mla Your levies at work // June 2013

Feedback

Taking stock in the red centre

A note from the MD...

The recent pressure on cattle prices is expected to remain throughout winter, as high volumes of cattle continue to be pushed onto the market. Drought conditions have caused the flow of northern cattle into the market to continue throughout May, while the failed or late autumn break across many southern regions has limited winter carrying capacity and restricted re-stocker buyers.

However, the record high cattle slaughter rates for the year, up 18% year-on-year for April, have led to export volumes for Australian beef and veal now forecast to exceed one million tonnes swt for the 2012-13 year, with greater volumes now being sent to our emerging and developing markets, particularly China. This market has emerged as Australia's third largest market to date this year.

In this edition you can read about programs aimed at reducing on-farm costs – including labour costs, controlling invasive animals and improving genetics to get more from less. Also featured is Target 100 – the community engagement initiative that MLA facilitates on behalf of producers. This program has now run for more than 12 months with over 140 producers sharing their stories with more than 200,000 consumers. See more on pages 8–9 including how you can get involved.

Scott Hansen
MLA Managing Director
managingdirector@mla.com.au

Contents

Cover: NT cattle producers John and Anne Stanes. Image courtesy by Dennis Schultz.

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

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

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

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

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

Growing demand

New look themainmeal.com.au

*MLA's consumer website **themainmeal.com.au** serves up a host of new features.*

The website contains more than 500 recipes and gives consumers the chance to comment; save or share their favourites; question an expert butcher, producer or chef; and easily find what they're looking for.

An average of 85,000 visitors per month viewed the old mainmeal website.

MLA Group Marketing Manager Andrew Cox said the new website is expected to be the online home of beef, lamb and goat recipes for Australians.

"themainmeal.com.au makes it easy for beef and lamb consumers to find the recipe or information they need to cook healthy meals that the family loves," he said.

"The new features of the website - and a more engaging design - will allow us to capture more of the huge interest in food ideas coming from social and digital media."

Top 3 features of the new site

1. **Greater two-way communication.** Consumers can submit comments on recipes and articles, and post a question in the 'ask an expert' section to our expert chef, butcher and producer. Users can also share recipes and articles via their social media networks.
2. **Personal customisation.** Account membership enables articles and recipes to be saved by members and accessed at any time. Members can also create their own 'virtual recipe book' and access it at any time.
3. **Improved search function.** Consumers can search via typing in keywords, meat type or cut, cooking method, cuisine type or collection theme such as 'under 30 minutes'.

Andrew Cox, MLA
T: 02 4963 9158
E: acox@mla.com.au

www.themainmeal.com.au

500
recipes on the re-launched themainmeal.com.au

85,000
visitors each month to old website

149,000
visitors peaked in March when television campaigns linked to the website

1.74
pages looked at per visit with old website

1.98
pages with new website

Look to the F'ewe'ture

MLA is a major sponsor of the upcoming BESTWOOL/BESTLAMB Annual Conference 'F'ewe'ture Sheep Farming.

Focusing on the key profit drivers in your sheep business, a series of half hour Innovation presentations will deliver practical information and tools that can make a difference to your bottom line.

Speakers will cover topics including:

Joining ewe lambs: Dr Jason Trompf from BESTWOOL/BESTLAMB will present the findings from the MLA funded Producer Demonstration Site which established the best practice for the early joining of young ewes.

Positioning sheep meat for the future consumer: MLA's Dr Alex Ball will deliver a workshop on what producers can do on-farm to ensure consumers enjoy a good eating experience.

Using social media: MLA will provide practical tips on how to engage consumers in the "conversation" about Australia's livestock production systems.

Driving profits in sheep production systems: Associate Professor Bill Malcolm, principal scientist with Victorian Department of Environment and Primary Industries, will talk about the key factors in delivering dollars to your bottom line.

Other session topics include pasture production, ewe nutrition, labour efficiency, managing ewe lactation to drive lamb growth rates, meeting market specifications, using cereals to fill feed gaps and improving farm infrastructure and safety.

The guest speaker at the event, and at the conference dinner on 25 June, will be New Zealand sheep producer Doug Avery.

When: 26 June 2013

Where: Bendigo Exhibition Centre, Bendigo Victoria

Register at: **www.dpi.vic.gov.au/agriculture/beef-and-sheep/sheep/bestwoolbestlamb**

Is it fit to load?

All states and territories will implement new national standards and guidelines for livestock transport by July. MLA's *Is it fit to load?* guide can help meet the standards.

The new standards have been progressively implemented nationwide starting with the Northern Territory and South Australia in August 2012. Queensland implemented the new standards in July bringing all states and territories into line.

The standards were developed in consultation with government, peak industry councils, welfare groups and the public, under the Animal Welfare and Product Integrity Taskforce

The standards apply to all people responsible for the care and management of livestock transported throughout the entire process and covers land transport of livestock by road, rail and vehicle on board a ship.

Livestock transport begins when animals are off feed and water and concludes when they have access to water at the end of their journey, including mustering and assembly; handling and waiting periods prior to loading; loading, journey duration, travel conditions, spelling periods and unloading and holding time.

To reflect the new standards and assist operators selecting animals for transport, MLA's *Is it fit to load?* guide is a practical guide to help meet these standards.

To download a copy of the free guide go to: **www.mla.com.au/fittoload**

www.livestockwelfarestandards.net.au

Three ways to access more *Feedback*

1. If you would like extra free copies of *Feedback* mailed to you, call 1800 675 717 or email **publications@mla.com.au**
2. *Feedback* magazine is now available at **www.mla.com.au/feedback** Back issues of the magazine from January/February 2012 are also available on the MLA website.
3. Receive weekly instalments of the latest MLA news by subscribing to *fridayfeedback*. Call 1800 675 717 or email **publications@mla.com.au** to get yourself signed up.

MLA on the move...

But not far. From August, MLA's head office will have a new home, just up the road from the current North Sydney location.

With the current lease expiring, MLA Managing Director Scott Hansen said the move was the most cost-effective option.

The new address is **40 Mount Street**, but all other details will remain the same.

Showing LPA through a new lens

The Livestock Production Assurance (LPA) program, the livestock industry's on-farm food safety program introduced in 2004, has turned to video to further spread its message.

The four-minute video is now available online to explain LPA's 'stand by what you sell' message and to encourage more producers to register for LPA, which aims to ensure the safety of red meat grown on Australian farms.

LPA is overseen by the industry's LPA Advisory Committee, made up of representatives of peak industry bodies responsible for cattle and lamb production. AUS-MEAT administers and audits LPA on behalf of the industry.

When producers tick the box on the National Vendor Declaration form, they are guaranteeing that their on-farm practices meet LPA requirements. Their tick must be backed up by accurate farm records.

As industry's on-farm food safety program, LPA meets the stringent requirements of domestic and export markets, providing assurance of the safety of Australian beef, lamb and goat meat.

LIVESTOCK PRODUCTION ASSURANCE

STAND BY WHAT YOU SELL

Check out the video at:
www.mla.com.au/LPA-stand-by-what-you-sell

Make more with less

Following its popularity in Western Australia, the publication *Sheep – the simple guide to making more money with less work* has been adapted for the rest of the country.

Developed by the Sheep CRC and Department of Agriculture and Food (DAFWA), the guide is designed to provide producers with the most up-to-date technology and infrastructure information to improve labour efficiencies with an eye on the bottom line.

Topics covered in the guide include:

→ Manage for ease and success
→ Less droving, more driving
→ Headache free husbandry
→ Healthy sheep save time
→ Well-fed sheep
→ Money grows in paddocks.

The guide was written and produced by farm adviser Bob Hall, and Sheep CRC and DAFWA staffers Mark Ferguson, Andrew Thompson and Mandy Curnow.

Order a free copy from the Sheep CRC
T: 02 6773 2927

Download it from
www.sheepcrc.org.au

New pasturefed assurance

CATTLE COUNCIL OF AUSTRALIA

Howard Smith,
Cattle Council councillor,
Queensland

Australia has long claimed to produce the best grassfed beef in the world. The Pasturefed Cattle Assurance System (PCAS) is an excellent opportunity for Australian producers to uphold the integrity of that claim using a certified system.

PCAS is a voluntary certification arrangement that will enable the grassfed beef production supply chain to provide 'certified pasturefed' cattle to the market place. It allows premium, high-quality, grassfed beef to be branded and recognised.

A large portion of Australia's cattle herd is exclusively pasturefed but beef from these cattle is rarely differentiated in the marketplace. PCAS will provide producers with a valuable marketing opportunity.

In the process of developing PCAS, Cattle Council found that stakeholders, including restaurateurs, doctors and nutritionists, were very interested in being able to access a consistent, reliable grassfed beef product.

The certification program provides an industry-recognised standard that supports claims surrounding production methods and provides the assurance that discerning consumers are demanding. Underpinning PCAS are the PCAS Standards that govern the on-farm feed requirements and traceability of the cattle as well as pre-slaughter handling practices that influence eating quality.

The standards also include two optional modules to support claims relating to freedom from hormone growth promotants and antibiotics.

To find out more go to
www.certifiedpasturefed.com.au
or T: 1300 653 038

Labour efficiency

Working smarter

Labour is a significant cost in running a livestock business; using it more efficiently offers the potential to improve on-farm productivity and profitability.

According to MLA's Sheep R&D Project Manager, Richard Apps, direct labour costs in lamb operations alone can make up 35% of the total expenses for a farm each year.

"Given its significance, it's not surprising that labour efficiency is one of the factors that sets the top 20% of livestock producers apart," Richard said.

The 2009 northern beef situation analysis (which is currently being updated, along with a southern version and is due later this year) concluded that the top 20% of northern cattle producers produced $315,397 of gross product per labour full-time equivalent (FTE) compared to average of $229,592/FTE. Similar findings were identified in southern Australia: the most efficient southern cattle herds employed a full-time labour unit for every 15,000 DSE run while the average was 10,000 DSE. For prime lamb operations, the top 20% employed an FTE for every 7,100 DSE; the average achieved 6,300 DSE.

"These findings reinforce the significant potential for most livestock enterprises to reduce costs per unit (kg, DSE, hectare) of production by increasing labour efficiency," Richard said.

While there are obvious cost-saving advantages to increasing labour efficiency, it is also becoming a matter of necessity for many producers as they struggle to attract and retain staff.

