

Feedback

Controlling costs

21// **Peter Kirk shares the benefits of knowing costs of production**

06// **Animal welfare**

Reconciling community expectations and livestock industry practices

09// **Agvocracy**

Troy and Stacy Hadrick return down under

15// **Condition scoring at calving**

Driving production with well managed fertility

24// **Winter management for high performance weaners**

34// **Growing appetite for Australian lamb in the US**



A note from the MD...

The welfare of cattle, sheep and goats is a daily high priority task for Australian livestock producers.

While our industry has always had a spotlight on the welfare of the animals within its care, there is growing interest from the broader Australian community in the welfare of production animals.

It is important to keep a finger on the community's pulse so we know what is considered an acceptable animal welfare practice.

It's equally important that our industry engages with the community to understand why they think the way they do.

While we should never let vocal minority groups overrun what the science is telling us, neither can we afford to dismiss the views of the community. After all, they are the consumers that we need to continue purchasing our products.

With this changed environment as the backdrop, MLA and industry have developed an animal welfare strategy which sets the vision for the next five years.

In this new landscape, future R&D will look for solutions to replace some existing procedures with less adverse ones, reduce mortality rates on farm, and minimise the pain of aversive procedures, provided the welfare of animals is maintained and productivity isn't compromised.

Turn to pages 6-7 for an article on this new strategy and the rationale behind it.

I welcome your thoughts any time at managingdirector@mla.com.au



Scott Hansen
MLA Managing Director



Contents

COVER STORY

- 21** Networking - a powerful production tool

IN BRIEF

- 02** Stand by what you sell
02 New guide to increase beef outputs
03 Visits to the Virtual Farm
03 Open your gate for FarmDay
04 Predicting horns or no horns
05 In profile: John Keiller, producer

INSIGHT

- 06** Animal welfare

INDUSTRY

- 08** Beef 2015 and beyond - have your say
10 Australia readies for new US beef testing regime

COMMUNITY

- 09** A grassroots voice for agriculture

ON-FARM

- 11** Seek help following floods
13 Lessons learned from floods
14 Flood recovery advice

06
Animal welfare

15
Condition scoring helps cash flow from cows

28
Selling the sizzle in secondary cuts

- 15** Condition scoring helps cash flow from cows
17 Feeding for fertility
18 Breaking the parasite cycle
20 Monitor, test, count and plan
23 Weighing up the scales
24 Watching winter weight gain for weaners
26 The economics of molasses

CONSUMER

- 28** Selling the sizzle in secondary cuts
29 Recipe: Roasted beef rump
30 'Chuck a Sunday'
30 Chopular culture off the charts this Australia Day
31 Higher protein diets: what's new?

MARKETS

- 32** Around the globe
33 Market observations
34 On the ground: United States
34 Market insight

MLA IN ACTION

- 36** Past and upcoming events

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Your feedback

Connecting with the community

Social media is a powerful tool for producers interested in sharing their stories to the community. With more than half of all Australians now on Facebook, it's a great place to connect with everyone from city cousins to customers.

Target 100 is the new online hub for posting the industry's sustainability credentials, and has generated a lot of online chatter over the last month.

Visit www.target100.com.au to check it out for yourself and maybe add your own story to the conversation.



Katrina Fay Goldsworthy
Katrina thinks target100 is excellent in The Year of the Farmer as well. From Steve Taylor on the front page to Lesley Couper at Aramac barriers first hand to meeting David Counsell Barcaldine on the plane. Being an artist if I can promote the Voice of the Bush in any way which I think Target 100 will do GO FOR IT.

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

MLA online



MLA tools

Weaner management manual

Download MLA's new publication that is a one-stop shop for managing weaners across northern Australia.

www.mla.com.au/weanermanual

Flood recovery

Read tips to help your pasture and livestock recover from recent flooding and maintain productivity.

www.mla.com.au/floodrecovery

'Chuck a Sunday'

Check out videos encouraging Australians to 'chuck a Sunday' midweek in MLA's newest lamb marketing campaign.

www.themainmeal.com.au/lambroast

Upcoming events

Find out about industry events during May-June including Beef Australia 2012, MLA Richmond field days, BeefUp forums, BusinessEDGE workshops and Lambex.

www.mla.com.au/events

fridayfeedback

Get timely on-farm information and the latest market news delivered to your inbox every Friday by subscribing to *fridayfeedback*.

www.mla.com.au/fridayfeedback

Social networking

YouTube

Check out the latest episode of *feedbackTV* on YouTube including tips on balancing yield and eating quality in lambs.

www.youtube.com/mlafeedbacktv

Flickr

View MLA's photo stream on Flickr including the recent Beyond the gate tour in Sydney NSW for MLA members.

www.flickr.com/meatlivestock

Twitter

Read the latest tweets by following MLA on Twitter.

www.twitter.com/meatlivestock

Facebook

Stay connected with MLA by 'friending' us on Facebook.

www.facebook.com/meatandlivestockaustralia

Stand by what you sell



STAND BY WHAT YOU SELL

The Livestock Production Assurance (LPA) program underpins Australia's reputation as a producer of safe red meat, but the integrity of the program relies on producers playing their part.

Currently 190,000 livestock producers are LPA-accredited, guaranteeing their customers that they have met on-farm responsibilities in the production of quality meat.

The five areas LPA accreditation covers are:

1. Property risk assessment
2. Safe and responsible animal treatments
3. Stock foods, fodder crops, grain and pasture treatments
4. Preparation for dispatch of livestock
5. Livestock transactions and movements

When producers tick the box on the National Vendor Declaration form indicating they are LPA-accredited, they must be able to back up the guarantee with accurate farm records.

The reputation of Australian red meat relies on producers being able to stand by what they sell.



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www.mla.com.au/lpa

New guide to increase beef outputs through good weaning management

A new publication has been released to provide northern cattle producers with practical insights for best practice weaning to improve herd productivity and profitability.

Released by MLA, *Weaner management in northern beef herds* outlines the best management practices for weaning, as well as the benefits of early weaning calves in difficult conditions to improve breeder fertility and reduce mortality.

The publication is a compilation of all the research, demonstrations and practical knowledge available on weaning and weaner management in northern Australia. It was written by a team from agricultural departments in the Queensland, Northern Territory and Western Australian governments and features producer case studies of various cattle breeding operations.

MLA's Northern Research Manager, Wayne Hall, said good weaning management can lead to greater herd productivity.

"In order to produce a calf every year, a cow needs to fall pregnant within 75 days of calving. So weaning to improve breeder body condition and improve re-conception

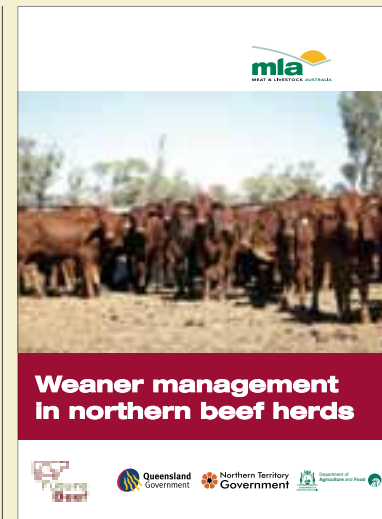
rates is the key. It can also reduce calf mortalities and reduces the need for breeder supplementation by ensuring cows aren't feeding a calf during the dry season," Wayne said.

"Also, we calculated that when properties with and without early weaning were compared, the property implementing early weaning showed a 19% improvement in profit, 10% improvement in gross margin per adult equivalent and 8% increase in beef output."

The publication also provides an easy-to-read guide for maintaining the health of weaners, outlining nutrient requirements and other health management techniques as well as training for ease of future handling.

Wayne said although the research was focused on larger herds in northern Australia the principles in the publication can be relevant to all cattle herds in Australia.

Weaner management in northern beef herds complements another recently released publication *Heifer management in northern beef herds* which outlines heifer management principles that can significantly improve herd profitability including how to improve re-conception rates.



Weaning to improve breeder body condition and improve re-conception rates is the key.



Visit www.mla.com.au/weaner manual to download *Weaner management in northern beef herds* or for the related publication *Heifer management in northern beef herds* www.mla.com.au/heifermanual

Visits to the Virtual Farm

Early results indicate the Virtual Farm Visit website is attracting attention from schools. This free online resource for teachers and students showcases what happens on Australian beef and sheep farms by featuring properties in the Kimberley, central western NSW and Gippsland.

Since going live in February 2011, the site has attracted more than 8,100 visits, averaging 680 hits a month.

Monitoring shows visits escalate during school terms to around 900 visits a month, but taper off during the school holidays, inferring a sizeable portion of users are school teachers and students - the target market.

The latest episode of *feedbackTV* takes a look at the use of the Virtual Farm Visit in a school. Here's a taste of what is being said:

"I learnt that not all the farmers are men; they are also women and families." *Student*

"It's an exciting tool so the children are getting on board, they're wanting to find out more about agriculture, they're learning about where their food is actually coming from which is very important." *Simone Taylor, teacher*

"The Virtual Farm...has very clear links to science, to technology, to English, to maths so there's something on every one of those farms in Virtual Farm that would interest or excite every single student in the class..." *Ben Stockwin, Primary Industries Education Foundation*



See the current episode of *feedbackTV* which showcases the Virtual Farm



Visit www.mla.com.au/virtualfarm



Open your gate for FarmDay

This year Australia celebrates rural Australia with the 'Year of the Farmer', making it a good time to encourage urban families out onto a farm.

FarmDay will be held nationally on 26 and 27 May and registrations are now open. More than 1,000 farming families have participated since FarmDay began in 2006.

Research commissioned by the Primary Industries Education Foundation recently revealed 75% of school students believe cotton socks are an animal product and 45% of school age students are unable to identify that everyday lunchbox items like bananas, cheese and bread come from farms.

FarmDay founder Deb Bain says the need for farmers to do everything they can to

broaden awareness about food and fibre production has never been greater.

"FarmDay is a great way for our friends in the big smoke to experience all the things that are part and parcel of being a primary producer. This first hand-experience leads to a better understanding of the agricultural sector," Ms Bain said.

The FarmDay team matches farming families with city visitors, ensuring an excellent FarmDay experience is had by all.

FarmDay is supported by MLA.



Further information and registration details are available at www.farmday.com.au

Switch on to *feedbackTV* episode 17



Controlling pests and predators

Take a look at work being done to develop new and better ways to assist in the management of feral animals.



City kids' virtual farm visit

Children from Lauderdale Primary School in Tasmania take us on a tour of their classroom while they get a tour of Australia's cattle and sheep properties via the virtual farm.



Balancing yield with eating quality

A new supply chain initiative with JBS Australia provides insight into the importance of producing the right lamb every time for consistent customer satisfaction*.

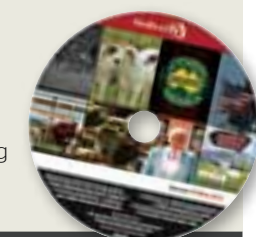


Industry projections - helping you make informed decisions

Hear how one Queensland family has changed the time of selling cattle to make the most of higher prices and find out what this year's projections mean for your business.



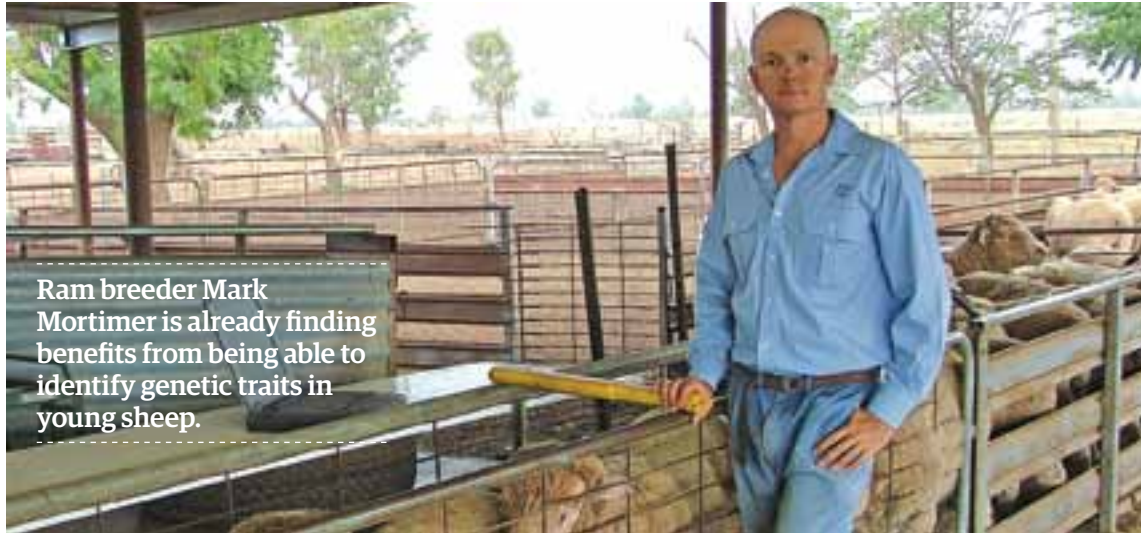
*** Don't miss out on the DVD extra:**
Genetic selection 101 - the step-by-step process for improving your flock genetics.



If you haven't received your *feedbackTV* DVD with this edition, contact MLA on **1800 675 717**.



For past stories visit www.youtube.com/mlafeedbacktv



Ram breeder Mark Mortimer is already finding benefits from being able to identify genetic traits in young sheep.