Forty-two per cent of producers reported turnover of full-time employees in a 12 month period, with the average cost of turnover per farm of about $33,000 per employee, according to a survey commissioned by MLA and AWI in 2007 (this survey is currently being updated – see side box for more information). The study also found the average cost of labour shortages at the farm level ranged from $22,500 to $112,500 in 2007, depending on farm size.

Opportunities to increase labour efficiency

MLA is focused on funding R&D that creates opportunities for producers to increase labour efficiency across the supply chain.

MLA is currently conducting an Australia-wide survey to gather evidence about the attractors, motivators and de-motivators associated with working on farms. The results will be collated into a free guide containing practical strategies for attracting and retaining great staff.

MLA is also funding a range of projects to free up labour, including evaluating remote management of water points in northern and southern Australia and creating guides that capture innovative labour-saving practices.

Many of MLA's on-farm R&D projects have labour-saving outcomes. Genetic research that allows producers to breed animals that don't require assistance when calving or lambing can deliver labour-efficiency benefits through the reduced level of care these animals require. Being able to redirect labour to where it's needed by using remote monitoring and targeted drenching programs are other ways on-farm research is achieving its direct aim and delivering additional labour efficiencies.

Richard Apps, MLA
E: rapps@mla.com.au
Mick Quirk, MLA
E: mquirk@mla.com.au

In profile Labour efficiency

Yeoval Merino breeder Nigel Kerin is always looking for ways to increase labour efficiency on his farm. It's part of a philosophy the 2008 NSW Farmer of the Year describes as "abundance thinking, rather than existence thinking".

"Our farm philosophy all comes back to one thing – matching stocking rate to carrying capacity and never running out of grass," Nigel Kerin said.

"And when you have labour efficiencies, you're not flat-out all the time, but are able to spend more time managing your business."

In the past 12 years, Nigel has put together a land base of 3,000 hectares across five properties in the Yeoval district.

He runs up to 25,000 dry sheep equivalents (DSE) in good seasons with two labour units. Efforts are focused on three enterprises:

Snapshot

Nigel and Kate Kerin, Yeoval, NSW.

Property: 3,000ha

Enterprise: Merino flock and Kerin Poll Merino Stud (60% DSEs), trade sheep/cattle (40% DSEs)

Livestock: Up to 25,000 DSE

Pasture: Improved temperate and tropical grasses, plus native grasses

Soil: Red loam to red clay

Rainfall: 650mm

Nigel Kerin // *Livestock producer*

Merino breeder Nigel Kerin pictured with his Racewell Sheep Handler and some of the technology he uses to collect and analyse data for the Kerin Poll Merino Stud. Photo by Amy Lawson, Lawson Communications.

a commercial Merino flock, the Kerin Poll Merino Stud, and a trade sheep/cattle enterprise that accounts for 40% of DSEs. Contract labour is used for shearing and crutching, lamb marking and pregnancy scanning.

Nigel has identified five key areas that have improved labour efficiency on his property:

1. **Modern livestock facilities** – "We've been upgrading for 10 years. As we buy farms, any outdated infrastructure goes. We knock down the old sheep yards and build new ones, including automated sheep handlers and laneways. Any yard work can be done by one person and one dog."
2. **Pedigree Match Maker (PMM)** – This is a walk-by system using electronic tags to estimate associations between ewes and lambs, and provide the ability to trace individual pedigrees. "PMM cost about $4,000 to set up and saves us about 10 labour days a year. We used to mother-up manually, which is very slow and a poor use of skilled labour."
3. **Good dogs** – In 2011, Nigel paid a then-record price of $9,000 for a 17-month-old kelpie, Ted, at the Casterton Working Dog Auction. In November last year he paid $4,500 and $3,300 for kelpies at the Dundee auction. "Ted is equivalent to about three men in the yards. His labour efficiencies are worth about $30,000 a year and he makes sheep work an absolute pleasure, rather than a stressful chore."
4. **Genetics** – "We've removed (through breeding) the pin wrinkle and skin folds from our Merinos, so we're not wasting labour managing fly waves. When you're in a high summer rainfall area with high humidity you want your sheep to dry out quickly, which traditional Merino skins don't do. We no longer use any blowfly treatments. We save at least $30,000 a year on pour-on, about 15 labour days a year applying it, and who knows how many days checking for flies. We also avoid the economic and animal welfare cost of fly strike."
5. **Grazing management** – "We manage grass, not animals, and this has an incredible impact on our labour-use efficiency. We're not wasting time drought-feeding sheep. We strictly maintain 120 days of grass at all times for our core breeding flock."

Monitoring water points via telemetry is the next labour-saver Nigel has in his sights.

Nigel Kerin // T: 02 6846 4070
E: kerinag@bigpond.com

The conversation

Connecting with the city

Target 100 has directly connected the cattle and sheep industry with more than 200,000 urban consumers since March 2012, and has potentially influenced thousands more.

Target 100 program manager, MLA's Pip McConachie, said the initiative's successful first year was a credit to the entire supply chain – from producers to researchers and retailers.

"Industry research reveals an increasing disconnection between consumers and how their food is produced," Pip explained.

"The cattle and sheep industry is also coming under increasing scrutiny from activists, so Target 100 was developed to allow the industry to tell its side of the story."

In its first year, Target 100 has:

- → put the urban spotlight on sustainable red meat with a 'Virtual Farm' in Sydney and at high-profile events including Melbourne's 2013 Sustainable Food Summit, the Sydney Food Festival, TEDx Sydney and the 2012 Sydney Festival
- → connected with urban consumers online: 2,600 Facebook likes, 1,400 Twitter followers, 8,000 views on YouTube, and counting
- → showcased the sustainable practices of more than 140 producers nationally
- → connected with 130,000 school students through Target 100-sponsored programs and Cosmos school guides on sustainability (featured on page 4 of the May 2013 edition of *Feedback*)
- → secured national environmental recognition by winning the Banksia Environmental Foundation's Gold and education awards
- → reached more than 2.5 million people a month through advertising

Target 100 will be further promoted to the community over the next year with a series of school guides, an advertising campaign on how consumers can get involved, and increased involvement from producers.

Elise Vale, MLA
T: 02 9463 9156
E: evale@mla.com.au

www.target100.com.au

As custodians of a slice of Tasmania's Forester Peninsula, Matt and Vanessa Dunbabin open their gate to consumers to showcase a balance of conservation and production.

Are you the missing link?

The producer profiles featured at www.target100.com.au are a pivotal part of the program, connecting consumers to people, livestock and environment.

The more producers who share their stories, the louder the industry's message will be. If you are making on-farm changes – big or small – to improve sustainability, Target 100 wants to hear from you.

How do you connect?

- → visit **www.target100.com.au/Farmer-stories/Add-a-Business** to upload your profile to the producer directory (your contact details are not made public)
- → use simple, strong messages – your audience is urban, with little or no knowledge about farming
- → include a photo – people and animals are always popular
- → want to be more involved? There are opportunities to speak to urban consumers or media
- → contribute further with Twitter, Facebook or a blog.

Target 100 is driven by sheep and cattle producers through MLA, Cattle Council of Australia, Sheepmeat Council of Australia, Australian Meat Industry Council, Australian Lot Feeders Association, and Australian Meat Processing Corporation.

Hosting more than 500 visitors a year on-farm sounds daunting, but the Dunbabins embrace this opportunity to educate the students, eco-tourists and community groups who come to their historic property, 'Bangor'.

They also promote environmentally responsible food production with a Target 100 profile.

"The red meat industry doesn't just have a 'good story' to tell consumers, we also have 'good facts'," Matt said.

"Consumers want to know how food is produced. If the industry doesn't provide this information they will find it elsewhere, and it may not be accurate.

Sustainable families

Snapshot

Matt and Vanessa Dunbabin, Forester Peninsula, Tas.

Property: 6,400ha

Enterprise: Cattle, prime lambs, super-fine wool, wine grapes, tourism

Livestock: 7,000 Merino ewes, 1,000 cross-bred ewes (Coopworth ewes crossed with a White Suffolk or Poll Dorset terminal sire), 100 Angus-Hereford cattle

Pasture: Introduced perennial grasses and clover, and native pastures

Soil: Various, including clay loams, alluvial, sandy

Rainfall: 650mm

Left: Vanessa and Matt Dunbabin at their historic Tasmanian property, Bangor.

Top: Wethers at Bangor, where production and conservation go hand-in-hand. Image: Matt Dunbabin.

Bottom: The Dunbabins' management philosophy centres on the protection and sustainability of unique native ecosystems. Image: Matt Dunbabin.

"Producers are in the best position to talk about sustainable production, and Target 100 gives us a vehicle to communicate to an urban audience."

Matt and Vanessa's three young children are the seventh generation of Dunbabins in Tasmania and the fifth generation to be raised at Bangor, so the couple are conscious of leaving a sustainable legacy for future generations.

They maintain a strong link to Bangor's history in their enterprise, which centres on beef, prime lamb and superfine wool production, with diversifications into viticulture, irrigated cropping and tourism.

Bangor's 5,100ha of native forests and 35km of coastline are home to many threatened and sensitive species, including Tasmanian devils and wedge-tailed eagles.

The Dunbabins host research projects, conduct farm tours for local schools, and offer guided walks to showcase this natural heritage.

"Our management philosophy centres on the protection and sustainability of these unique native ecosystems," Matt said. "We have voluntarily placed more than 2,000ha under formal conservation reserves to protect valuable areas."

Only 15% of Bangor is cleared and sown, with productivity optimised through improved pastures, fertiliser and careful grazing. The remaining 85% is lightly grazed, with some areas (including sensitive wetlands, coastlines and water courses) managed entirely for conservation.

"As well as protecting these important habitats, this contributes to our goal for a viable, sustainable enterprise," Matt said.

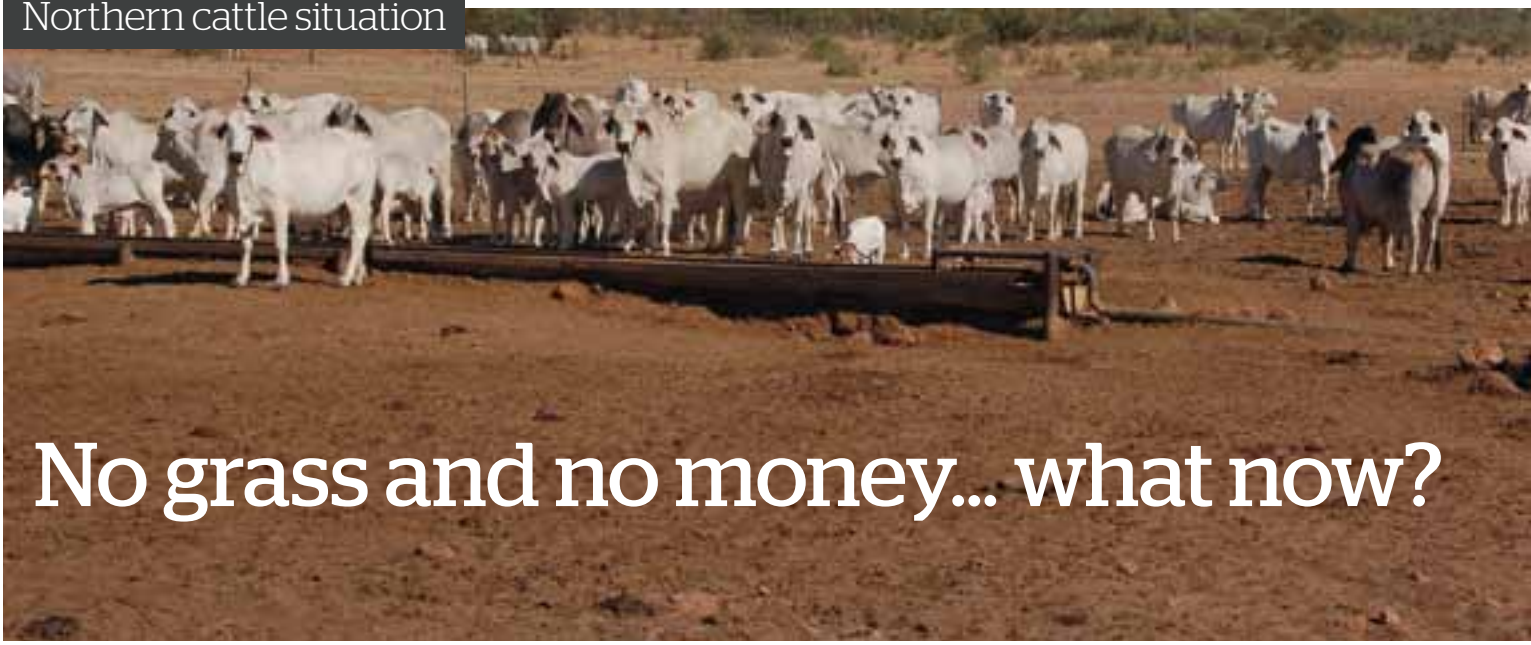
"Sensitive seasonal stocking of select native vegetation complements our broader grazing program by providing a low-input source of nutrition, and our conservation, weed and fire management programs contribute to the overall health of the property."

Matt Dunbabin // T: 0438 535 788
E: matt@bangor.com.au

www.bangor.com.au

www.target100.com.au/Farmer-stories/Matt-Vanessa-Dunbabin

Northern cattle situation



No grass and no money... what now?

Ian Braithwaite
Vet and northern cattle herd specialist

A combination of factors, many of which have been nibbling away for more than a decade, including drought, the high Australian dollar, reductions in live exports and increased farm debt, have led to many northern beef producers reaching crisis point.

The pressure has been borne out by the large volumes of cattle (21% more in April 2013 than on the previous April) that continue to be sold, despite low prices (with the Eastern Young Cattle Indicator going below 300¢/kg in May).

The questions producers are posing to me: What should northern cattle producers do now? What do I recommend? After travelling Queensland recently speaking to people at various meetings and seeing producers in tears, my main advice is to focus on survival. Look after your mental and physical health, and implement a plan for your enterprise to maintain the support of your bank.

A recent survey by the Queensland Rural Adjustment Authority estimated average debt per Queensland cattle enterprise was $1.4 million - up 20% in the past two years alone. This, combined with falling land values, has caused a marked reduction in equity.

Much of this crisis pre-dates the live export issue. It has a history going back 12 years, with many beef producers having earnings less than expenditure over much of that period. Other factors have not helped. Now the tap has just turned off, compounding the situation.

The first step is to look after your own health and welfare and that of your family and your animals.

The second step is to talk to your bank manager and other advisers to your business. Provide them with a plan of how you are going to manage your stock through the next 12 months.

A bank manager told me the other day only 5% of his clients provide him with regular cash flow and stock flow reports.

To do that you need to know your true carrying potential - every farm is individual - and the status of your cows. Poor-performing cows on ordinary pastures will result in a downward spiral for your business.

Time and time again I've seen a move from 50% weaning rates to 63% with little additional financial investment, just a sharpening of the operation.

Ian's survival tips

- → Look after the health and welfare of yourself, your family and your herd.
- → Take a professional approach to planning the management of your business through the crisis.
- → Seek professional help for personal and business decisions.

However, now is not necessarily the time to overhaul your business. Now is about making sure you have options and you are in control of the outcome. Then we need to look at how we run our businesses longer term and change the emphasis from being beef producers to grass producers and matching our production goals accordingly.

Ian Braithwaite
E: tmbwaite@bigpond.com

Queensland Rural Assistance Authority **www.qraa.qld.gov.au**

Beyond Blue **www.beyondblue.org.au**

www.mla.com.au/drought

Rural Financial Counselling Service **www.daff.gov.au/agriculture-food/drought/rfcs**

Managing cattle on rapidly deteriorating pastures

Désirée Jackson
Scientist, Department of Agriculture, Forestry and Fisheries at Longreach

As feed dries up in the beef regions of Australia, producers are looking at their options. There are some basic nutritional guidelines that can help manage your way through the situation. I advocate a step-by-step approach starting with understanding what feed is available.

First, get a handle on diet quality. This prevents shooting from the hip.

Diet quality analysis is useful for:

- determining where protein and energy levels are and how these match up with the animal's nutrient requirements
- monitoring how quickly diet quality is declining and when animals are likely to begin losing weight so action can be taken before animals spiral into rapid weight loss
- determining the most appropriate nutrients to supplement stock
- making decisions on when to wean, whether to sell or retain and supplement

Cattle requirements change with their stage of production, so this needs to be considered.

Segregate first-calf cows from mature cows and wet cows from dry, pregnant breeders. This allows for preferential supplementation to those breeders with the highest requirements.

Get advice from your local beef adviser or a nutritionist on the most appropriate supplement to feed.

Managing livestock on poor quality pasture

Where there has been significant pasture damage by spoiling rain or frost, or diet quality is otherwise poor, wean calves down to 60kg. This reduces protein and energy requirements in wet cows by more than 30% and 50%, respectively. Lighter calves need particularly good nutrition, so seek advice from a beef adviser or nutritionist if required.

If animals are retained with the intention of feeding them energy supplements until there is a break in the season:

- calculate the cost of feeding and subtract this cost from the reasonable price you might expect at the saleyards
- do a forage budget and factor in the increasing grazing pressure from supplementation and whether there is sufficient pasture available
- consider the labour component of feeding.

Although prices are low, selling down:

- prevents animals from further deteriorating in condition and potentially becoming unsaleable and unable to be transported to agistment
- frees at least one person from the property to work off-property to maintain cash flow
- prevents pasture damage caused by overgrazing, enabling it to re-generate quickly once there is a break in the season or even small storms.

Where there is little pasture available for grazing, stock are vulnerable to poisoning, even from safe feeds such as protein meals. Always ensure that there is plenty of roughage available to stock when supplementing.

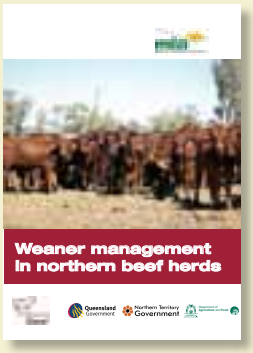
Désirée Jackson
E: Desiree.Jackson@daff.qld.gov.au

For further resources go to:

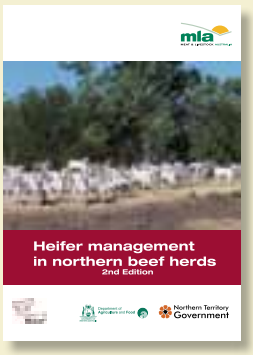
Drought and disaster management
www.mla.com.au/drought

Drought management
www.daff.qld.gov.au/4789_6541.htm

Order or download the free manual *Weaner management in northern beef herds* from
www.mla.com.au/weanermanual



Order or download the free manual *Heifer management in northern beef herds* 2nd Edition from
www.mla.com.au/heifermanual



Order or download the free manual *Beef cattle nutrition: An introduction to the essentials* from
www.mla.com.au/beefcattlenutrition

Drought feeding (topics include nutrition, residues and confinement feeding)
www.mla.com.au/droughtfeeding

Ensuring the welfare of drought-affected livestock during transport
www.daff.qld.gov.au/4790_8195.htm

Welfare of extensive livestock in dry periods
www.daff.qld.gov.au/4790_8181.htm

Tips & Tools: Looking after drought pastures
www.mla.com.au/droughtpastures

Pasture management for drought recovery
www.futurebeef.com.au/topics/grazing-land-management/pasture-management-for-drought-recovery

Animal health, welfare and biosecurity
www.mla.com.au/Livestock-production/animalhealthandwelfare

Ask the expert Q&A

My cows chew bones yet I have no problems with conception rates and my steers average about 160kgs a year – do I need to supplement them with phosphorus?
Cattle producer, Barcaldine Qld.

While bone chewing is always seen in areas of acute phosphorus deficiency, some stock in areas where there is adequate phosphorus may still be observed chewing bones from time to time. The best test is to take some blood samples from growing cattle (steers or maiden heifers) at the end of the wet or growing season. This will tell you if you have a deficiency in your paddocks. Dung samples can also provide an indication of the P status of your country. To read more about phosphorus management download the *Phosphorus management in beef cattle in northern Australia* publication at **www.mla.com.au/phosphorus-management**

Geoff Niethe, MLA's Project Manager Animal Production

I keep hearing about alternative fertilisers which claim to be better for our soil, cheaper or more environmentally friendly. How do I assess if any of these products would work on my farm?
Sheep producer, Henty NSW

A good first step is to do a soil test. This helps you identify what your soil needs – where the deficiencies are and what's your current soil fertility. The value of a fertiliser is around what it contains – it's important to know what you are applying before you spend a lot of money.