Predicting horns or no horns

PP, PH and HH are three acronyms sheep producers may see a lot more of in the future. While they look fairly simple, these three genomic breeding predictions represent a breakthrough from the Sheep CRC Information Nucleus Flock and Genomics Pilot Project. They allow the identification of traits in sheep from as young as three months old.

The three acronyms indicate the poll-horn status of an animal. PP is polled, PH is half poll and HH is horn.

The test for these possible genotypes has been developed using a single SNP (single nucleotide polymorphisms) on the 50k SNP panel used in the Sheep CRC Pilot Project.

Sheep Genetics Manager, Sam Gill, said the SNP is highly associated with polled and horned phenotypes and is closely linked to the polled gene which has been independently confirmed in other studies.

“So testing for this SNP does not result in a simple yes or no answer. Sires with the PP genotype will produce significantly more offspring with polled status than sires with a PH or HH genotype,” he said.

As it is important to understand the probabilities of different outcomes when mating PP and HH rams to either horned or polled ewes, figure 1 has been developed to summarise the possibilities of various poll-horn outcomes associated with the different statuses of sires or dams.

Ram breeder Mark Mortimer who runs Centre Plus Merinos at Tullamore in NSW is already benefiting from the findings of the project, saying it means important traits can be identified much earlier in young sheep using DNA testing.

Figure 1 Sire breeding values for horn status (probability of progeny phenotype):

Outcome	Male progeny		Female progeny	
	Horned	Polled	Horned	Polled
When mated to PP 'polled' dams				
PP sire	3%	82%	1%	92%
PH sire	3%	65%	1%	87%
HH sire	4%	49%	1%	82%
When mated to HH 'horned' dams				
PP sire	3%	49%	1%	82%
PH sire	37%	27%	5%	50%
HH sire	70%	6%	8%	18%

Estimates are based on 2,300 Merino progeny in the Sheep CRC Information Nucleus. PP = polled, PH = half poll, HH = horn

Mark had 50 rams DNA tested at seven months as part of the second Sheep CRC Genomics Pilot Project late last year. In the joint CRC - MLA - Australian Wool Innovation project, breeders were subsidised for the first 20 rams tested. Mark then paid \$100/head for an additional 30 young rams to be tested.

“For many of the traits we would have learned this information by taking physical measurements in another 12 months’ time. But the fact that we know it now means we can select breeding stock earlier,” he said.

“The DNA tests have provided new information about hard to measure traits like meat quality and polled/horned genes. And for some traits the estimated breeding values (EBVs) for these weaner rams are actually more accurate than what we had when we selected their sires at 19 months of age.”

“Sires with the PP genotype will produce significantly more offspring with polled status than sires with a PH or HH genotype.”



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www.sheepcrc.org.au

In profile

John Keiller
*Producer,
Portland, Victoria*

John Keiller makes it a habit to look over the horizon. The Portland producer of prime lambs and self-replacing maternal composite genetics wants to ride the wave of change rather than be drowned by it.

Genetics is a passion of John's. He considers sheep are "bags of genes" to be tuned - as for instance, the Cashmore Oaklea Performance Maternal composite - a smorgasboard of Coopworth, Finn, East Friesian, Border Leicester, South African Meat Merino, Poll Dorset, White Suffolk, Texel and Corriedale genetics.

What will guide breeders in designing the sheep of the future?

Producers think they design their sheep, but mostly the market does. If we keep listening to the market, our customers will decide where the sheep industry needs to go and what type of sheep we need to breed.

Of course, animals must also be fit and functional within the ecosystems they run in. Breeders have to balance consumer desires with environmental and farm system realities.

Are producers getting enough feedback from consumers to make good breeding decisions?

That's an issue. We don't really have the systems in place to give us the feedback we need, and what we do get back from

processors still tends to come by fax - you can't readily use that information for statistical analysis*.

But we've still made a lot of progress over the past 20 years. The genetic gain we've made in that time has been worth \$18 million a year to the industry.

What comes next?

I think that chasing eating quality attributes, like tenderness and intramuscular fat and perhaps omega 3 levels are going to be useful in keeping lamb on the dinner table at a price that rewards the producer.

And welfare issues like castration and mulesing won't go away. We should keep looking for better solutions.

Next month, John will talk at Lambex in Bendigo about his operation, Cashmore Park, and "engineering the sheep".

*MLA is working to address this with the Livestock Data Link initiative which is now ready to pilot.

**John Keiller**

T: 03 5526 5248
www.cashmoreoaklea.com.au

For more on Lambex see the latest episode of *feedbackTV*.



To register for Lambex
www.lambex.com.au



Animal welfare: reconciling community expectations and livestock industry practices

There is growing interest from the Australian community in the way animals are cared for, new research by the Department of Primary Industries in Victoria highlights.

In the legal arena too, interest in animals is being elevated. For a few years now there have been rumblings in Australian courts that are mirroring those of the broader community with legal argument proposing to treat animals not as human property but rather as creatures with intrinsic rights. Industry has the opportunity and challenge to manage the evolution of its welfare practices, to address community concerns while avoiding a reduction in productivity.

In this changed landscape, some Australian and global food companies have adopted strategic positions around cheap, ethical and safe fresh food and have established principles to express their commitment to animal welfare.

The Department of Primary Industries (DPI) research also refers to heightened interest and changing expectations of the broader community over some farming practices that is leading to a new environment for agriculture where social expectations place constraints on the use of new or established animal welfare practices and technologies.

Roger Wilkinson, co-author of the report *Victorians' attitudes to farming*, explained as consumers became

"It's vital we understand where the other person is coming from, why they consider a practice to be inhumane, and we need to engage with them and, after going through that process, that might mean that some practices have to be changed."

more food-secure, wealthier and better educated, many become concerned with addressing ethical consequences of food production like animal welfare and environmental sustainability.

"Disputes over farming issues like animal welfare appear to be influenced by a mismatch between more established, traditional values which focus on production and productivity, and emerging community values which focus on caring for animals and the environment," Dr Wilkinson said.

"These pressures aren't going to go away and there are no easy answers. It's dangerous to try to draw conclusions about what the average consumer thinks, as there is wide variation in public opinion on issues such as animal welfare."

Victorians' attitudes to farming categorised Victoria's adult population into six groups ranging from 'doubly concerned' (accounting for 16% of the sample), environmentally concerned (9%), animal concerned (7%), disengaged (18%), contented (32%) and supportive (18%).

"The first three segments accounted for 32% of the sample and we named them the 'concerned' segments. They valued animal welfare or the environment highly but had low trust in farmers to manage these issues without being forced to do so."

"The other large segment, which we called the 'contented', included the people who valued animal welfare or the environment highly but who - unlike the three concerned segments - did trust farmers to manage these issues without being forced. The disengaged and supportive did not value these issues highly. An important challenge lies in making sure the contented do not become concerned," Dr Wilkinson says.

Given the disparity of views Dr Wilkinson stressed the need to communicate and engage with the community.

"It's vital we understand where the other person is coming from, why they consider a practice to be inhumane, and we need to engage with them and, after going through that process, that might mean that some practices have to be changed."

Over the years progress has been made through MLA-funded and international R&D to

understand what constitutes good animal welfare based on scientific measures for sheep, goats and cattle. But the measures identified may not always match what the community judges to be reasonable, particularly in relation to some surgical husbandry practices.

Given this environment, MLA with industry has developed an animal welfare strategy which sets the R&D direction to meet community expectations while minimising impacts on industry productivity.

The new strategy takes into account the community's reasonable expectations and the tightening laws and regulations that govern animal welfare.

Four strategic pillars underpin future R&D:

→ Develop solutions to replace some existing procedures with less aversive ones. Priority R&D will focus on developing replacements for surgical castration of cattle, lambs and kids; tail docking of lambs; and spaying, branding and ear notching for cattle

→ Reduce mortality rates on farm. Priority R&D will look to reduce mortality due to exposure and predators

→ Increase uptake and demonstration of welfare best practice

→ Minimise the pain of adverse procedures. Priority R&D will focus on developing options for castration of cattle, lambs and kids; tail docking of lambs and kids; and dehorning, ear marking, branding and spaying in cattle

The new strategy aims to put the livestock industry in a position to defend its animal welfare practices based on science and community perception without losing markets. It's also a proactive approach which moves away from aversive procedures, reducing the likelihood that industry is called upon to quickly make onerous changes to practices.

Animal welfare is not a new issue when you think that the first Society for the Prevention of Cruelty to Animals in Australia was formed in 1871.

Over the years, animal welfare has moved more into the spotlight, particularly in westernised countries. Once people's basic needs have been satisfied they can divert their attention to other issues - including the needs and rights of animals.

Since 2002 MLA has invested \$3.7 million in various animal welfare projects including:

- Polled/horned genomics to minimise the need for dehorning
- Assessing the welfare impacts of land transport on animals
- Developing an understanding of wild dog behaviour and measures to help control their numbers
- Pain management including non-steroidal anti-inflammatory drugs and needleless injections

A current project into a remote calving alert device investigates causes of calf and breeder loss due to dystocia (abnormal or difficult labour). The research aims to identify the genetic, seasonal and physical influences on dystocia and therefore aid the development of management and breeding programs to reduce the risks.



To download *Victorians' attitudes to farming*, visit www.mla.com.au/vicfarmingattitudes

Beef strategic plan

Beef 2015 and beyond - have your say



CCA President
Andrew Ogilvie



The call has gone out to beef producers across the country to provide input into a strategic plan for the grassfed beef sector.

An initiative of the Cattle Council of Australia, *Beef 2015 and beyond* seeks to set the future direction of the industry with widespread participation from producers.

Andrew Ogilvie, President of Cattle Council of Australia urges all producers of grassfed cattle to take one of the many opportunities to provide input into the formation of their sector's strategic plan.

"The Cattle Council board has agreed it's time to develop a new national strategy for the grassfed beef industry. The strategy will direct and mobilise all industry resources and efforts over the next few years," Andrew said.

Importantly, *Beef 2015 and beyond* will also define the roles of the various parties responsible for implementing the plan - including the research and marketing service delivery body MLA.

"If the beef industry is to move head, we need measurable goals and this is what the process and development of the strategic plan will deliver to us," Andrew said.

The Cattle Council will run producer forums, interviews with key industry leaders and stakeholders and a comprehensive telephone survey of grassfed beef producers to gather input.

"We are also making use of online platforms to reach a wider audience than ever before and every grassfed producer and industry stakeholder is being given the opportunity to contribute to the development of the plan. This really is your chance to tell the industry the direction you think it should take," Andrew said.

Further industry consultation will occur once a draft plan is created and any major changes to industry policy or direction may be subject to a vote to demonstrate industry support.

"If the beef industry is to move ahead, we need measurable goals and this is what the process and development of the strategic plan will deliver to us."



To participate in online forums and surveys: www.cattlecouncil.com.au/beef2015andbeyond

A grassroots voice for agriculture



Troy has:

4,323 followers

on twitter and has made

7,497 tweets

In Queensland for Beef Australia 2012, Troy and Stacy Hadrick's goal is to encourage and empower producers to tell their positive stories locally, nationally and globally.

Fifth generation US ranchers from South Dakota, the Hadrick family runs a diversified grain and cow/calf enterprise but it is their desire to fight back against the untruths they say are plaguing modern day farming that drives them.

"Ten years ago a reporter interviewed us for a story about the beef industry," Troy explained on the eve of his second visit to Australia.

"He disregarded our real story, writing instead a misleading, inaccurate account. It was a devastating experience for us. We quickly learned the only way to put across our story (and what farmers and ranchers do), was to do it ourselves."

The Hadricks used that single event to transform their thinking and their daily lives. Since then Troy and Stacy have presented at forums nationally and globally, determined to help empower producers to tell their own good stories about farming.

"I have this thing called the 30-second elevator speech and any farmer can do it," Troy said.

"My 30-second elevator speech is: 'My name is Troy Hadrick. I'm a fifth generation American rancher from Faulkton, South Dakota. Every day my family and I work hard taking care of our cattle so we can provide safe, wholesome beef for your family'."

"Almost without exception this will lead to the person I've just introduced myself to ask me several questions. Therefore one more consumer knows the real story of agriculture from an expert.

"For too long we have been letting other people tell our story for us and that has to stop. That's what this is all about."

Facing the same issues as Australian producers from animal rights and the environment to government regulations and production - and feeling increasingly under siege by the growing movement questioning farmers' ethics and practices - the couple added social media like facebook, blogs, websites and twitter to fight back.

"It's about making connections to tell the truth about production systems, what we do and how we do it. Tell people how we care for our livestock and the environment. Producers are a fairly humble group, but unfortunately, that's what we have to do now. It's not bragging, it's just telling the real story," Troy said.

"Through public response, we quickly realised how successful social media was as a platform for telling stories," Stacy said. "The public listens and connects to stories about where their food is coming from and how it is produced."

With 350 head of cattle, 1,400ha of wheat, soybean and corn crops and three small children to raise, Stacy and Troy travel whenever and wherever they can manage. Word of mouth has kept them consistently in demand to speak.



Visit Troy and Stacy's website:
www.advocatesforag.com
Blog www.advocatesforag.blogspot.com
twitter.com/TroyHadrick



Fast facts

Six additional non-O157 *E.coli* strains are estimated to cause 70-95% of all non-O157 *E.coli* infections in the US.

Australia readies for new US beef testing regime

Three Australian meat exporters agree - while new US Government requirements for additional *E.coli* testing will add financial and logistical challenges to their enterprises - it should not affect their export volume to the US market.

The US government will introduce routine sampling from 5 June 2012 for six additional non-O157 *E.coli* strains that produce Shiga toxins. These toxins can cause illnesses ranging from mild intestinal disease to severe kidney complications.