Another way is to undertake a 'paired-paddock' trial such as that which was implemented at Holbrook as part of their producer demonstration site (see case study on page 26). Fertiliser strips offer a quick and easy way to see what response you might have on your farm. Do a small trial and measure the amount of pasture grown to start to identify how to measure the pasture grown per dollar spent.

Linda Hygate
Southern Feedbase Project Manager

If sheep measles are caused by tapeworm cysts, is it the same as bladder worm?
Sheep producer, Bendigo Vic

No, but they are both connected to dog tapeworms. The muscle cysts of sheep measles are the intermediate stages of the dog tapeworm *Taenia ovis*. Sheep bladder worms are usually found in the abdominal cavity (after they've crawled through the liver tissue and caused bloody migration tracts). They can be quite large (as big as a tennis ball), are thin-walled and are the intermediate stage of another dog tapeworm, *Taenia hydatigena*. For more on worms read the *Worm control in southern prime lamb production systems* fact sheet from **www.mla.com.au/worm-control-in-prime-lambs**

Johann Schröder, MLA's Project Manager, Animal Health and Biosecurity

To ask your question, email the editor at **info@mla.com.au** (include 'Feedback – ask the expert' in the subject line) or write to Feedback, Reply Paid 906, Locked Bag 991, North Sydney NSW 2059.

Research at work

The latest on-farm strategies emerging from MLA's investment in research

In this issue

Savvy sustainability

Skilful stocking rate management and spelling some land each year helps improve land condition in the arid Alice Springs region, according to research as part of the Climate Savvy Grazing project.

The project found that high annual variability in pasture growth in the Alice Springs region meant stocking rates needed to be carefully managed, now and into the future.

Dr Robyn Cowley, Senior Rangeland Scientist from the Northern Territory Department of Primary Industry and Fisheries, conducted the modelling for the project, a partnership between MLA, CSIRO and state and territory governments, which began in November 2011 and ran alongside the Climate Clever Beef project.

"The Alice Springs region has a desert climate – basically it's an arid environment, but every so often it has one or two years of high rainfall," Robyn said.

"Normally, rainfall – or water – is the limiting factor for pasture growth, so when these high rainfall years occur, there is a phenomenal increase in growth. If stocking rates are increased dramatically in these wet years, you need to rapidly reduce them when average (arid) seasons return in order to protect land condition."

→

Thunderstorms can dump heavy rain on the otherwise arid Alice Springs region. Photo Chris Materne.

Climate variability

→

Climate projections for the region vary markedly, from the worst case drying trend scenario to the best case, where rainfall will be much higher. The changes in pasture growth and profitability show even greater variability (Table 1).

"If rainfall declined to the level projected in the worst case scenario, our models show it would lead to catastrophic declines in pasture growth," Robyn said.

"Average carrying capacity would drop to half the current levels, which would necessitate significant structural adjustment to cattle production in central Australia.

"However, at the other end of the scale, the projected rainfall for the region increases markedly and that would be highly beneficial to cattle production. Carrying capacity could increase by 50% and higher rainfall could also facilitate more opportunities for land condition recovery."

Robyn said that under the present climate, the modelling showed long-term benefits could be gained by spelling. Six-month annual spells of an oatgrass pasture stocked at 1.2 animal equivalents per square kilometre (AE*/km^2) – an average annual stocking rate of 0.6 AE/km^2 – resulted in a greater recovery of land in 'C' condition (based on the northern land A to D condition scoring system) than continuous (year-round, no spells) stocking at 0.6 AE/km^2.

"The results were far better across a range of parameters – land condition, profitability, and productivity – if half the property was spelled and the other half was stocked, rather than if the same number of animals were run across the entire property with none of it spelled," Robyn said.

**AE = animal equivalent, based on one 450kg steer.*

"In this scenario, there's not actually a drop in stock numbers – it's just a shift in stocking pattern.

"By spelling paddocks half the time, there is more chance that more of the country will be spelled during a period of good rainfall, which is when the pasture grows and land condition improves."

Dr Dionne Walsh, NT Department of Primary Industry and Fisheries Rangeland Program Coordinator, said producers needed to blend the modelling results with common sense.

"The really important messages are that stocking rate and spelling need to work in tandem and, in order to get improvement, spelling must be part of a long-term commitment," Dionne said.

"Many producers don't spell because they tried it once and didn't get the results they wanted.

"Spelling needs to be undertaken in a regular and systematic way – the time it takes to get results varies, depending on the country and the run of seasons. In good seasons, when soil moisture is available, spelling allows the country to regenerate. In the drier seasons, spelling can help protect the soil.

"But, if stock numbers are too high for too long, no amount of spelling will improve land condition. It's no accident that producers who get the balance of stocking rates and spelling right are the ones who have country in the best condition."

Dr Dionne Walsh // T: 08 8999 2178
E: dionne.walsh@nt.gov.au

Dr Robyn Cowley // T: 0419 829 493
E: robyn.cowley@nt.gov.au

Region-specific technical guides, fact sheets and case studies from the Climate Savvy Grazing project are available at **www.futurebeef.com.au**

Table1 Average percentage change (compared to current climate) in maintenance stocking rate for the Alice Springs region. The relative change in profit for a representative property, under three future climates compared to current climate.

	Drying trend	Median trend	Wetting trend
Stocking rate	-53%	-13%	+61%
Profit	-133%	-50%	+94%

 # Adapted from: Phelps, D. Developing improved grazing and related practices to assist beef production enterprises across northern Australia adapt to a changing and more variable climate (Climate savvy grazing) Final Report, 2012.

Surveying

Towards the end of March this year, John and Anne Stanes spent a day inside their house at Lyndavale Station, Northern Territory, watching the rain fall outside. They received 45mm in that one shower, almost as much as the 52mm the station received in the whole previous year.

That's how it is in the arid centre – long periods of dry followed by sudden heavy falls. It's the climate John and Anne are used to working with.

"We try to run a sustainable grazing operation that we can run year in and year out, regardless of the season," Anne said.

"We see ourselves as custodians of the land for the long term. We have two sons who would like to come back to Lyndavale in the future."

Just keep checking

The Stanes watch the country closely to ensure it is not degrading. They have cameras set up at strategic locations near bores for formal monitoring, which are also monitored by the Northern Territory Department of Land Resource

the situation

Anne and John Stanes. Photo courtesy of Dennis Schultz.

Management. But Anne sees it as important to regularly check how the country is going – how it is responding to rainfall events and dry times, so decisions on land management can be made to ensure the land condition is maintained.

"After good rains we always check what species are coming. We check which plants are growing and see how far away from the bores they are," Anne said.

"There's no point in having your good grasses five kilometres from the bore and everything else eaten out. You have to have the right species close enough to the water. This is good for the health of the land but also good for beef production.

"If, over time, we see some places aren't regenerating as we'd like, we might need to adjust the stocking rate, to help the land come back."

Generally, the Stanes run about 1.5 to 1.8 cattle (cows and calves) per km^2 of watered area, but take a relatively informal approach to actual stocking rates. They are more concerned about judging whether or not they have the right number of cattle by the condition of the land, the season and the profitability of their enterprise. Depending on the season on Lyndavale, around 120–150 head are run per bore.

Working for profitability

"We've put in a lot of infrastructure – bores, traps, drafting yards and trapping paddocks – to make it more efficient to run," Anne said.

"When it comes time to do anything with the cattle, we just open and shut the relevant gates. It's easier and safer for the handlers and much less stressful for the stock. It also helps us to keep our labour costs down, which is important because it is our highest cost."

The Stanes increase their profits by selling heavier stock, aiming for a turnoff weight of 550–600kg, finished to MSA standards with all cattle sold to the abattoir.

"The major cost of the calf is in the first 12 months," Anne said.

"After that, it doesn't cost much to maintain them, and steers are easier to manage than cows."

"We make sure we buy in bulls that we select by objective measurement using EBVs (estimated breeding values). We select for traits that suit our enterprise, climate and markets. We select for high-fertility traits, such as positive rib and rump fat. Because our country can be somewhat harsh, animals with traits that are suitable to the conditions are very important."

Land management

The Stanes use burning to control woody weeds and open up mulga country.

"We burn when we can. It's not always easy to burn in this country – it can be too wet or there may not be enough fuel on the ground," Anne said.

"In good seasons, we try to run same number of cows per bore; if it gets dry those cows are able to survive on the bore without us needing to destock. We don't build our numbers up just because there's feed on the ground. We let the country regenerate."

As producers who have learnt to operate in a variable climate, Anne and John are "waiting to see" the further impacts of variability. If the outcome is reduced rainfall, they believe those impacts will be huge.

"John's third generation on this station and I've been here for 30 years. So far we have managed everything that has been thrown at us. We believe that by continually keeping an eye on the country we can work with it and future generations here will continue to produce beef sustainably," Anne said.

Lessons learned

- Get good information – work with people you trust.
- Watch the country closely and monitor what is going on.
- Work with the seasons, keeping stock numbers conservative.
- Infrastructure is important but doesn't need to be elaborate – keep it functional and well-maintained.

Snapshot

John and Anne Stanes, 'Lyndavale Station', NT and 'De Rose Hill Station' SA.

Property: Total 5,650km^2 – made up of 3,800km^2 (Lyndavale) and 1,850km^2 (De Rose Hill)

Enterprise: Cattle aiming to finish to MSA standards

Livestock: 4,000 breeders – Charolais X Angus; around 8,000–9,000 total stock on both properties

Pasture: High-production, dense pastures of palatable annual and perennial grasses (oatgrasses, windmill grasses) and bluebush on calcareous clayey plains. Land systems used for cow production are sand plains with woollybutt and other perennials and annual grasses and forbs

Soil: Different land systems – some open clay loams is the better country; breeding country is sand plains with perennials

Rainfall: 200mm

John and Anne Stanes
T: 08 8956 2907
E: lyndavale@bigpond.com

ASBVs – the essential flock improvement tool

The value of Australian Sheep Breeding Values, available for use since 2005, has been confirmed by an independent review.