Australian export processors are implementing additional testing procedures and are adding new equipment to meet the new requirements. To minimise the impact to sales of Australian manufacturing beef in this important market for Australian producers and exporters, MLA invested in a research project to identify the best ways to test for the strains and has run industry events to explain how to manage the changes.

MLA Manager Market Access Science and Technology, Ian

Jenson, said the research project assessed more than 1,800kg of Australian manufacturing beef using four different screening methods and found a low prevalence of the strains (representing an estimated 0.02% in Australian manufacturing beef).

MLA then ran two half-day information seminars on how to prepare for the changes, attended by more than 100 industry and processor representatives.

JBS Australia Group Quality Assurance Manager, Michael Johnston, said the MLA study helped JBS Australia identify a number of available testing methods, their performance and required machinery.

The company will install a testing machine, at a cost of about \$70,000, in its Dinmore

plant and staff will require further training.

Michael said the \$1,400 for a full confirmation test, whenever a consignment records a potential positive was a dramatic increase compared to current costs of confirmation testing.

About 55% of JBS Australia's beef trimmings have been exported to North America so far this year.

Teys Australia's General Manager Corporate Affairs, Tom Maguire, said the change would require a significant additional cost in equipment.

Tom said MLA testing of pathogens in Australian meat helped the company make informed decisions on future testing methods.

"This new testing requirement means we have to invest in

significant capital and we also need a particular capability to interpret the results," Tom said.

Atron Enterprises Managing Director, David Larkin, said as results would now take almost twice as long as current testing, delays to supply chain logistics would be significant and pose the greatest impost on business.

Atron directs 15-20% of its beef to the US and David said the market would become more important in the immediate future as demand for Australian product grew.



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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

Flood recovery

Advice and lessons to help recover after inundation

Integrated pest management

Planning ahead to minimise the impact of internal parasites in sheep

Weighing in

Northern Territory research reveals not all cattle scales are created equal

Condition scores

Breeding cows in condition score three or better prior to calving means higher re-conception rates



Flood recovery



Seek help following floods

Snapshot

Peter and Marg Richards, Timmering, Vic.



Property:
800ha

Enterprise:
Self-replacing Merino flock and cropping

Livestock:
1,000 Merino ewes

Soil:
Dryland loam

Rainfall:
445mm

THE physical work required to recover from major flooding is tough - but the mental aspect of coping with sick livestock and damaged infrastructure can be tougher.

That was the experience of Victorian producer Peter Richards, whose property at Timmering was severely affected by floodwater in the summer of 2011.

"Stress is the biggest challenge," he said. "It is as much a mental thing as physical and that is why I feel so much for the people going through the situation now."

Peter and his wife Marg farm 800 hectares, run 1,000 Merino ewes as a self replacing flock and a cropping program. Half their property was inundated, and while most of the water drained within a fortnight, it left widespread feed damage and animal health problems.

"The first flood water that came down was like sewerage. It looked black and smelt rotten," Peter said.

"We had sheep that were losing condition and basically everything which could go wrong with sheep, did go wrong."

The main problems were flystrike and pink-eye, and Peter said one moment still stands out in his mind.

"I couldn't get on top of the flystrike, and this day I had gone through a mob by putting about 10 sheep at a time in a small pen and inspecting them - that's how careful I was being," he said.

"And then when I went to let the mob out I noticed all these sheep I had still missed and I found myself standing in the sheep yards swearing, thinking I can't do this anymore."

Peter found great support in Echuca-based Victorian Department of Primary Industries (DPI) district veterinarian Dr Jim Walsh.

"He came out and we talked through problems, and he probably didn't realise it, but it was great therapy and it helped me keep focused and keep going," he said.

Peter said his advice to producers who were going through flooding was to talk to others and accept as much help as possible, either through official channels such as DPI and counseling or financial services or just communicating with neighbours.

A silver lining was the development of a local Best Wool Best Lamb (BWBL) group, one of five formed in north-west Victoria as an initiative of DPI's 2011 flood project to ensure affected sheep producers were supported during their recovery phase.

Peter, a founding member, said the group had been great for professional and social contact.

For further information see the flood recovery advice article on page 14.



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Lessons learned from floods

2011 flood-affected producer Dean Harrington suggests working backwards from peak feed demand to plan for pasture re-establishment following flooding

In the weeks after water submerged his Boort property in January 2011, Victorian farmer and agronomist Dean Harrington struggled to find motivation to get his cropping and 1,000-head first-cross ewe operation back on track.

"Everything was such a diabolical mess. We were shell-shocked," he said. "For the first six weeks I really thought this is it - I don't want to be a farmer anymore."

Despite 90% of their 600 hectare property being under prolonged inundation and destroying its lucerne feed base, Dean and wife Natalie bounced back, to the point where they were still able to turn off sucker lambs that season.

Large areas were under 0.5m of water for up to a month: "The water that came through was really warm too - kind of like a bath - and it killed anything it touched, including the weeds," he said.

The Harringtons' priority was to restore some pasture for their ewe flock before lambing, especially after being forced into expensive hand-feeding - something Dean wouldn't repeat.

"My advice to farmers in this situation this year is to get their sheep and cattle off on agistment until a feed wedge gets going, which is a lot simpler without stock in the system," he said.

The Harringtons' critical feed point is July as ewes start lambing in August, and as access to paddocks only came in April it meant careful plant selection for resowing.

"The trick is to work backwards from when you need feed, which means looking at the growth rates and establishment times.

"The minimum time is about six weeks, but only a handful of species will do that," he said.

The Harringtons chose a mix of ryegrass, berseem and sub clovers.

"The weight of the water on the ground for up to a month had really compacted it and the soils had gone anaerobic - the water had basically de-oxygenated it," he said.

The paddocks were worked lightly with a disc cultivator. Another trick was high seeding rates, with the pasture direct drilled following at 30kg/ha instead of the usual 20kg/ha.

"The theory is the higher sowing rate generates more dry matter per ha, and it was cheaper to buy extra seed than more hay."

After establishing well, the pasture was treated with gibberalic acid (a natural growth promoter).

It was ready for grazing in July, and the Harringtons were able to achieve their normal production pattern of turning off sucker lambs at 12-weeks of age. The paddocks also produced a cut of hay in October.



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Snapshot

Dean and Natalie Harrington, Boort, Vic.



Property:
600ha

Enterprise:
Prime lambs, vealers and cropping

Livestock:
1,000 first-cross ewes and 30 F1 cows

Soil:
Loam to heavy black country

Flood recovery advice

Recovering livestock enterprises after prolonged flooding will pose a challenge for many producers this year, but careful management can help minimise the impacts on productivity.

Pasture

The effect of flooding depends on the flow and temperature of water, soil types, depth and duration of flooding, the health and type of plant species growing and the amount of silt or debris deposited (figure 1).

These factors will determine if pastures successfully recover, or if resowing is needed due to plant deaths.

Victorian Department of Primary Industries (DPI) recommends, "For ryegrass and clover pastures the target is greater than 70% plant survival. If plant population gets under 50% action should be taken."

For lucerne, a plant that does not tolerate wet conditions, "take action" if viable plant numbers have fallen below 6/m² in irrigated pastures and 5/m² on dryland.

Sheep

Dr Stephen Love, State Co-ordinator Internal Parasites with the NSW DPI, said producers should carefully manage worm control in conditions ideal for several species to flourish, including Barber's pole - normally only found in northern areas but which could appear in southern regions this year.

MLA Project Manager Animal Health and Welfare, Dr Johann Schroder, recommended using tools such as worm egg counts (WEC), larval cultures or the haemonchus dipstick to develop targeted drenching and grazing control program.

Flystrike caused by wet wool and dermatophilus (dermo) infections are common after floods. Producers need to be vigilant about lameness in sheep, as virulent footrot (which is contagious, unlike simple dermatitis type footrot) spreads quickly.

Clostridial diseases such as blackleg and pulpy kidney, caused by spore producing bacteria that thrive in moist and warm conditions, can result in high mortality rates.

Cattle

While in the immediate aftermath of the floods, lameness and mastitis are the first challenges, producers should monitor animals for some time for bacteria and insect borne disease and illness.

Johann warned producers to look for:

- Viral conditions transmitted by biting insects including bovine ephemeral fever, three day sickness and akabane, which can cause still-births or birth defects in pregnant cows
- Bacterial diseases such as pasteurellosis, salmonellosis or botulism caused by ingesting contaminated feed or water
- Clostridial diseases such as pulpy kidney and blackleg, caused by commonly found spore producing bacteria which flourish in moist and warm conditions
- Parasite burdens
- Mycotoxic diseases eg from eating mouldy hay



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Health checklist for livestock post-flooding

- Keep livestock away from areas that have been spoilt by floodwater including stockyards or other areas that had a high build-up of manure and urine.
- Clostridial diseases such as blackleg and pulpy kidney can increase due to bacteria commonly found in contaminated water and soil. Ensure all livestock vaccinations are up-to-date.
- Monitor sheep daily for flystrike, particularly body-strike caused by wet wool and dermatitis.
- Implement worm control strategies to reduce parasite burdens in both sheep and cattle. Use worm testing tools.
- Investigate sheep lameness as virulent footrot often occurs in wet and warm conditions.
- Populations of biting insects such as mosquitoes increase. Look for symptoms of diseases like Three Day Sickness and Akabane in cattle.
- Lactating cows and ewes need to be monitored for environmental mastitis caused by mud and bacteria.
- Implement weed control and restrict livestock from eating toxic plants.
- Inspect hay and grain for water damage or toxic mould growth.
- Seek immediate advice from veterinarians or DPI animal health officers if livestock show signs of ill-thrift or illness.
- Check fences and ensure they are stock proof to enable biosecurity to be managed and protected.

Figure 1 Tolerance to waterlogging of pasture plants suited to non-saline areas

	Highly tolerant	Moderately tolerant	Susceptible
Grasses	kikuyu, phalaris, fescue, couch	perennial ryegrass, wimmera ryegrass	cocksfoot, veldt, Italian ryegrass
Legumes	<i>Lotus spp.</i> , white clover, Persian clover, balansa clover, yanninnicum, subterranean clover	subterranean clover, murex medic	lucerne, medic



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Northern cattle

Condition scoring helps cash flow from cows

Investing in nutrition and genetics to improve cow condition at calving can directly increase annual farm income.

An MLA-supported study of more than 30,000 breeders in northern Australia found that breeder cow condition significantly influenced a cow's ability to conceive again.

Cash Cow project data (figure 1) shows that females in poorer condition (ie below condition score 3) in the months prior to calving achieved significantly lower pregnancy rates in the next breeding season.

According to Mick Sullivan, Principal Beef Extension Officer with the Department of Employment, Economic Development and Innovation (DEEDI) at Rockhampton, breeders in condition score 3 or better at calving achieved superior re-conception rates to those in lighter body condition.

"We expect cows in a backward store condition (condition score 2) at calving to achieve a pregnancy rate of 20-50% at the subsequent mating, whereas for cows in body condition 3 or better, a conception rate of 60-90% would be expected," Mick said.

"When cows get run down in condition, their ovaries shut down. It can then take some time after the seasonal break for these cows to regain body condition and for the ovaries to re-commence cycling.

"On a lot of poorer country, and particularly with first-calf cows, they will not cycle until weaned.

"Another benefit of cows in good condition at the end of the dry season is that they have body reserves which enable them to better cope with a late seasonal break, say late January instead of December."

Mick said that northern cattle producers had three tools to manage breeder body condition: grazing management, weaning and supplementation.

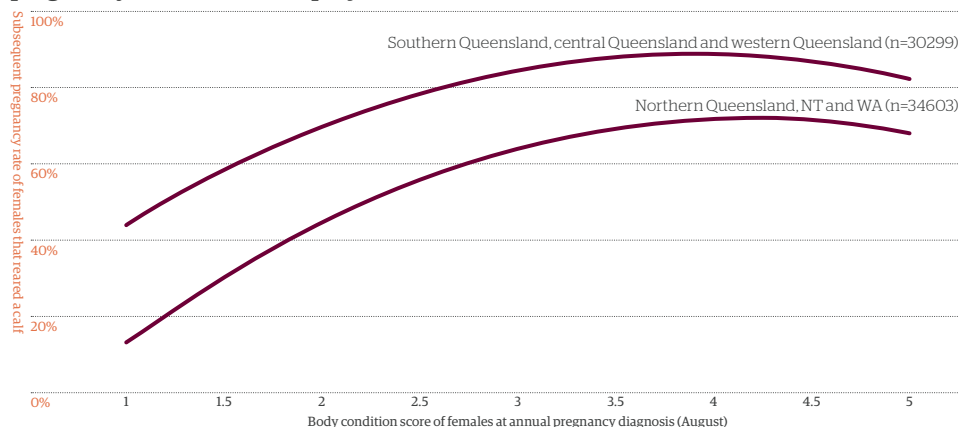
Grazing management

Cattle need adequate pasture to meet their nutritional requirements, and Mick advised that stocking rate was "super critical".

"If you're overstocked, animals have to consume more of the lower quality parts of the pasture and also cannot obtain enough forage to satisfy their appetite. Nutrient intake is reduced and animals struggle to maintain body condition," he said.

"At this time of year (April-May), it's important to think about how much feed you have on offer. There is unlikely to be much pasture growth from May until the seasonal break, which in many cases won't happen until December." →

Figure 1 The effect of female body condition score prior to calving on subsequent pregnancy rates (Cash Cow project, 2008-2011)



Condition scoring cows

→ Use a standard system to assess breeders at particular points in the reproduction cycle.