No sheep producer can afford to ignore Australian Sheep Breeding Values (ASBVs). That's the conclusion from a recent review of the results of more than 50 industry trials that evaluated the usefulness of LAMBPLAN and MERINOSELECT ASBVs to producers.

Independent consultant Anne Ramsay, of Stenhouse Consulting, concluded that benefits to producers included:

- → an added degree of certainty in predicting progeny performance
- → increased genetic and production gains through faster growth rates and shorter turn-off times
- → improved flock quality; and
- → reduced production costs

Watch this space

Senior Scientist Dr Daniel Brown, from the University of New England's Animal Genetics and Breeding Unit (AGBU), said more improvement is still to come, with new measurements on the horizon and improved accuracies for existing ASBVs anticipated.

"We're working on improving the accuracy of breeding values for carcase traits such as intramuscular fat and lean meat yield and we're also looking at increasing that list to include meat colour and pH," he said.

Wool producers will be encouraged by collaborative work on utilising earlier age wool measurements and on the development of ASBVs for lifetime performance for wool traits and body weight.

"We're also aiming to use ewe pregnancy scan records in the genetic evaluation process to predict fertility and litter size by gathering information from a wider range of flocks," Daniel said.

"Genomic prediction for worm egg count (the WEC ASBV) is a new area for us and proving challenging because it's a complicated trait that shows more variable expression across different environments."

Daniel said the development and progression of ASBVs was very much a collaborative effort between ram breeders, who generate 90% of the raw data, and the Sheep Co-operative Research Centre (CRC) , AGBU and Sheep Genetics.

MLA is a significant participant in the Sheep CRC investing 10 million during its seven-year tenure.

Dr Daniel Brown // T: 02 6773 2948
E: info@sheepgenetics.org.au

For a more in-depth look at how ASBVs affect production, visit the Sheep CRC's new publication *Using ASBVs – What's in it for me?* **www.mla.com.au/Value-of-ASBVs**

To read Stenhouse Consulting's report go to: **www.sheepcrc.org.au/management/genetic-selection/proof-of-benefits-from-genetic-selection.php**

A holistic approach to worm control considering genetics, pasture management and nutrition can deliver huge benefits, says Poll Merino and White Suffolk seedstock producer Martin Oppenheimer.

Having an occupation as a 'holistic sheep designer' may sound a bit 'hippy' but it accurately describes what Martin Oppenheimer does for a living.

The Poll Merino and White Suffolk breeder, based near Walcha, NSW, is intent on producing the best high-performance animals he can for his challenging high-altitude environment.

He does this by achieving a delicate balance between genetics, nutrition and grazing management.

"The art of genetics is getting the important traits in balance, particularly fibre diameter, staple strength and fleece weight with body weight, eye muscle and fat," Martin said. "With Merinos there is a lot of genetic variation and therefore a lot of potential for improvement."

Martin is a fifth generation Merino breeder; his great, great grandfather registered a flock in 1868. 'Petali', the stud, was formed by his parents in 1966 and, through improved genetic selection, grazing management and trace element supplements (particularly selenium), Martin has transformed his enterprise from district average to benchmark leader.

"We run Petali at 16DSE/ha, the district average is 11DSE/ha and the average number of worm treatments is five to six while ours is three," he said.

Side effects

One of the keys to this success has been the stud's continued selection for worm resistant sheep, which are sheep with negative yearling worm egg counts expressed as negative YWEC Australian Sheep Breeding Values. Worm resistance has positive correlations for carcase and production traits such as body weight, eye muscle and fat as well as weaner survival.

Breeding all rounders

Snapshot

Martin Oppenheimer, Walcha NSW.

Property: 1,450ha

Enterprise: Poll Merino stud, White Suffolk stud, commercial Merino flock, commercial Angus herd

Livestock: 10,000–2,000 Poll Merinos; 1,500–2,000 prime lambs and 300–500 Angus cattle

Pasture: Tall fescue, cocksfoot, phalaris, chicory, plantain, white and sub-clover

Soil: Sandy, grey loams, trap soil

Rainfall: 800mm summer dominant

All this has been achieved without sacrificing micron, with the flock average at 17.2 and most of the one-year-old sheep from 14 to 16.

"When I first came home from university in 1980 we were drenching our sheep once a month. People in the district were suffering from organophosphate poisoning from drenching and dipping sheep so often and we were always looking to the next new chemical to save us from drench-resistance problems," Martin said.

"I was convinced there had to be a better way to do all this – what we were doing was unsustainable."

From the early 1990s, Petali sheep were selected for worm resistance, and within a decade the Oppenheimers have cut their drenching program back to once a year for wethers and three times a year for the rest of the flock.

"Now, our main treatment is administered pre-lambing (ewes lamb off-shears in spring), we do another treatment at weaning and then another pre-joining," Martin said.

Wider take up

Commercial producers have been quick to follow Petali's lead with strong demand for rams with YWEC ASBVs of -50 to -60 and better.

"At -60 they're trait leaders in the top 10% of the breed," Martin said. "It's very difficult to sell rams now with positive YWECs. For some of our clients, who are from areas with particularly nasty strains of Barbers Pole, being able to source these trait-leading rams means being able to stay in business."

Martin said producers who have never used YWEC ASBVs as a selection criteria for their rams could still expect to make significant gains in flock performance within three to five years by selecting moderate to highly resistant rams.

The rate of that improvement will depend on the ewe base as rams are only half of the genetics," he said.

Martin has made further improvements including breech and dag scores and aims to improve fertility and reproductive traits.

"There's a huge variation in ewe performance and we see a lot of potential for improvement, particularly in the number of lambs weaned and weaning weights," he said.

"Having worm-resistant sheep is not just a feel-good thing – it means we use fewer chemicals and have lower costs. It has also resulted in better animal welfare outcomes and healthier people."

Lessons learned

- Worm resistance is moderately heritable and selection for the trait can significantly improve flocks within a few years.
- Worm resistance has positive correlations with carcase traits such as eye muscle, fat and body weight as well as weaner survival.
- Worm resistance and carcase traits can be improved without sacrificing micron.
- Worm resistant sheep result in less reliance on chemicals, lower costs, better animal welfare outcomes and healthier people.

Martin Oppenheimer
T: 02 6773 2493
E: petali@northnet.com.au
www.petali.com.au

Read the full case study at **www.sheepcrc.org.au/information/news/asbvs-key-to-worm-resistance-and-resilience-at-petali-30-01-2013.php**

Worm-resistant flocks a win for producers

Selecting rams with a negative yearling worm egg count (YWEC) of -60 or more can transform an entire flock's natural worm resistance within seven years, cutting control costs and boosting production.

If you could find a ram with naturally high worm resistance that also produced offspring with high muscling and a good dressing-out percentage, it would make sense to take him home.

According to MLA Program Manager Dr Alex Ball, the worm-resistance Australian Sheep Breeding Value (ASBV), often expressed as yearling worm egg count (YWEC), can have a significant economic impact, particularly given its positive correlation with important carcase traits.

Alex said ASBVs provide highly accurate projections for how many sires' progeny will perform for a range of traits. This makes it relatively easy to address flock shortcomings and achieve production gains.

He said worm-resistant genetics, when incorporated with an integrated parasite control program, could add $12.50/ewe/year of benefit to an enterprise based in the New England region of NSW, an area known for its worm burden issues.

"On average, in the New England, a ram with a good negative YWEC, say more than -60, will only cost $200 to $250 more than a ram with no or positive YWEC," Alex said. "It is not a lot of extra outlay for the potential benefits.

"Sheep with strong negative YWECs tend to be more robust, more productive and have good weaner survival rates."

Lifetime benefits

Geneticist Dr Johan Greeff, a researcher with the WA Department of Agriculture's experimental flock, said there were clear economic benefits in breeding resistant sheep.

"Ewes from resistant flocks cause less pasture contamination, therefore their lambs are less challenged and grow better," he said. "At weaning, resistant animals are 4–5kg heavier than sheep not selected for resistance and that advantage continues for the rest of their life.

"Those resistant weaners will not only grow faster and larger but will also cut more wool. Their fibre diameter tends to be a bit stronger but the increase in wool production offsets that.

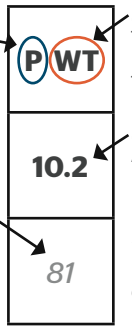
"We have found that, up to hogget age, there is a $6/head or better advantage in having resistant sheep compared to non-resistant animals," he said.

According to Johan, there are many variables in calculating the payback period for producers who invest those extra dollars in rams with good negative YWECs. These include the resistance difference between the rams being introduced and the rest of the flock. However, the improvement starts immediately.

"Producers will get some benefit from the first drop of lambs and, within six or seven years, all the ewes in a flock can be sired by resistant rams," he said.

Both Johan and Alex warned that genetics was no silver bullet, but could be an important part of an overall worm-control strategy that includes pasture management and an effective drenching program.

Figure1 How to interpret an ASBV



1. AGE/STAGE
The first letter is the age stage:
W = Weaning (6–16 weeks)
P = Post weaning (7–10 months)
Y = Yearling (10–13 months)
H = Hogget (13–18 months)
A = Adult (> 18 months)

2. TRAIT NAME
The trait is expressed as an abbreviation of the trait name. This example is weight (WT).

3. ASBV
ASBVS are expressed as either positive or negative deviations from an average. This example for post weaning weight (PWT) is 10.2kg. As rams contribute half the genetics of their progeny (the ewe the other half), the resulting progeny will on average be 5.1kg heavier at post weaning than an animal with a PWT ASVB of 0.

4. ASBV ACCURACY (%)
This is a reflection of the amount of information available on each animal for each trait. As the amount of information increases the accuracy increases. The higher the accuracy, the closer the ASBV is to the true breeding value of the animal.

Source: www.sheepgenetics.org.au/Getting-started/ASBVs-and-Indexes.

Look to the F'ewe'ture

The BESTWOOL/BESTLAMB Annual Conference 'F'ewe'ture Sheep Farming is happening on 26 June 2013 in Bendigo.

Conference topics include joining ewe lambs, positioning sheepmeat for the future consumer, social media, pasture production, ewe nutrition, labour efficiency, managing ewe lactation to drive lamb growth rates, using cereals to fill feed gaps and improving farm infrastructure and safety.