→ Score cows from 1 (poor) to 5 (fat) - see below.



- 1. Very poor
- 2. Backward
- 3. Moderate
- 4. Forward
- 5. Very fat

→

Effectively, the feed on offer at the end of the growing season is what cattle have to survive on until the wet season.

Tools such as Stocktake and grazing charts can be used to assess feed on offer, animal requirements and determine how long paddocks can be used.

Pasture photo-standards (2003) are available for most pasture types and are a valuable tool for assessing pasture yields.

Faecal NIRS (near infrared reflectance spectroscopy) assesses pasture quality and can assist planning for grazing management and supplementation. Another important consideration is maintaining adequate groundcover at the end of the dry season to prevent excessive runoff.

Weaning

Weaning was a powerful tool to manage cow condition, Mick said, because the nutritional requirements of a lactating breeder were around 50% above those of a dry animal. The timing of weaning and the size of the calves weaned is determined by the type of country, seasonal conditions and breeder age.

“On tougher country, weaning earlier in the year and down to a younger age is critical because it’s a lot harder for cows to maintain condition,” he said.

Cows weaned March-May have time to regain body condition while there is still reasonable quality feed.

“On better country, say Mitchell grass downs or brigalow, it’s quite normal that you wouldn’t have to wean calves until May-June, but keep the season in mind,” Mick said.

“Well below normal rainfall by March is a warning to think about how to manage your breeders for the rest of the year, and to take steps to maintain cow condition, such as weaning earlier and weaning calves down to a younger age.”

Supplementation

While dry season protein supplements can play an important role in maintaining breeder condition, Mick suggested they were most effectively used in conjunction with grazing management and weaning.

“Dry season protein supplements are half as effective as weaning in reducing weight loss,” he said.

On phosphorus-deficient country, Mick said wet season phosphorus supplementation was also critical.



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Watch *Managing Breeder Condition: Body Condition Score* video at:
<http://youtu.be/x2rjjBjxwoo>

www.mla.com.au/weanermanual
to download *Weaner management in northern beef herds*

www.mla.com.au/heifermanual
to download *Heifer management in northern beef herds*

Getting breeders into condition score 3 or better

→ Condition scores can be managed through nutrition and weaning, and in the longer term, through genetic selection (ie breeding and selecting cows suited to your operating environment).

→ Adjust your stocking rate to match the quantity and quality of feed on offer at the end of the growing season (March-April), to ensure sufficient pasture to maintain breeders until the seasonal break.

→ Adopt a flexible weaning strategy that suits your type of country, and use triggers such as rainfall patterns and pasture bulk at the end of the growing season to change weaning time to suit the seasonal conditions.

→ Finally, determine whether your breeders need supplements to address dry season protein deficiency or wet season phosphorus deficiency.

Snapshot

Ben and Vikki McGlynn, Helen Springs Station via Tennant Creek, NT.



Property:
10,200km²

Enterprise:
Brahman Charbray cross cattle breeding

Livestock:
42,000 cows and 1,030 bulls

Pasture:
Mitchell and Flinders grasses on black soil and spinifex and Buffel and Spear grass on red soil

Soil:
70% black soil and 30% red soil

Rainfall:
440mm





Feeding for fertility

Scoring cow body condition is an important tool for driving fertility rates across four different calving groups at S. Kidman & Co Ltd's 'Helen Springs' Station.

Helen Springs Station Manager Chris Towne, and his assistant manager Ben McGlynn focus on breeder re-conception rates and weaning numbers.

At first muster, Ben collects information right across the breeder herd - and the bulls - to assist short-term decisions on feeding and weaning, as well as long-term decisions affecting whole herd fertility.

"First round, as the cows come through, we draft wet cows from dry ones. The dry cows are preg. tested into PTIC (pregnancy-tested in calf) or PTE (pregnancy-tested empty), and the empties become sale articles," Ben said.

"We're also collecting weights and doing a body condition score."

In the long term, this data can be used to monitor the reproductive performance of individual animals for breeding selection decisions.

"We've been able to identify cows that have maintained a 12-month calving interval for the past four years, and use that for fertility selection on those animals to create our own bull multiplier stud."

Ben explained that first time weaner heifers were generally pregnancy tested in August, in an average season, and aligned into one of four calving groups based on foetal ageing results (October-December, January-February, March-April or May-June).

"Then we can determine our mustering program for the following year," he said.

"Depending on the season, we can go out to our October-December calving group and either brand the calves and put them back on mum and wean them in May, or if it's an extended wet period, we'd probably blanket wean the calves in the first two groups in May and the later two groups as early as practical."

Unless a poor season triggers an earlier weaning strategy, each calving group is weaned in turn, until August, when the

October-December calving group undergoes a second round of pregnancy testing, and so on until all groups have been managed in succession.

While it is hard to put an exact dollar figure on the benefits to the Helen Springs operation of condition scoring at weaning and pregnancy testing, Ben said the greatest return is in knowing exactly how many kilograms of weight gain is needed to improve condition score and hence, the chances of pregnancy.

"If we look at our October to December calving group scores in September, the October calvers may average 500kg, the November calvers, 488kg, and the December calvers, 475kg, and so on. In the case of these calvers half a condition score is 28kg for the group and from what we have recorded if they lose half a condition score then 26% of these animals will drift out past our green date or become empty," he said.

"There is obviously a small margin for weight gain and nutrition to maintain breeder performance, therefore monitoring and managing breeder body condition throughout the year is one of our biggest performance drivers."

But Ben warned against using breeder segregation as a standalone management tool.

"Anyone could segregate cattle and monitor cow body condition score. While they do drive our system, our approach includes many critical factors to help us increase herd fertility, like grazing land management, matching cows for their nutritional requirements, supplementary feeding, carefully introducing heifers and culling less fertile cows," Ben said.

"Unless you get everything right, from critical weaning time to cow body condition and the nutrition of your pasture, then segregating breeders will not deliver the benefits."

Vikki, Charlie and Ben McGlynn of Helen Springs Station via Tennant Creek.



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Sheep and lambs

Breaking the parasite cycle



Targeted preparation of ewes and low worm-risk paddocks before lambing can help to break the cycle of sheep internal parasites which cost Australian sheep industries about \$370 million each year.

In winter rainfall regions across southern Australia, effective integrated parasite management (IPM) involves having the right genetics, strategic use of drenches, monitoring worm burdens, good sheep nutrition and manipulating local climatic, seasonal and pasture fluctuations to minimise sheep exposure to intestinal worms.

The upside of these practices is reduced ewe and lamb mortalities and greater flock

productivity from better feed conversion, liveweight gain and wool production.

IPM strategies also reduce drenching costs and the risk of worm drench resistance.

MLA-funded research has found the risks of poor intestinal parasite control include a potential 12% reduction in lamb growth rates - as much as 19 grams/day - and delayed finishing by almost six weeks.

MLA Program Manager Animal Health and Welfare, Dr Johann Schröder, said ewe health and productivity could also be severely limited by gastrointestinal worms, which had been known to cause 5kg weight losses in pre-lambing

ewes and annual mortalities of 4-5% in older ewe flocks.

He said winter rainfall areas faced the biggest worm burden challenge during the winter months from worm larvae that develop in dung pellets deposited in autumn. The most susceptible mobs are lambing ewes, weaners and prime lambs being finished for sale.

Johann said ewes provided with adequate nutrition during the winter months were better able to withstand this worm challenge and rear a healthy lamb.

Strategic drenching

Sustainable worm control programs across all winter rainfall areas include appropriate drenching practices.

Internal parasites cost Australian sheep industries about

\$370 million
each year

Figure 1 Different ways of preparing low-worm risk pastures for sheep

Management practice	Duration of de-stocking	Residual number of roundworm larvae	Nutritive value	Usefulness for worm control
Freshly sown pastures	32 weeks or more	Decimated	Very good	Excellent
Cropping cereals	32 weeks or more	Decimated	Poor	Excellent
Rotational grazing with cattle	Grazing with cattle for 4-6 months	Reduced	Good for sheep; poor for cattle	Very good
'Smart Grazing'	1-2 months following intensive grazing by drenched wethers for 1 month	Reduced	Good	Very good
Hay or silage production	4-8 weeks	Reduced	Very good	Good
Spelling	Variable	Depends on the season and pasture type (ie irrigation vs. dryland*)	Variable	Variable

* Larvae rapidly killed by hot and dry conditions but can survive for long periods if cold and wet. Source: Fact sheet: Preparing low-worm risk pastures for sheep (adapted from The Cattle Parasite Atlas: a regional guide to cattle parasite control in Australia).

Dr Angus Campbell, of the University of Melbourne's Mackinnon Project, said in south eastern Australia this started with a summer drench for lambs at weaning and a follow-up in autumn as they were put on to finishing or irrigated paddocks.

He said this would help to avoid weaner growth penalties and reduce potential worm contamination of paddocks in autumn, winter and spring.

In WA, Department of Agriculture and Food parasitologist Dr Brown Besier said drenching in summer was a high risk for selecting for drench resistant worms.

He recommended WA producers drench all adult sheep before the autumn break to reduce worm burdens going into winter and spring. Weaners drenched in summer did not need another dose.

In south eastern areas, Angus suggested regular monitoring of sheep during winter and treating when worm egg counts exceeded 250 eggs/gram - taking into account animal condition score and pasture quality.

It is recommended all ewes lambing after June are routinely drenched pre-lambing. Spring lambing ewes might not need a pre-lambing drench. Decisions should be based on condition score and worm egg counts.

Brown said this was because for up to two months after birth, ewes experienced a hormonally-induced relaxing of worm

resistance and egg counts could skyrocket from as low as 100 eggs/gram to 400 eggs/gram or more during this period.

He said this had potential to significantly increase pasture contamination for new lambs and adversely impact on ewe lactation and lamb growth.

Preparing low worm burden paddocks

Brown said ideally ewes should lamb onto paddocks with low worm burdens and high quality, nutritious feed. Weaners required similar paddocks (figure 1).

In WA, he said stubble paddocks that had not been stocked with sheep since autumn were ideal.

Angus said setting up low worm burden and high quality pastures for lambing and weaning could be achieved by grazing off excessive dead pastures before the autumn break, changeover grazing with cattle, grazing with sheep that had known low worm egg counts, using summer fodder crops or 'Smart grazing'.

The 'Smart grazing' program involves two periods of intensive grazing for 3-4 weeks after each summer drench to reduce worm larvae populations on pasture.

Brown and Angus said veterinarians and animal health advisors were available to help producers in all states design IPM programs that were specifically suited to their property.

Strategies to reduce worms

Reduce the impact of gastrointestinal worms on sheep production systems in winter rainfall areas before lambing by:

- Maintain ewes in good condition during winter to better withstand parasites.
- Tailor a strategic worm control program to your location and enterprise and treat sheep based on egg count monitoring.
- Prepare dedicated high quality, nutritious and low worm risk pastures for lambing ewes, the lactation period and weaning.
- Low worm risk pastures can be set up by destocking/spelling paddocks, cattle grazing, sowing fodder break crops, hay or silage production and/or smart/rotational grazing.



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Read about the management of worms in the Making More from Sheep guidelines: www.makingmorefromsheep.com.au

For worm control download fact sheets at www.mla.com.au/wormcontrol

Snapshot

Stuart, Maree,
Allan and Ailsa
Fox, Merton, Vic.



Property:
4,000ha

Enterprise:
Merino wool and
first cross prime
lambs, cattle
breeding

Livestock:
15,000 sheep and
1,000 cattle

Pasture:
Improved phalaris
and native
pastures

Soil:
Clay loam

Rainfall:
700mm

Monitor, test, count and plan



Two consecutive wet summers have wreaked havoc with gastrointestinal worm control in Allan and Stuart Fox's predominantly crossbred and Merino ewe flock.

Prior to 2010, the father and son - who farm in north east Victoria - rarely experienced worm problems warranting more than a single summer drench.

But changing climatic conditions have heightened the risks worms now pose to productivity in their prime lamb and wool enterprises.

The Foxes run about 6,500 Border-Leicester/Merino crossbred ewes joined annually to Poll Dorset rams to produce prime lambs and 4,500 Merino ewes joined annually to Merino sires for wool production.

Prime lambs born in spring are sold the following autumn and traditionally Merino wether lambs have also been sold at this time, so there have been few dry sheep on the property during winter.

Wet summers in 2010 and 2011 made running predominantly breeding stock challenging for breaking worm cycles and establishing low-worm risk pastures in

preparation for lambing ewes, new lambs and weaners.

Stuart said in 2010 ewes were not drenched pre-lambing based on low worm egg count (WEC) test results. But by lamb marking ewes had acquired significant worm burdens.

"In 2011 we expected major problems if the summer was wet again, so we gave the ewes a long-acting preventative drench before lambing," he said.

"As a result, last year's lamb drop was one of the best we've had with a 160% lambing rate across the Merinos and crossbreds."

"At about \$2/head, that drench was an investment well made."

Last summer prime lamb weaners and ewes received a December drench and a second drench in February based on quite high WEC results of 300-400 eggs/gram.

"We would now need to see very low worm burdens to stop us treating crossbred weaners with a second summer drench in future," Stuart said.

Merino weaners had low WECs of 20-40 eggs/gram in February this year and were not given a second drench.

These sheep were grazed on a Winterford rape brassica over summer in a paddock that was spelled for some time.

This year's autumn break arrived early for the Foxes, in mid-March, and Stuart said WEC monitoring would be carried out every six weeks during winter in the lead-up to lambing.

He said further strategic drenches would be given if the regional threshold level of 200 eggs/gram was reached.

Stuart said the family also ensured ewes were maintained at condition score 3-3.5 during winter, as sound nutrition appeared to significantly reduce worm burdens.

"We make sure the ewes are on a rising plane of nutrition from pre-joining right through to lambing," he said.

"During the green pasture phase we feed budget for all our crossbred and Merino ewes as if they are carrying multiple pregnancies."

Preparing for low worm burden pastures during winter in readiness for lambing is complicated for the Foxes because they have only a small proportion of dry sheep in the rotation and sheep are run in big mobs until lambing.

Stuart said cross grazing with cattle had helped to deal with the big worm outbreak in 2010 by providing clean paddocks for sheep.

"Cattle have been a very useful tool in our worm management, as well as spreading our business risk," he said.

Stuart said the family had decided to start building-up the wether portion of its Merino flock this year to provide greater flexibility with rotational grazing. More land has been purchased, which will allow them to run similar ewe numbers.

Summer crops are used as finishing paddocks for weaners and this also could help to break worm cycles.

Stuart said the family would undertake regular drench resistance testing in future to monitor the status of its flock, as this could pose a serious production challenge if left unchecked.



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Cost of production

Networking – a powerful production tool

For the past decade, facing the challenges of fire, drought and flood have all been in a day's work for Australian beef producers. However, according to 2007 Victorian Beef Producer of the Year, Peter Kirk, it's how people respond to those challenges that defines success.



“At times, being involved in agriculture felt like riding a mad horse downhill – no control at all,” Peter said.

“However, it taught me knowledge and useful science are freely available and, by applying them to your own business, you can greatly reduce the impact of those challenges and consistently make better decisions.”

A registered valuer who now farms full-time on 500ha at Tallangatta, about 50km from Albury-Wodonga, Peter considers his first good decision was to learn everything he could from his mentor, local Hereford breeder and bullock finisher, Leo Lorenz. His second good move was to expand his practical knowledge by embracing BeefCheque, and the third was to surround himself with motivated peers through the Tallangatta BetterBeef Network (BBN) group.

“Our group of 11 producers has been together since 2009. We meet six times a year on different properties and these meetings are very important to me,” Peter said.

“The producers who attend are motivated. They’re forward thinkers. They’re the people you want to learn from and bounce ideas off. It’s very reassuring to have access to their collective wisdom.”

BetterBeef Network Tallangatta Group Co-ordinator, Alison Desmond, said producers were empowered by setting their own agenda based on topics offered by MLA’s More Beef from Pastures (MBfP) program.

The Tallangatta group has an average age of about 55 and many are still reeling financially from the string of droughts from 2002 to 2009. Consequently, cost of production (CoP) has held centre stage with some producers having up to four years of data on which to base decisions.

→

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"People think of benchmarking and immediately think of having to share personal information and being compared to - and possibly even criticised by - others," Alison said.

"The information remains confidential and the farmer has complete control over how much they share. Because we have been together for quite a few years, there's a great sense of camaraderie and often a farmer will volunteer 'they're my figures and I don't care who knows them' and we then have a really meaningful discussion."

Alison said CoP data was most useful for producers trying to solve quandaries such as whether to buy a tractor or hire a contractor, comparing feed options, selecting the most productive pastures and generally identifying their business strengths and weaknesses.

For Peter, the group's CoP work put paid to any doubts he had about his daring drought strategy of lot feeding 550 head for five months during 2005 and 2006

"It was a huge financial outlay," he said of the decision which saw him invest in a mixer, silos and a pad, feed and water troughs, and buy in straw and grain.

"But at the end of five months, I still had my breeding cows and weaners and the drought damage to my land was minimal. I had invested years in genetics. There was no way I could have sold my herd and ever hoped to buy it back."

Five years on, Peter and his wife, Marie, still have their closed, 300-cow Hereford herd based on Injemira blood. And their two properties - the 100ha home block, Glengyle, which overlooks Lake Hume, and 400ha at nearby Spring Creek - show none of the typical drought scars of erosion, depleted pastures and dead trees.

Snapshot

Peter and Marie Kirk, Tallangatta, Vic.



Property:
500ha

Enterprise:
Hereford breeder and feeder steer production

Livestock:
300 Hereford breeders

Pasture:
Phalaris, cocksfoot, fescues, ryegrass, microleena and volunteer grasses

Soil:
Red brown shale clay and grey clays of granitic origin

Rainfall:
850mm



The couple are still production focused with a keen eye kept on maximising the number of kilograms of beef produced per hectare.

"I learned a lot about nutrition, animal health and growth from our lot-feeding experience. I believe it's really important to look after the female element of the herd - without them you've got nothing," Peter said.

As a result, the Kirks supplementary feed their weaners a high protein ration until there is a 'feed wedge' in the paddock and aim for a weight gain of 1kg/head/day with emphasis on the July/August-drop heifers making their joining weights by June.

All steers are turned off at feedlot entry liveweights of 430kg to 450kg while the entire heifer drop is retained and ideally joined after their first or second cycle for six weeks. All empty females are culled.

Fertiliser and soil health are also top priorities and CoP benchmarking has proven Peter's alternative biological approach is a financial winner.

Instead of using commercial phosphorous-based fertilisers, over the past decade Peter has developed his own fish emulsion for spraying on pastures, primarily deep rooted perennials such as phalaris, cocksfoot, fescues and ryegrass.

"Using fish and biology I've reduced my fertiliser costs considerably and I'm getting an overall better result."

Figure 1 Three years of data from the Tallangatta BBN group

Year	Average price received (c/kg lwt)	Cost of production (c/kg lwt)	Kg beef/ha	Kg beef ha/100ml rainfall
2006/2007*	0.83	2.59	155	64
2008/2009	1.49	1.12	536	na
2010/2011	1.91	1.04	505	51

* The 2006/07 data illustrates the impact of drought through higher feed and infrastructure costs and lower beef production due to reduced numbers and lower weight gains.

The BetterBeef Network is a supportive network of producer groups across Victoria aimed at improving the profitability and net value of Victoria's beef industry. The groups, made up of 10 to 15 producer businesses, meet for five hours, six times a year and have access to technical specialists and the More Beef from Pastures program.



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www.mla.com.au/morebeeffrompastures

www.dpi.vic.gov.au/agriculture/beef-and-sheep/beef/betterbeef-network

NT weighing systems



1. A typical weigh box system used in commercial beef operations.
2. A typical portable platform used on commercial beef properties. This platform would be inserted into the base of a crush for weighing.



Weighing up the scales

1

2

A Northern Territory Department of Resources (NT DoR) research project has found cattle weigh boxes were up to three times more accurate than portable platform weighing systems.

In 95% of cases, the research also found repeated weights on weigh box systems were within 4kg of each other, compared to 11kg for portable platform systems.

For producers targeting live export markets, this research highlights the need for weighing accuracy in light of the strict 350kg weight restriction introduced for the Indonesian live export market in 2010.

The research was undertaken as part of a larger project analysing factors affecting variations in the liveweight gain of steers on commercial cattle properties.

NT DoR Beef Cattle Research Officer, Sarah Rothery, who ran the project, said the research focused on the two most commonly used on-farm weighing systems, the weigh box (image 1) and the less expensive portable platform (image 2).

"We knew this research would have significant industry relevance given the pressure on producers to supply cattle in specific weight ranges for markets such as the live export and feedlot sectors," she said.

Sarah said producers should be aware of factors that could influence the accuracy of their weighing system and follow some basic protocols to ensure the most accurate result possible.

Tips for improving accuracy when weighing cattle on portable platforms

- Check the scales with a known weight before starting.
- Ensure load cells are sitting level in the base of the crush.
- Remove dirt, rocks and manure that may build up beneath load cells - repeat throughout the weighing process.
- Ensure the scales return to zero between animals.
- Ensure animals are standing squarely on the platform and not stepping off.
- Ensure animals are not leaning on the side of the crush.
- Always use the same curfew (either full or empty) when reweighing mobs to calculate liveweight gain to avoid the gut fill effect.



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Watching winter weight gain for weaners

Southern Australian sheep producers are advised to avoid complacency with the arrival of high quality green feed in late autumn and winter.

The focus should be on weaner growth and performance to maximise the genetic potential of these young sheep.

Department of Primary Industries (DPI) Victoria Livestock Systems Senior Research Scientist, Dr Ralph Behrendt, recommends producers plan well ahead and set targets for winter liveweight and spring growth to reach liveweight targets by the following summer.

"Management strategies implemented now in the green pasture phase are vital for the flock to economically gain weight and to prepare young sheep for achieving high performance at their first joining," he said.

Ralph said major challenges for weaner management during the winter months included maintaining body condition and growth on short green feed with higher intestinal parasite loads and colder weather.

MLA is contributing to the Sheep CRC's High Performance Weaners (HPW) training course that outlines how to best manage weaners right throughout the year to optimise growth rates and animal welfare, boost ewe lamb conception rates and reduce mortalities.

It is estimated 20% of sheep flocks in southern Australia have a weaner mortality rate higher than 6%. This costs producers up to \$20/head in expenses incurred getting each lamb on the ground.

Winter growth rate targets
Rural Industries Skills Training (RIST) HPW Program Leader, Darren Gordon, said Merino and prime lamb weaners should be

growing at a rate of at least 1kg/month during winter.

He said a consistent condition score of about 2.7 during this period indicated this was being achieved.

Research has shown this growth target can boost weaner survival rates by 80–90% in Merinos, especially at the tail end of the mob.

Darren said ewe weaners being grown out for their first maiden joining next autumn required regular monitoring during the winter months to ensure growth rates were being maintained.

"These sheep should be growing at an average 30–60g/day throughout winter and to the end of spring to achieve a target of 80% of their adult weight by the time feed dries off," he said.

"The aim then is to ensure at least maintenance, or preferably slow growth, to joining in autumn so ewes reach condition score 3 at that time."

HPW and Lifetime Ewe Management principles recommend maiden ewes should be at condition score 3 at joining to achieve good conception rates.

Winter nutrition

It is estimated weaners weighing from 25 to 35kg need about 8–9 megajoules of energy per day to achieve growth rates of 1kg/month.

Feed on offer (FOO) targets to meet these energy requirements are about 800–900kg green dry matter/ha during early winter. Weaner growth will accelerate if levels are higher.

"Pasture monitoring and budgeting is important in winter and if the quality or quantity required is not there, supplements might be needed," Darren said.

He said weaners put on to lush green feed straight from dry pastures could suffer from low fibre in their diet and scouring, which could set back growth.



Late autumn/winter management strategies to boost weaner survival and maiden ewe performance in southern production systems

- Weaner ewes need to gain weight through winter - aim to reach 80% of mature weight by the end of spring and be at condition score 3 for joining.
- Growth rate target for Merino weaners being held for wool production is a minimum 1kg/month. Heavier animals need higher targets.
- Higher rates may be targeted for females to reach 1- or 2-year-old joining weights.
- Feed budget for a minimum 800-900kgDM/ha of high quality green feed on offer (FOO).
- Ensure weaners have had a primary and booster vaccination at lamb marking and weaning for protection against pulpy kidney.
- Consider a third vaccination if longer than three months since previous vaccination and lambs are going on to lush pastures, particularly lucerne or clover.
- Monitor intestinal worm burdens and treat young weaners promptly when worm egg counts exceed drenching thresholds for the region.
- Minimise feed disruptions during shearing and provide shelter and extra feeding post-shearing, especially for lighter weight weaners.
- Don't change feed sources suddenly - weaners take time to adjust to new feeds.

He recommended roughage be provided in the transition phase to green feed for up to 14 days if necessary to allow microflora in the rumen time to adjust.

Animal health

Weaners introduced to lush green feed in the autumn and winter need to be up-to-date with vaccinations to protect against pulpy kidney and avoid fatalities. If weaners are more than three months past their booster vaccination and going on to lush lucerne or high clover content

pastures, an extra vaccination should be considered.

Another major issue at this time of the year is intestinal parasites. Ralph said it was vital for producers to monitor worm risks in the paddock, sheep growth and condition score, and FOO.

He recommended weaner sheep be regularly tested for faecal worm egg counts from three weeks after the autumn break.

Ralph said for young weaners and sheep less than 12 months old, it was vital to treat for worms

promptly with an effective drench when drenching thresholds were reached.

He said veterinary advice should be sought about appropriate drenching thresholds for specific regions at this time of year.

Shearing risks

Extended research, including by the University of Melbourne's Mackinnon Project, has shown shearing Merino weaners in autumn or early winter poses an increased risk of deaths for a fortnight after shearing, especially in the March to May period. →

Figure1 Bodyweight targets for weaners and young ewes.

Adult weight (kg)	Birth (kg)	Weaning on dry pasture (kg)	Autumn break (kg)	Late winter (kg)	End of spring (kg)	Mating on dry pasture (kg)
45	4.0	20.3	26.3	30.3	34-36	34-36
50	4.5	22.5	28.5	32.5	37-40	37-40
55	5.0	24.8	30.8	34.8	41-44	41-44
60	5.0	27.0	33.0	37.0	45-48	45-48
70	5.5	31.5	37.5	41.5	52-56	52-56
% of adult	8-9%	45%	54-58%	59-67%	75-80%	75-80%

Source: Adapted from http://makingmorefromsheep.com.au/wean-more-lambs/tool_10.5.htm

The table provides a guide for the target liveweight for maiden Merino ewes from birth to pre-mating to lamb as a two-year-old. The target weight at any given time depends on the mature size of the ewe. Following these guidelines will help achieve high rates of weaner survival and acceptable reproductive performance in young ewes.