The guest speaker at the event, and at the conference dinner on 25 June, will be New Zealand sheep producer Doug Avery.

MLA is a major sponsor of the conference.

Register at: **www.dpi.vic.gov.au/agriculture/beef-and-sheep/sheep/bestwoolbestlamb**

$12.50 /ewe/year
gain from using worm-resistant genetics and integrated parasite control in NSW's New England region

$350 million
cost to the sheep industry in deaths, lost production, prevention and treatment due to worms

Dr Alex Ball // T: 02 6773 2493
E: aball@mla.com.au

Dr Johan Greeff
E: johan.greeff@agric.wa.gov.au

For more information on how to use ASBVs to select for worm resistance and other desirable traits visit **www.sheepgenetics.org.au**

For more information on worm control visit **www.wormboss.com.au** and **www.makingmorefromsheep.com.au/healthy-contented-sheep/tool_11.8.htm**

Animal health

Solving the setback mystery

An MLA-funded pilot study has found that a pasture fungus may be the cause of a mysterious disease resulting in weight loss, liver damage and photosensitisation in cattle, and sometimes death from secondary infections.

Figure 1 **Map of south-east Victoria showing the relative locations of each farm in the pilot study**

The study, completed in Victoria during autumn last year, was coordinated by Dr Leah Tyrell and Dr John Larsen, of the University of Melbourne's Mackinnon Project. The research investigated South Gippsland autumn setback syndrome (SGASS), which has been found to affect weaners and yearling cattle in the high winter rainfall zones of Victoria, and possibly similar areas such as King Island and Tasmania.

Leah said that according to local veterinarians, the problem of poor growth rates in weaner cattle during winter has plagued south Gippsland producers for some time. One producer believed the syndrome has been on his property for up to 10 years.

"Of those stock affected by the disease, about 1% died, while another 3-4% never recovered," Leah said.

"Their growth rates were severely compromised (for example, animals with diarrhoea were losing 400g/day while unaffected stock gained 150g/day) and some showed chronic ill-thrift. On one farm, up to 25% of their weaners showed symptoms."

Leah said symptoms seemed to coincide with increased mould counts on pastures animals were grazing.

The pilot study was conducted on three farms, two south of Leongatha and another near Yanakie, and involved mainly Angus and some Hereford steers and heifers.

"Among our monthly observations we measured growth rates, faecal egg counts, fluke egg counts, liver enzymes, trace elements, mould and yeast growth as well as pasture assessments," Leah said.

"We suspect that a mycotoxin produced by an as yet unidentified fungus is causing the syndrome, although this has yet to be confirmed. We hope to continue the project during autumn next year."

"The syndrome isn't transmittable and may sometimes be confused with facial eczema, which is also caused by fungus and is common on irrigated pastures in central Gippsland," she said.

"However, cattle with SGASS have elevated levels of a liver enzyme, strongly suggestive of liver damage, which is not consistent with facial eczema."

Leah said affected stock seem to respond well to being moved off pastures with high fungus counts, often old pastures with more fallen dry feed, on to more recently sown and possibly cleaner pastures.

Clinical symptoms

- Abdominal upset sometimes accompanied by diarrhoea
- Dull appearance
- Weight loss
- Ill-thrift
- Photosensitisation (a discoloured nose that later peels)
- Decreased immunity

A Hereford steer who showed early signs of photosensitisation 10 days before, now showing ill-thrift and severe photosensitisation caused by South Gippsland autumn setback syndrome.

Producers who believe their cattle are affected by SGASS, or anyone wanting more information, should contact **Dr Leah Tyrell**, Mackinnon Project // T: 03 9731 2233 E: ldtyrell@unimelb.edu.au Read the project's final report at **www.mla.com.au/SGASS**

Genetics

Genetics pay up

Genetic selection for key traits has potentially added $15.4 million a year to tropical cattle herds.

Paul Williams of Tropical Beef Technology Services says the figure was calculated by averaging the past two decades of BREEDPLAN data for Brahman, Santa Gertrudis, Brangus and Belmont cows mated in commercial herds targeting grass-finished steers for export markets.

"BREEDPLAN calculates the Estimated Breeding Value (EBV) of traits such as weight, fertility and carcase, which are of economic importance to commercial beef producers," Paul said.

"By combining these EBVs with an economic weighting based on costs of production and returns on outputs, a single selection index ($Index) for an animal can be produced.

Paul said the selection indexes generated from BREEDPLAN can help producers make economically sound breeding and selection decisions.

"These selection indexes can be calculated for different production and market scenarios, so beef producers can make balanced selection decisions to identify the bulls that have the most profitable genetic profile for their commercial enterprise.

"Visual assessment is still important, but you can't see an animal's genes – particularly when we consider the range of traits covering growth, fertility and carcase. The right genetics make a difference, and industry can access a range of information in the form of EBVs and selection indexes which, in the right combination, deliver productivity gains and reduce production costs through genetic progress."

Set your sights

The tropical beef breed selection indexes reveal the importance of balanced selection across a range of traits covering fertility, weight and carcase. The selection indexes generally have a heavy weighting on fertility (cow weaning rate), followed by weight (liveweight at sale) then carcase (meat yield, fat depth and marble score). See figure 1.

Paul Williams, Tropical Beef Technology Service
T: 07 4927 6066
E: paul@tbts.une.edu.au

BREEDPLAN **http://breedplan.une.edu.au**

Tropical Beef Technology Service **http://tbts.une.edu.au**

Tropical Beef Technology Services and Southern Beef Technology Services YouTube Channel: **http://www.youtube.com/user/sbtstbts**

For Tips & Tools: The accuracy and success of EBVs visit **www.mla.com.au/EBVaccuracy**

For information on genetics and breeding **www.mla.com.au/genetics**

Figure1

Trait	Why it is important	EBVs to look for
Fertility	Breeder fertility significantly affects the profitability of a cattle business, as the ability to produce more calves from a set number of breeders for each defined production cycle increases income and lowers the cost of production.	For genetic gains in fertility through the replacement daughters, select bulls with high (that is, bigger) EBVs for scrotal size and low (shorter) EBVs for days to calving.
Weight	The rate at which cattle reach a specific weight affects your bottom line.	For genetic gains in growth, select bulls with higher weight EBVs (eg. 200, 400, 600-day weight) that are relevant to the age you turn off their progeny.
Carcase	Having high-yielding carcases that are able to be finished (ie. adequate fat levels) at the required age and weight has an impact on the bottom line of the supply chain.	Select bulls that have the right genetic profile for your production system for the carcase EBVs, which include eye muscle area, rib fat, rump fat, retail beef yield and intramuscular fat.

Project dashboard: Tropical Beef Technical Services

Financial contributions to the project:
$682,000

Agricultural Business Research institute: **50%**

Government matching funds: **50%** (via MLA Donor Company*)

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

Length of project:
4 years

Project is part of MLA's objective to:

Create opportunities through research and extension to improve reproduction efficiency in northern beef (by 5 percentage points) and maternal sheep breeds (by 2 percentage points)

Going for the good earners

Snapshot

Alf, Louise, and Wendy Collins, Bowen and Nebo, Qld.

Property: 16,000ha

Enterprise: Commercial cattle and Brahman stud

Livestock: 1,500 commercial breeders, 500 stud breeders, 100 bulls sold annually

Pasture: Mix of ironbark, bloodwood coastal forest, brigalow, introduced pastures, stylo and legumes

Soil: Range from granite ridges to heavy scrub soils

Rainfall: 700mm

Central Queensland cattle producer Alf Collins targets fertility in his Brahman herd.

Female fertility, measured by 'calf or carcase', tops the selection criteria used by Queensland cattle producer Alf Collins in his 2,000-head Brahman breeding enterprise.

Alf, his wife, Louise, and mother, Wendy, run 1,500 commercial breeders at 'Tondara', Bowen, and 500 stud cows at 'Gundaroo', Nebo. They sell 100 bulls a year off grass and grow 800 steers at Gundaroo and on agisted land for the 400–500kg feedlot market.

Prime cattle are important for cash flow, but remain the 'by-product' of what is first and foremost a breeding enterprise.

"Our main business is weaning calves, so the most important selection trait is fertility," Alf said.

"We have no tolerance for cattle that do not earn every year. Our management system is geared to ensure non-performing cattle are converted into dollars – no exceptions. By setting a 'calf or carcase' requirement we remove poor genetics, lighten the grazing pressures and secure cash flow throughout the year."

Mating at Tondara starts on 1 October, regardless of seasonal conditions, to identify the most efficient and adapted females. Cows are mated for 105 days and heifers for 90 days, at a bull:cow ratio of 3%.

"We judge a female on her ability to quickly conceive while lactating, hold the pregnancy, calve unassisted, raise a sound calf and rebreed within this strict timeframe. Cows that fail this reproduction and weaning test are sold direct to works," Alf said.

"We target predictable production in an unpredictable environment, so seasonal stresses help identify the females who deserve a place in our herd."

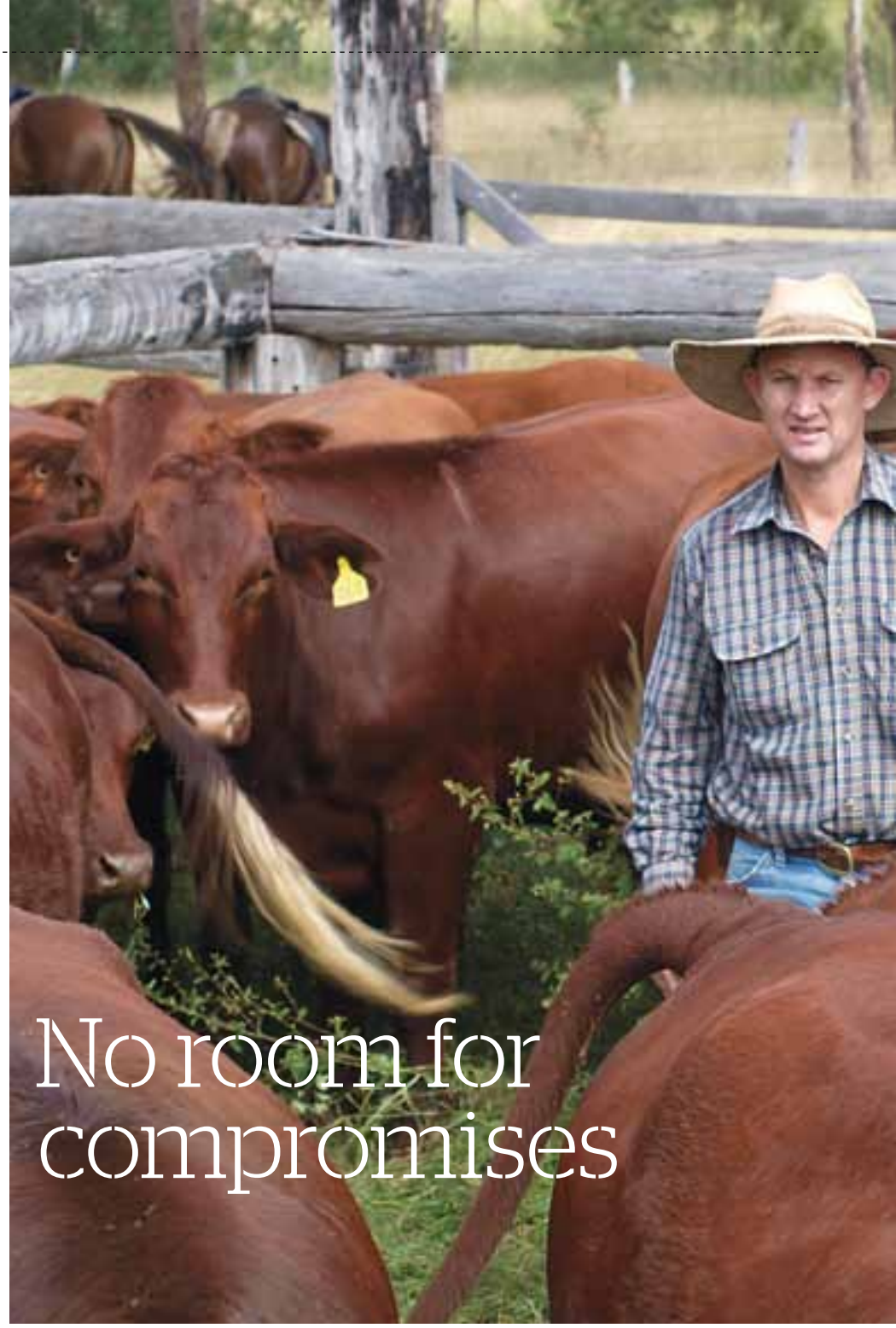
The Collins budget for 75% conception at pregnancy testing to maintain a self-replacing herd, but consistently average 80%.

"Consistency is a sign our business is sustainable regardless of the season, and this has a big bearing on our bottom line.

→

Lessons learned

- **Combine for results:** Combining superior genetics with sustainable grazing management optimises profit per hectare and is saving decades in achieving our production targets.
- **Embrace the tools:** BREEDPLAN is an important tool to assess the genetics going into our herd. We also participate in research projects to access new data, and draw information from industry tools such as Grazing for Profit, so we know what changes are needed to achieve production goals.
- **Ask the industry:** The global beef industry is an accessible and invaluable resource. In 1999-2000 Louise and I visited beef producers and research stations throughout North America, South America and South Africa, and these networks continue to contribute to how we run our business.



No room for compromises

The Greenup family of 'Rosevale', at Jandowae in south-east Queensland, are boosting their bottom line by producing more calves from fewer bulls, thanks to a focus on sustainable genetic selection.

David and Sonya Greenup, their three teenage sons and David's parents, Grahame and Peggy, run 700 stud Santa Gertrudis breeders and 700 commercial breeders – predominately Santa Gertrudis with a small infusion of British and European genetics. All progeny are grown out on pasture to meatworks specifications.

"Our annual production goals are to average 85% live calves weaned while turning off prime cattle at 22–30 months to meet EU market specifications," David said.

"We select our herd to perform with minimal inputs, ensuring a low cost of production, irrespective of seasonal conditions."

→

As a breeding operation, our annual costs for a given number of cows are the same, regardless of how many calves they produce, so the more cattle we wean, the lower our cost of production," Alf said.

It's not just breeders who must demonstrate fertility traits: Alf closely inspects the female pedigrees of bulls they retain. 'Keepers' must be born in the first two months of calving, from sires and dams with outstanding calving intervals and rapid rebreed, to multiply superior genetics.

"We don't select for fertility in isolation – it would be a poor management decision to produce lots of calves that didn't meet the market. We use the data available to us from industry research and tools like BREEDPLAN to take multiple traits in the right direction," Alf said.

As the third generation of his family to breed Brahmans, Alf draws on more than 50 years of selection for traits that improve profit margins: temperament, muscling, survivability, growth, low cost and predictability.

Selection tools such as scrotal circumference measurements and morphology testing are also used early to identify top-performing sires to advance the commercial herd.

Alf Collins // T: 07 4956 8385
E: alf@alcbrahmans.com.au

www.alcbrahmans.com.au

Snapshot

David and Sonya Greenup, Jandowae, Qld.

Property: 12,000ha

Enterprise: Bull-breeding (selling over 300 bulls/year) and prime cattle primarily for EU market

Livestock: 700 Santa Gertrudis stud breeders, 700 predominately Santa Gertrudis commercial breeders

Pasture: Forest country for breeders, softwood scrub country for bulls/steers, dryland forage crops for feed gap to grow young cattle and finish sale cattle

Soil: Ranges from sand to heavy black soil and everything in between

Rainfall: 625mm

David Greenup has a genetic selection strategy to multiply favourable traits through his Rosevale herd.

Lessons learned

- **Trust your judgement:** Studying cattle meticulously, with an eye on family lines, has forged the personal experience that backs up the majority of decisions made for our herd.
- **Learn from every decision:** You learn more by going in the wrong direction than if everything goes your way – poor choices can build a stronger sense of direction.
- **Don't compromise:** At no time do we let trait selection come at the expense of herd fertility, and we do not compromise traits such as temperament and structural soundness.

Selection pressure is put on a wide range of traits, including increased growth, muscle and fattening ability, underpinned by reproductive performance.

The Greenups use Santa Gertrudis Group BREEDPLAN EBVs to select herd sires. Although commercial calves are not BREEDPLAN-recorded, they are weighed at weaning, 400 days and 600 days. Rankings are calculated from these weights, and commercial calves are benchmarked against the BREEDPLAN-recorded stud calves. Similar comparisons are used with flight time and yearling bull scrotal-size measurements. These rankings guide culling and retention of replacement heifers and bulls.

"Serving capacity assessments and annual semen morphology testing are also selection tools for herd sires, to identify bulls with higher libido and tighter sheaths," David said.

"With all bulls meeting recommended guidelines, cows have no excuse for not falling pregnant."

Programmed for high performance

Mating at Rosevale has been tightened from five to three months. Cows failing to return a positive pregnancy test after this joining with no supplementary feed, irrespective of seasonal conditions, are culled.

"This policy ensures selection for higher-performing cattle is not at the expense of fertility. It is the barometer that tells us how far we can push performance before cattle lose adaptation to their environment.

"Years ago, our herd could achieve high pregnancy rates when seasonal conditions were good, but would crash when feed availability was low. Now, by making fertility and management decisions such as weaning earlier when needed and culling animals with lower fertility, we maintain consistently high pregnancy rates, year-to-year."

This combination of genetic selection and strict culling has boosted Rosevale's productivity and profitability over the past two decades as 15% more calves are now weaned and their average weight is higher.

By selecting more fertile sires, the Greenups now run 20–30% fewer bulls in their commercial herd, achieving higher calving rates while reducing injury to bulls.

"As a result, our business has become more profitable. As well as the genetic influences, each breeding female gives us a return every year from her calf or herself, ensuring there are no 'freeloaders' in our herd."

David now has his sights set on the top end of the herd, to identify animals that push productivity to new levels so their genetics can be multiplied.

David Greenup // T: 07 4668 6192
E: rosevalesanta@bigpond.com
www.rosevalesanta.com.au

Producer Demonstration Sites

Producers producing research

Around 350 projects have been carried out by local producer groups under MLA's Southern Producer Demonstration Sites (PDS) program since it began in 1993.

From perennial pastures to parasites to producing productive ewe lambs, the PDS program covers a wide range of specific issues affecting regions across southern Australia (see Table 1).

Producer groups who want to join the program can apply for up to $60,000 per project over three years and run satellite trials with member involvement.

Table 1 Existing and recently completed Producer Demonstration Sites in southern Australia