HPW training

The HPW course has a practical measure-to-manage approach that guides groups of up to five producers through the critical stages of the annual weaner management cycle with the help of a RIST coordinator.

New HPW groups are being formed this spring.



RIST

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Sheep CRC's website

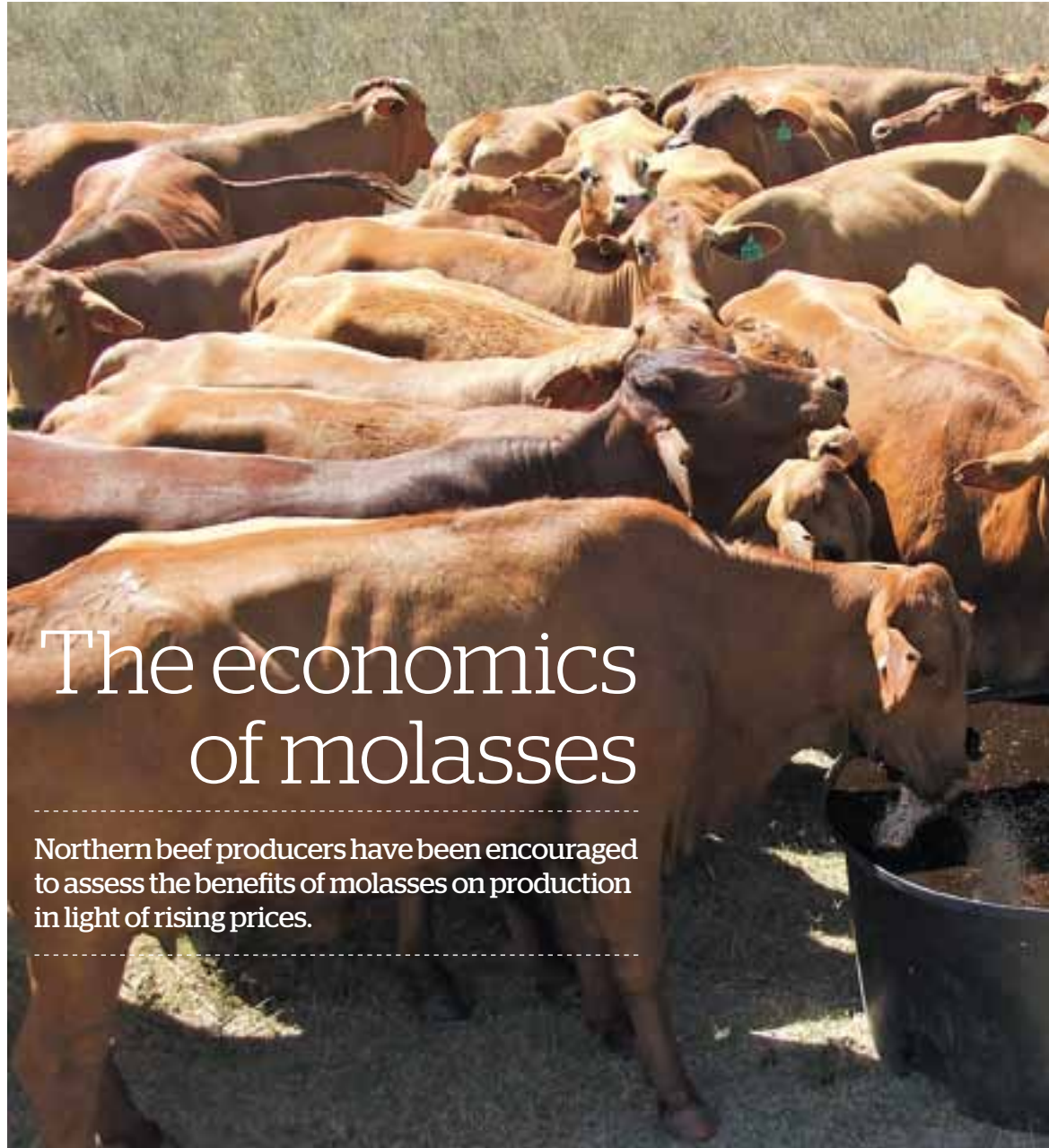
www.sheepcrc.org.au



This is when sheep are not acclimatised to cold weather and post-shearing energy requirements and risk of exposure increase.

It is recommended lighter animals are shorn first and returned quickly to a sheltered paddock and feeding regimes that have been in place are maintained.

If poor weather is forecast in the post-shearing risk period, vulnerable sheep may have to be put back in the shearing shed.



The economics of molasses

Northern beef producers have been encouraged to assess the benefits of molasses on production in light of rising prices.

When used in conjunction with best practice grazing, molasses remains one of the most economic cattle feed supplements in coastal cane growing regions.

However like most farming inputs, the price of molasses supplements has been increasing, so it is vital producers do a cost benefit analysis for their enterprise.

Alan Laing, beef extension officer and nutritionist with the Department of Employment, Economic Development and Innovation in Queensland (DEEDI) at Ayr said that for cattle properties situated within a reasonable distance from sugar mills, molasses remained one of the best feed supplement options.

A by-product of sugarcane processing, more than one million tonnes of molasses is produced in Queensland each crushing season. About 50% of Australian molasses is used domestically for stock feed, ethanol and rum production, according to the Australian Cane Farmers' Association (ACFA).

The economics adds up for Robert Rea who feeds molasses to his herd on Lisgar Station, Home Hill.



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Therefore, its value is linked to a number of local and global supply and demand factors, but generally strong end-user demand for molasses has created a rising price trend for the product in recent years.

Alan said raw molasses currently costs about \$117.50/tonne plus GST and freight for delivery.

"Molasses is still a cost effective supplement provided a property is within reasonable reach of sugar mills to avoid high freight costs," Mr Laing said.

"But the economics of feeding a molasses supplement comes back to an individual property and what they are wanting to achieve with their cattle and what other feed options are available to them."

Molasses itself is palatable, high in sulphur and with good energy levels of about 11MJ/kg, but is low in protein and phosphorus. These elements have to be added into molasses, where once mechanically mixed through they remain (some dissolved and some suspended) at safe levels for cattle to consume.

Mr Laing said the cost of these additives were a key factor in what molasses mixes were viable to use.

Molasses can be used as a carrier for urea when nitrogen levels in the diet are low - at about \$900/t - currently the high cost of urea is limiting the use of mixtures such as M8U (molasses with 8% urea), which is commonly used as an ad-lib supplement to supply protein and energy and help cattle maintain weight during drought periods or times of low quality feed.

Mr Laing said a popular mix being used instead was MUP - molasses with 3% urea and up to 10% protein meal.

Using computer modeling, he said when fed to weaner cattle at a rate of 1.5kg a day, this mixture cost 29¢/day.

Mr Laing said such a ration wouldn't achieve big weight gains but would help the weaners maintain a forward growth plane until better pasture was available.

He said research had shown weaners supplemented with a molasses mix during their first dry summer season achieved better growth rates and fertility later in life.

"Just by gaining 100 grams a day as a weaner during their first dry season from having access to a fortified molasses supplement, heifers will have higher fertility when mated as two-year-olds and have better fertility for life," he said.

Molasses can also be used as an energy supplement. Mr Laing said the cost of using the MUP mix as an energy feed to help fatten cattle would vary depending on the quality of pasture the animals were on, their size and genetic potential to convert feed into weight gain.

At a rate of 5kg/head/day of MUP, the cost would be 93 cents a day. If the cattle needed to consume 8kg/day, the cost would rise to \$1.50/day.

He said such supplement levels should be capable of achieving weight gains of up to 1.1kg/day for cattle grazing average pastures. For example, if at current beef prices a beast gains at 1.1kg/day and it is costing only \$1.50 to achieve that gain, then it will still be cost effective to feed the molasses brew. It really depends on current beef prices, the cost of feeding and the target markets.

"What producers need to consider is whether the cattle they are feeding have a target market and sale value that makes the feeding program viable, and the figures will be different for each individual property," he said.

Mr Laing said farmers needed to be careful not to ad-lib feed cattle with very palatable mixes of molasses, as consumption levels would rise beyond what was economical.

He advised producers to assess the size of feed troughs and to know how many cattle being fed and at what kilogram rates, so a set amount of molasses supplement could be fed out each week.

Mr Laing said to make the most economical use of molasses a producer needed to have bulk storage tanks for volume deliveries, and pumps and mechanical mixers to reduce labour costs.



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Read the MLA final report *High-input systems for Northern breeding herds*.
www.mla.com.au/highinputsystems



Selling the sizzle in secondary cuts

A connoisseur of all that is red meat, David Carew shared his flair at Beef Australia 2012.

MLA's resident chef and Product Innovation Manager, David runs chef Masterclasses and red meat cutting and cooking demonstrations at trade shows and industry workshops around the globe.

Winner of eight Australian Innovation awards and specialising in the technical side of meat preparation, here David explains to *Feedback* just what his role involves.

What does your role bring to the industry?

I work specifically on secondary cuts and capability training. I draw on the latest technology to increase carcass utilisation for cuts ideal for restaurants and hotels. We develop and promote secondary cuts in global markets, with the aim of making them more widely accepted. This results in people worldwide eating more meat.

How do you increase carcass utilisation?

To increase the carcass value we draw on Meat Standards Australia (MSA) principles to develop value added red meat from secondary cuts. We develop technologies, build scientific and technical knowledge, provide information and technical support services' and undertake market research to identify new product opportunities.

New technologies have increased product shelf life and utilisation of low value cuts to meet consumer needs for healthy and convenient food products.

My job is to identify unmet consumer needs, provide technical assistance to foster innovative secondary cuts and create new products and recipes for the industry. SmartShape is one of our unique inventions. It shapes red meat into a log and places it into a round plastic package. The meat maintains its round shape, and taste and tenderness are unchanged by the process. SmartShape provides better portion control, less waste, uniform presentation, consistent cooking time and the ability to create new products ideal for foodservice and airline catering.

Explain what you do in a typical demonstration, at events such as this month's Beef Australia 2012?

I demonstrate seam cutting of beef secondary cuts and discuss technical interventions MLA has designed to assist the value proposition. At Beef Australia I showcased SmartShape and introduced menu design and MSA Cut to Cook principles to provide the knowledge to successfully embrace increased carcass utilisation. Producers also got some great tips to impress their family when they're next in the kitchen.

100

cooking demos a year performed by David

10,000

people watch David's cooking demos a year

2 to 200

in a demo audience

The three components of David's demonstration at Beef Australia 2012 were:

→ **Plate profiling:** A beef carcass offers many tasty steak options for the diner which don't necessarily look like a scotch fillet. Plate profiling details the method used to shape non-loin cuts into more manageable and user-friendly meat portions for food service and manufacturing. In turn this alleviates the reliance on loin muscles and enhances new product opportunities for what were previously considered secondary cuts. It also moves top quality beef into mainstream catering, where lower price meat options are sought.

→ **Cut to cook:** This articulates to the trade the most ideal cooking method for individual muscle meat to achieve the best possible eating result.

→ **Menu design:** A pathway to deliver ultimate value for every part of a primal. Most red meat users buy multiple parts for their menu independently and pay a premium on each product. Menu design shows how to minimise cost by buying secondary cut muscle meat products. It encourages more use of red meat, ultimately increasing menu opportunities.

Recipe



Roasted beef rump with mushroom sauce

Serves: 4**Preparation time:**
15 minutes**Cooking time: 1 hour****Ingredients**

1 Smart Shape Rump (or ask your butcher to prepare a whole rump centre and cut into 3 pieces cutting head to tail direction)
250gms field mushrooms
200ml of beef stock
50gms butter
2 tablespoons of olive oil.
Salt and pepper

Method

1. Preheat oven to 100°C. Remove rump from refrigerator 30 minutes prior to cooking.
2. Brush rump with olive oil and season with salt and pepper. Seal meat in a hot frying pan on each side for two minutes.
3. Place on an open rack in the oven and cook. Using a meat thermometer, the meat will reach 60°C internal temperature for rare, 62°C for medium and 68°C for well done. This should take approximately 30-50 minutes.
4. Remove meat from oven and rest in a warm area.
5. Meanwhile heat olive oil in pan and cook sliced mushrooms on high heat looking for colour about 3-4 minutes stirring frequently until lightly browned. Add 100ml of the beef stock and stir until it reduces by half. Add another 100ml and reduce.
6. Remove pan from heat and stir through the butter until melted. Slice meat and pour sauce over.

Serving suggestion

Serve with roast potatoes and steamed green vegetables.

Above: From a beef rump centre cut created using SmartShape, featuring a new cooking protocol designed for the airlines to deliver an economy meal option.



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'Chuck a Sunday' with a mid-week lamb roast



Lamb roast may have been voted the nation's favourite dish in 2010*, but it's still considered a 'Sunday' meal. MLA's new lamb marketing campaign aimed to change this view by inspiring Australians to 'Chuck a Sunday' with a midweek lamb roast.

Launched on 15 April, the campaign featured a new television commercial bringing the activities most Australians associate with Sunday, including reading the newspaper, mowing the lawn, playing in the park and the highlight - a delicious family lamb roast - to a midweek day, making it feel like 'another Sunday'.

"We're moving away from simply promoting lamb for mother's day and instead positioning lamb roast as a casual mid-week meal for autumn. The new campaign carries the 'chuck a Sunday' message as we'd like to see consumers inserting a family lamb roast into their busy midweek lives," said Andrew Cox, MLA's Marketing Manager Brands and Strategy.

Lamb roast was voted

Australia's #1 dish
in a 2010 poll of 24,000 Australians.

"Our market research has told us that educating consumers about the variety of cuts available for roasting and how they can prepare a faster lamb roast midweek is important. As with all our campaigns, we've developed a range of collateral including a recipe booklet to inspire and help consumers prepare lamb roasts," said Mr Cox.

Public relations activities included a workplace competition with Nova radio station-created hype and conversation about 'chucking a Sunday' with a lamb roast.

* News Limited poll, February 2010.



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Recorded lamb sales:

Best ever week: Lamb sales value up by 32% to \$18.5m for week including Australia Day since MLA began tracking in 2000.

Record month: January lamb sales value was the highest for the past 12 months, averaging \$15.9m per week and reaching \$63.6m in total.

Highest butcher participation: 86% of butchers surveyed by MLA participated in the campaign.

Big audience: The campaign had an audience reach of 146 million people. That's more than six times for every Australian.

Chopular culture off the charts this Australia Day

MLA's Australia Day 2012 campaign, fronted by Sam Kekovich, contributed to a record four-week period for lamb sales value, with the week including Australia Day, the highest recorded by MLA.

Figures for lamb sales value for the week including Australia Day were up 32% on average weekly sales, reaching \$18,552,911. Meanwhile the value share of lamb sales also performed strongly for the month of January, up 13% on the previous year.

The campaign - which ran in the lead up to, and including, Australia Day - featured a traditional Sam Kekovich rant, this time against pop culture and a pop-song parody. Sam's 'remake' of the '90s hit 'Barbie Girl' could be viewed online via YouTube and was a radio hit.

Audiences were drawn to the song with more than one million online views recorded. The highly anticipated campaign also made twitter's list of top 10 conversation topics in Australia on the day it was launched.

Sam made 75 appearances promoting lamb across radio, television, online, print and events.

"We are very happy with the success of this year's Australia Day lamb campaign. It caught consumers' attention and received a lot of support from retailers, with 86% of surveyed butchers participating - the highest for any promotion we have run," said Andrew Cox, MLA's Marketing Manager Brands and Strategy.

Higher protein diets: what's new?

Higher protein diets for different life stages were the focus of more than 450 dietitians attending the recent nutrition symposia series hosted by the Dietitians' Association of Australia (DAA) and sponsored by MLA.

Held in Sydney, Melbourne and Brisbane, the symposia heard the findings from MLA's Human Nutrition Research program.

Presenters from the University of Sydney and Deakin University highlighted the benefits of a higher protein diet for managing insulin resistance in overweight adolescents (Dr Sarah Garnett); improving compliance with weight management in young women (Dr Helen O'Connor); and, together with an exercise program, for building muscle health in older women (Professors Caryl Nowson and Robin Daly).

The benefits of a higher protein diet for meeting nutrient requirements, including iron, zinc and vitamin B12, were also highlighted.

These studies showed red meat, as part of a higher protein diet and combined with a healthy lifestyle, contributes to good health.

The symposia was sponsored by MLA as part of its efforts to ensure the nutritional benefits of red meat as part of a healthy diet are underpinned by credible scientific evidence.

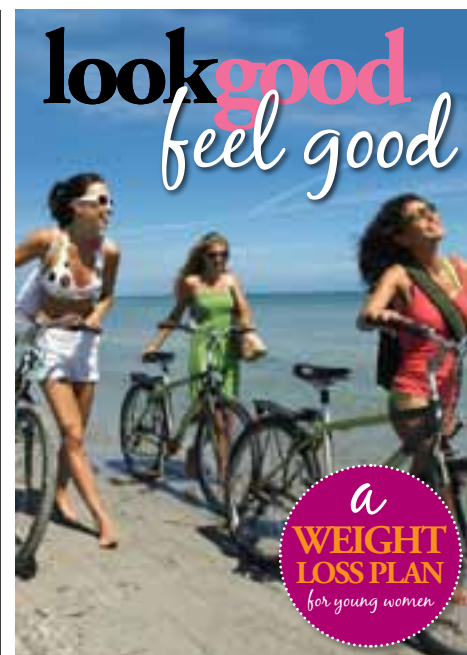
New weight loss brochure for young women

In a world of plenty, effective weight management is becoming increasingly important, especially for young women aged 18 to 25.

In response to rising obesity levels and a lack of effective weight loss strategies, a new *Look good, feel good* brochure, funded and produced by MLA, provides young women with a higher protein weight loss plan. *Look good, feel good* outlines the benefits of protein-rich foods to provide critical nutrients that can be lacking in young women's diets.

The information in the brochure is informed by research undertaken at the University of Sydney, funded by MLA, comparing the effectiveness of a higher protein diet with a higher carbohydrate diet. While women lost weight on both diets, those on the higher protein diet tended to lose more weight.

The *Look good, feel good* brochure provides information on nutrient-rich protein foods, a daily food guide, eating plan, tips for managing alcohol, encouraging exercise and how to prepare healthy meals with easy beef and lamb recipes.



Look good, feel good brochure.

Almost 200,000 copies of the brochures will be inserted into the July edition of *Cosmopolitan* magazine, popular with young women.

The *Look good, feel good* brochure has been independently reviewed by the Dietitians' Association of Australia (DAA) and will be distributed to more than 10,000 health care professionals, including GPs, dietitians, practice nurses and fitness professionals.



Sam Kekovich may not have the singing prowess of the world's biggest popstars, but when it comes to promoting lamb on Australia Day, he has rhythm.



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Visit www.youtube.com/lambaustrialiaday to view Sam's 'Barbie Girl' video clip.

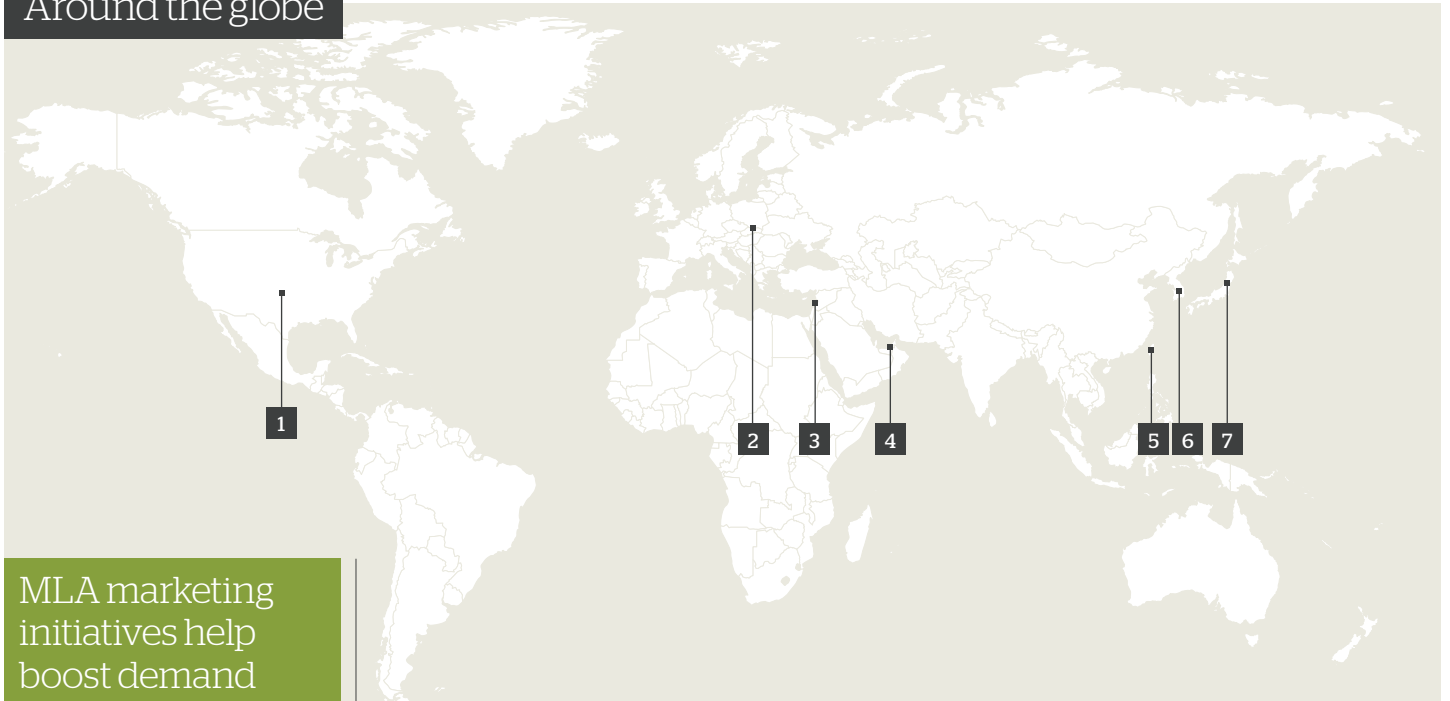


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View the *Look good, feel good* brochure at www.themainmeal.com.au/red+meat+and+nutrition

Around the globe



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

1 US

Revamped website in North America

MLA's US office has just launched a redesigned website for American consumers, retailers and the restaurant trade. Designed with foodservice, retail and consumer focused components, www.australian-meat.com highlights practical instructions on the use of primal beef and lamb cuts, recipes and

information on the Australian red meat industry.

2 EU

Redoubling market access efforts in the EU

In recognition of the difficult nature of market access progress, particularly within the EU, the recent industry taskforce for Europe and Russia endorsed the addition of an agricultural trade lawyer to MLA's current team of one.

3 LEBANON

Muscling in on the 'Monaco' of the Middle East

Australian beef and lamb was promoted in Lebanon last month at the only annual foodservice trade show, HORECA. MLA coordinated exhibition stands with four importers and their export partners to actively promote Australian red meat. MLA also sponsored junior culinary competitions throughout the show. Importers were inundated with enquiries to supply high quality chilled beef and lamb cuts. Beirut is fast developing a reputation as the 'Monaco of the Middle East' and the Lebanese market is an emerging market for the Australian red meat industry with significant hotel and restaurant developments.



Revamped website in North America

4 UNITED ARAB EMIRATES

Dubai



MLA hosted 19 Australian red meat exporters in Dubai during February at Gulfood - billed as the world's largest annual food and hospitality show.

5 TAIWAN

Australian beef on the move



Working in collaboration with seven major red meat importers, MLA has designed and developed mobile advertisements promoting Australian beef on 13 meat importer delivery trucks.

The travelling advertisement for Australian beef provides reassurance to Taiwanese consumers of our clean, safe, and chemical residue-free product, at a time when concern has been raised about beef imported from the United States into Taiwan.

The ads feature the new Australian beef logo and have been developed in line with new point-of-sale material displayed in hyper- and supermarkets, for a stronger impact on consumers at retail level.

6 KOREA

Non-loin cuts highlighted in Korea

Consumers in Seoul were introduced to MLA's 'Masterpieces' program, which outlines how to utilise non-loin cuts during a *HojuChungjung Woo* masterclass. The class was held from 4-5 April to increase awareness of the quality of Australian beef and lamb, by demonstrating cooking methods for a wide variety of cuts. The interactive event served as a platform for promoting clean and safe Australian beef and lamb. Consumers also learned how to utilise cuts that are not commonly used in Korean cooking styles. The event attracted plenty of media attention for Australian beef and lamb.

7 JAPAN

Aussie beef - the perfect partner for your glass of wine



MLA is supporting a spring outdoor campaign run by Jacob's Creek which features Aussie Beef recipes attached to wine bottles. The recipes included in the campaign were specially created by Ken Tanaka - Japanese outdoor lifestyle campaigner and Aussie beef and lamb cooking expert. The campaign is being run until the end of May.

Market observations

Mixed trading environment for Aussie beef

Australian beef exporters continue to witness two distinct markets on the global stage: a bullish manufacturing market and a more subdued market for premium cuts. This is having implications for livestock prices back on home soil.

Tim McRae
MLA Economist



Since the onset of the GFC in late 2008, demand for lower priced Australian beef products has been relatively robust - at times positively surging.

This has occurred despite the rising A\$ reducing the price competitiveness of Australian product. In contrast, demand for high quality and high priced beef cuts have experienced a tumultuous trading environment to Japan, Australia's largest beef export market.

Demand and prices for manufacturing and lower priced beef has been high while interest in high quality beef has been low. The global benchmark for manufacturing beef is known as 90CL in the US and commonly used in the production of hamburger patties in the foodservice trade. It's global benchmark surged to record highs in early 2012, driven by a combination of falling US beef production and robust global competition

from the world's three largest beef importers US, Japan and Russia.

What about the premium cuts? With Australia's trade heavily focused on North Asia, the combination of the higher A\$, sluggish demand for higher priced beef and increased competition from the US has influenced returns, especially for chilled beef.

One of the most heavily impacted sectors has been the chilled grainfed market, with returns for Australian exports of chilled shortfed fullsets averaging 8% below the five-year average in the first two months of 2012. Chilled strip loins and tenderloins have also averaged well below the five year average.

This trading environment for Australian beef exports has been displayed in several ways to producers, most visibly in sustained strong returns for cows (traditionally sourced for manufacturing beef), while returns for heavy grainfed animals have been weaker.



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On the ground

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With Australian beef and lamb exports to the US predicted to rise by 12% and 6% respectively this year, market development in the grassfed and natural categories will be imperative to see the US return as a major export destination for Australian red meat.

The nutritional focus of the US consumer creates tremendous opportunities for the Australian red meat industry. Australian product is well positioned to take advantage of opportunities in the grassfed, natural and pasture-raised beef and lamb categories.

Alongside expectations for a US economic recovery, the interest in healthy living is quickly growing. Michelle Obama's 'Let's Move' campaign to combat child obesity is gaining momentum, with a number of restaurant chains now responding to the new health conscious consumer. Some restaurants are either changing their core menus or adding limited-time offers of lower calorie, healthier choice meal options. One restaurant chain is showcasing an entire menu with dishes less than 475 calories (1,988 kilojoules). From March all supermarkets are required to carry nutrition labelling for all cuts of protein. This regulation stems from the nutrition and food safety focus on the Obama administration's agenda for the coming election.

As the US produces 11.9 million tonnes of beef, 10.3 million tonnes of pork and 16.9 million tonnes of chicken, it's difficult for Australian exporters to compete on volume and price. Instead, MLA is working with importers to position Australian red meat as a product for consumers who are looking for a point of difference to what's currently on offer.

Sustainability is also a strong message for the Australian red meat industry, which is why MLA partnered with importers to tell Australia's red meat sustainability story to the US foodservice industry through a dedicated session on Australia's sustainable farming practices at the Protein Innovation Summit in April.

Market insight

The world's largest beef market develops a taste for lamb

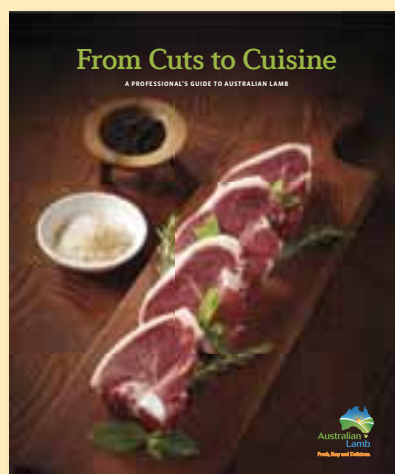
The US is the world's largest producer and consumer of beef. Yet when it comes to lamb, consumption remains relatively small, with nearly three-quarters of US consumers reported to have never eaten lamb. However, change is underway and increased demand for healthy, naturally raised foods is one of the factors expected to help lift Australian lamb exports to the US by 6% this year.

The US sheep industry is rooted in history and tradition, dating back to the second voyage of Columbus in 1493, when sheep were primarily used for wool for home-produced textiles and, to a lesser extent, meat. Today, the US sheep industry has evolved to provide meat, wool and pelts for textiles and milk in the emerging dairy sheep industry.

Despite the sheep industry's long history and versatility, the US sheep flock has been on a steady decline since the mid-1940s, from a record high of 56 million head in 1942 to 5.3 million head at 1 January, 2012, the lowest level in recorded history.

Over 55 years ago, about 25% of US consumer expenditure on food was in restaurants. Today, the US restaurant industry accounts for nearly half of the consumer's food dollar. US consumers are also increasingly interested in food from natural origins and which has high nutritional values.

3 out of 4 Americans say they have never eaten lamb



From Cuts to Cuisine

As lamb's popularity continues to grow throughout North America, retail meat buyers, meat managers, butchers, restaurateurs and chefs are increasingly being asked to look beyond the rack and chop for more innovative cuts and variations. MLA's new foodservice resource *From Cuts to Cuisine*, featuring recipes and other information, shows chefs how to utilise cuts commonly exported to the US other than the rack to add value to their menu offer.

What does this mean for Australian lamb exports?

The US market has played a significant role in transforming the Australian lamb industry with US consumer research leading early 1990s on-farm research targeting larger, leaner lambs.

Marked by its distinct flavor, nutrient-dense and natural attributes, Australian lamb has risen in popularity with US consumers over the past two decades.

Of the 100 countries Australian lamb is exported to, the US is by far the single largest export market. Last year exports reached 34,334 tonnes swt, fetching about A\$350million for the industry.

With higher imports of Australian lamb into the US but lower local supply and imports of NZ product, the Australian share increased last year to just under one-third of the total US lamb market.

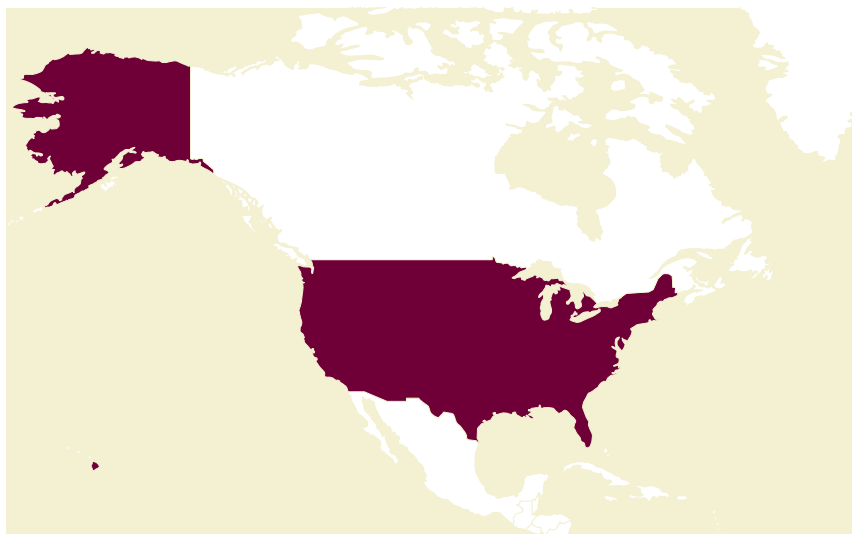
Continued good seasonal conditions in eastern Australia so far this year are expected to see the Australian sheep flock expansion supporting production. Australian lamb slaughter is expected to increase throughout 2012, with shipments to the US forecast to rise 6%, to 36,300 tonnes swt.

Australian lamb's cut of the market

The majority of Australian lamb is sold through the retail sector in the US. Yet, with high US protein prices across all categories, chefs at foodservice have been increasingly sourcing lamb as a point of difference in their restaurants.

While Australian lamb racks remain popular in the US, other cuts requiring different cooking methods and providing opportunities for alternative presentation have proved popular with consumers both at retail and foodservice. Such cuts include lamb shank, which is used as lamb osso bucco, and lamb legs.

The book features a step-by-step guide to lamb cuts, all the way from primal cuts through removal of bones and fat trims to the final stage of cooking and presentation. Alongside the cut guide, the book highlights that Australian lamb is prepared under strict specifications and packed in accordance with stringent quality assurance standards. With nutrition labeling important in the US, the *From Cuts to Cuisine* book features the essential nutrients of Australian lamb and provides a simple guide to handling, storage and cooking the product.



9.8 million km² area
The world's third largest country by size - about half the size of Russia

313.8 million people living there
The world's third-largest country by population

\$48,100 GDP per capita
and total GDP of US\$15.04 trillion, nearly a quarter of world's economy

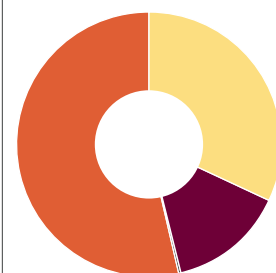
491 billion tonnes of coal reserves
Contains the world's largest reserves and accounts for 27% of the world's total

19.15 billion barrels of oil consumed per day
and 683.3 billion cubic metres of natural gas per year

The world's largest transportation systems

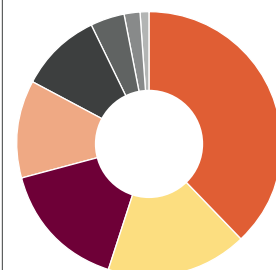
15,079 airports
244,792 km of railway
6.5 million km of roadways

US lamb market share



Australia: 32%
New Zealand: 14%
US: 53%

Australian lamb exports to the US by cut



Leg: 38%
Shoulder: 17%
Rack: 16%
Shortloin: 12%
Shank: 10%
Carcase: 4%
Manufacturing: 2%
Other: 1%



See the current episode of *feedbackTV* which showcases the US as a market for Australian beef

Beyond the gate Sydney, NSW

Thirty five NSW producers took a tour along the supply chain in March, discovering how their livestock travelled through the processing, foodservice, retail sectors and finally onto the plates of consumers. The producers saw first-hand the programs MLA invests their marketing levies in that aim to increase demand and position red meat ahead of its competitors in the domestic market. The producers visited Murray Valley Meat Co to get a better understanding of the Meat Standards Australia grading process before moving onto Vic's Meats Wholesale Division where Anthony Puharich discussed how Vic's Premium Quality Meats business grew from a small butcher store to premium supplier that services retail customers and top Australian restaurants.



Producers gather outside Victor Churchills in anticipation of a unique display of premium Australian red meat.

The producers visited the Sydney Convention and Exhibition Centre to take a behind the scenes tour of the kitchens that cater for over 600 annual events and then to the upmarket Victor Churchill butcher, which for many was an experience they weren't expecting. The day concluded with a Racking Up Your Profits masterclass and Masterpieces dinner, where producers learnt how MLA educates butchers about adding value to red meat and demonstrates the benefits to chefs of cooking with non-loin cuts of red meat.



Anthony Puharich takes producers through the Vic Meats Foodservice Processing plant.



David Carew and Doug Piper share a few cooking tips that butchers are using to keep red meat on the shopping list.



Chefs at the 'Hilltop' Boer Goat property discussing the production and supply of quality farmed goats.

Chefs get a taste of Paddock to Plate

Twenty three chefs from NSW, ACT and Queensland recently joined the MLA-organised Grazing Club Paddock to Plate two-day tour in Tamworth. The group had an opportunity to see the whole red meat Paddock to Plate process to enhance their knowledge of the industry and the full process behind getting quality red meat in their kitchens and onto consumers' plates. The group visited JBS Swift's Caroonia Feedlot, where quality Meat Standards Australia (MSA) product produced at the feedlot was showcased, a 'Hilltop' Boer Goat property to look at the production of quality farmed goats, and the Peel Valley Processing Plant where Country Fresh Lamb is produced. Goatmeat was on the menu with a sampling of six goat dishes which followed a demonstration on the breakdown of a goat carcass, to familiarise the chefs on working with goatmeat.

Upcoming events



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

BusinessEDGE

A two-day financial and business management training workshop for northern beef producers.

When and where:

22-23 May, Katherine NT
29-30 May, Charleville Qld
29-30 May, Goondiwindi Qld

Bookings: 0488 599 033
businessedge@
jkconnections.com.au
www.mla.com.au/EDGENetwork

Lambex

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

When and where:

28-29 June, Bendigo, VIC

Bookings: 1800 177 636 or esther@estherpricepromotions.com.au

Butchers shown how to 'chef up' their shops

MLA's Red Meat Networking Club (RMNC) held its annual national tour in Victoria recently, with 75 butchers from around Australia joining in. The RMNC brings together retail butchers to share ideas on innovative ways to promote red meat.



Butchers outside Montrose Meats.

On the four day tour, the butchers visited a number of Victorian meat retailers including Rainbow Meats in Chirnside, Dench's Meats in Hoppers Crossing, Elg and Robinson in Williamstown as well as a Certified Australian Angus Beef property. A hands-on 'chefing up your shop with beef and lamb' demonstration was also part of the tour, with a professional chef providing value-adding recipes to help increase sales of non-loin cuts.



Nick Edwards, South Australian Research and Development Institute (SARDI), discusses pasture establishment at the MLA producer demonstration site.

Producers investigate pasture in South Australia

In March approximately 100 producers inspected the producer demonstration site (PDS) in the Lucindale region in South Australia during the biennial Pasture Update forum. The forum was conducted by South East Prime Livestock Achievers and the Grasslands Society of Southern Australia. This event investigated a combination of pasture species mixes, seeding rates and planting methods to identify the optimal combination for perennial pasture establishment in the region.

Aussies win Trans-Tasman butchery challenge

Australian butchers have proven the best butchery skills are this side of the Tasman, winning the second Trans-Tasman butchery challenge against rivals, New Zealand. William Angliss

TAFE in Melbourne hosted the competition which required each team to breakdown, value-add and display one lamb carcass and a side of beef. The Australian team was made up of one butcher from each state. Congratulations to Trevor Hill (SA), Michael James (QLD), Larry Brewer (WA), Adam Stratton (NSW), Anthony McGregor (VIC) and Team Captain Jodie Hummerston (National Meat Industry Training Advisory Council).



The Australian team won by two points.

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

BeefUp forums

Discover how to make more money from your beef production enterprise at MLA's BeefUp forums.

When and where:
31 May, Durong Qld
1 June, Biggenden Qld
6 June, Texas Qld
7 June, Nindigully Qld
22 June, Croydon, Qld

Bookings: 1800 675 717

Benalla (Welcome Swallow) beef field day

The program includes an update on animal health management, the Angus/Charolais crossbreeding program, pasture technology and local and international beef market trends.

When and where:
16 May, Benalla, VIC

Bookings: 03 9731 2225

Cattle Council of Australia producer forum

Take part in discussions on the grassfed beef industry strategic plan *Beef 2015 and Beyond*.

When and where:
29 May, Casino NSW

Bookings:
cca@cattlecouncil.com.au

MLA Richmond field days

Hear about the latest challenges and opportunities facing the red meat industry at the Beef Industry Dinner.

When and where:
15 June, Richmond Qld

Bookings:
richmondfielddays@mail.com

Lambex²⁰¹²

A lamb industry event of excellence, designed to
unite, excite and enlighten



The Australian sheep and lamb industry is invited to attend this compelling two day conference, featuring outstanding speakers, an extensive trade exhibition, quality entertainment and an opportunity to communicate with all sectors of the lamb value chain.

Early bird
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farmers closes
June 1.
Book early to take
advantage of the
\$100 saving!

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www.lambex.com.au



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