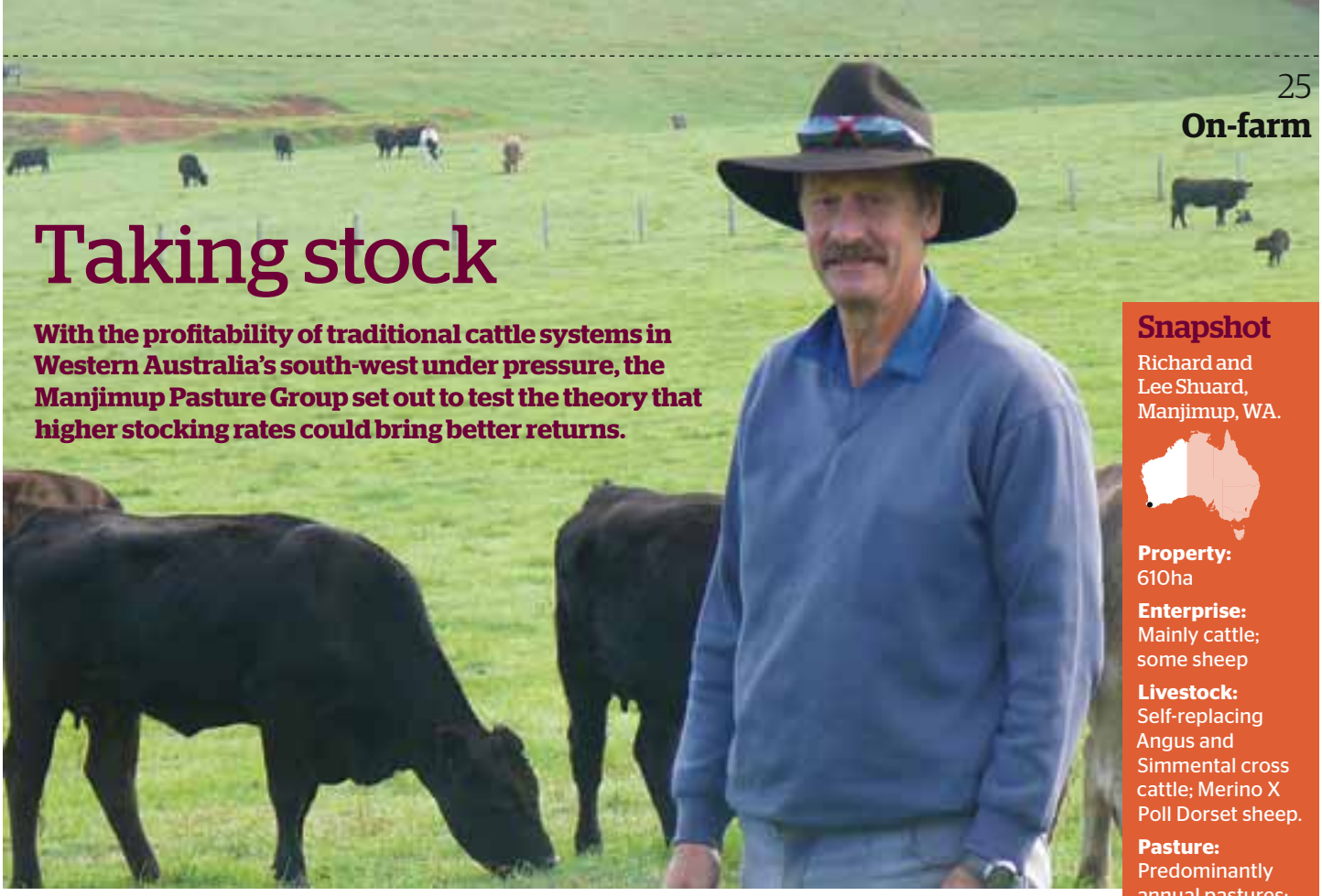
	Title	Where	Finish date
1	Measuring and monitoring a lucerne/grass mix pasture to increase enterprise, productivity, profitability and sustainability	Ballarat, VIC	31 Dec 2011
2	Carp, kelp and Christmas Island: where to next for fertilisers? (see article on page 26)	Holbrook, NSW	30 Sep 2012
2	Productive grazing – native and introduced pastures	Holbrook, NSW	13 Dec 2013
3	Persistent, productive perennial pastures for Euroa	Euroa, VIC	31 Jan 2013
4	Managing the growth of weaner cattle: The impact of internal parasites and nutritional management on enterprise profitability	Bathurst, NSW	30 Jan 2012
5	Is compost the fertiliser of the future?	Guyra, NSW	30 Nov 2012
6	Perennial pasture systems	Elmhurst, VIC	15 Dec 2012
7	Improving pasture growth and utilisation on the Northern Tablelands through better investment in soil fertility	Tenterfield, NSW	30 Apr 2014
8	Improving the reproduction efficiency of ewe lambs (lambing at 12-15 months)	Glenthompson, Ararat and Violet Town, VIC	31 Jan 2013
9	Optimising animal health to improve pasture utilisation and productivity	Hamilton to Benalla, VIC	31 May 2011
10	Evaluating sustainability of higher stocking rates in an integrated perennial and annual pasture system in the south west of Western Australia (see article on page 25)	Manjimup, WA	30 Apr 2012

	Title	Where	Finish date
11	Winnaleah Towards 2000 with legumes	Winnaleah-Ringarooma groups, TAS	30 Jun 2013
12	Wellington Resilient Business Group	Wellington, NSW	31 Jan 2013
13	Rotational grazing cereal crops in a Mallee farming system	Mallee, VIC	31 Dec 2011
13	Grazing cereal crops in a Mallee farming system – 2	Mallee, VIC	31 Jan 2014
14	South East Prime Livestock Achievers	Naracoorte, SA	31 Mar 2014
15	Targeted drenching of adult ewes (see article on page 27)	Tyrendarra, VIC	31 May 2013
16	Increasing pasture and red meat production through soil ameliorants	Armidale, NSW	8 Feb 2014
17	Monaro – Targeting fertiliser applications to soil	Monaro, NSW	5 Dec 2013

To download an application form go to **www.mla.com.au/funding-for-producers**

Northern Australia PDS' - **Liz Allen, MLA**
T: 07 3620 5237 // E: lallen@mla.com.au

Southern Australia PDS' - **Renelle Jeffrey, MLA**
T: 02 9463 9235 // E: rjeffrey@mla.com.au



Taking stock

With the profitability of traditional cattle systems in Western Australia's south-west under pressure, the Manjimup Pasture Group set out to test the theory that higher stocking rates could bring better returns.

Snapshot

Richard and Lee Shuard, Manjimup, WA.

Property: 610ha

Enterprise: Mainly cattle; some sheep

Livestock: Self-replacing Angus and Simmental cross cattle; Merino X Poll Dorset sheep.

Pasture: Predominantly annual pastures; about 20ha kikuyu and tall fescue

Soil: Gravelly loam

Rainfall: 810mm

Funded by MLA's Producer Demonstration Site program, the group established a 'farm within a farm' stocking rate trial at Richard and Lee Shuard's property 'Deeside'.

The trial compared a traditional low stocking rate (0.8 head/ha), low input management system (control) with a higher input, rotationally grazed system with a higher stocking rate (1.1 head/ha). The higher input system integrated annuals and perennials, used higher fertiliser and lime rates, and increased use of nitrogen.

"We basically divided the farm into two – a 77ha block that we put 82 cows on, and a 71ha block that we put 55 cows on," Richard said.

"The mobs were the same – a mixture of the Angus X Simmentals – and the cows were mixed ages. The calves went with them, and the bulls came and went as normal. But the cattle and the pasture were managed differently."

The trial ran for three years and results show a $176/ha cumulative gross margin increase in the innovation (higher stocking rate) trial, despite the difficulties of the first two seasons. Of this, $122/ha came in the final year where calf weights in the innovation trial were more than 20kg/head higher than the control.

"We think the higher calf weights in the innovation trial were because they grew more evenly, as they had access to better, and more even, pastures right the way through," Richard said.

"The first couple of years were pretty tough. We had poor seasons and the perennials were just establishing. During that time, the control cows and calves were heavier, but the innovation trial still broke fairly close to even on dollars per hectare, and it didn't cost us anything as far as production goes.

"But in the third year, when the pasture was established and we had a better winter and spring, the innovation trial did much better. By then, it had paid for itself."

There was no loss to fertility, cattle condition or land condition during the study, despite the higher stocking rate.

On the flipside

Richard did find that there was more work involved with the higher stocking rate.

"It was more intensive to manage, but once you get used to shifting the cows every four or five days and they get used to it, it's pretty easy," Richard said.

He is clearly convinced the extra work was warranted by the increased income – which he estimates to be $60–$100/ha, depending on season – and is now implementing the same approach on other areas of the farm.

Agronomist Paul Omodei, who supervised the research, said all members of the pasture group continue to report stocking rate increases, improved pasture production and enhanced knowledge of pasture and grazing management.

Lessons learned

- Higher stocking rates require higher inputs and increased labour, but lead to more dollars per hectare.
- The cost of establishing the perennial pastures was repaid in three years.
- If managed correctly, a higher stocking rate need not cause any decline in the condition of animals or the land.

"As with any project, over time new information and research becomes available and of interest," Paul said.

"The Manjimup Pasture Group became particularly interested in fodder crops (triticale, oats, oats/peas, turnips, rape) and where these could fit in the higher stocking rate system. This led to interest in cash crops of cereals and oilseeds (canola), which some group members trialled in the last year of the project.

"Some were initially cautious, but they're dipping their toes in the water."

Richard Shuard
T: 08 9773 1260
E: deeside@activ8.net.au

Paul Omodei // T: 0427 728 566
E: paul@agvivo.com.au

Assessing alternatives

Snapshot

Marcus Richardson, Table Top, NSW.

Property: 900ha

Enterprise: Cattle

Livestock: Angus breeders

Pasture: 60% arable land with phalaris and clover; about 7% lucerne; 33% native pastures (non-arable)

Soil: Grey and red loams

Rainfall: 650mm

Faced with low returns after eight consecutive years of poor seasons and keen to look at different approaches, Holbrook Landcare Network members found there was little information available on using alternative fertilisers.

The group sought MLA funding through the PDS program to answer the question: Carp, kelp or Christmas Island – where to next for fertilisers?

The project compared seven products, which were chosen to be representative of the wide array of products available locally. They were assessed for effects on growth, quality and composition of pasture, and on the chemical, microbiological and physical properties of the soil.

The products were applied in line with manufacturers' recommendations on paddocks typical of the area. The study used two controls: no added fertiliser; and single superphosphate applied at 10.8kg phosphorus/ha.

According to cattle producer Marcus Richardson, the ability to assess fertilisers in terms of cost per nutrients supplied was a valuable lesson from the project.

"At one of the field days we were shown how to calculate fertiliser cost as cents per kilogram of phosphorus, potassium, and so on," Marcus said. "That gives a really easy and effective way of assessing the different fertilisers in terms of what they actually deliver to the paddock."

The replicated field study showed that none of the alternative products significantly affected pasture growth, quality or composition, and nor did any significantly affect soil softness, or soil chemical or microbiological properties.

Super confident

Agronomist Jeff Hirth, who coordinated the field trials for the Holbrook group, said paired-paddock evaluations showed very small and inconsistent differences in live weight changes (of cattle grazing the pastures), but these were not of economic benefit to the producers.

The results indicated that most of the alternatives supplied little or no phosphorus, nitrogen or sulphur. In contrast to single superphosphate, which annually supplied 10.8kg phosphorus/ha and 13.5kg sulphur/ha, only two of the alternatives tested supplied phosphorus in the first year. One supplied 64.2kg/ha and the other 7.4kg/ha. Additionally, one other alternative supplied moderate levels of potassium (35kg/ha) each year.

"We found that none of the products tested were significantly different to super, so it reaffirmed our confidence in super," Marcus said.

Chris Cumming, Executive Officer of Holbrook Landcare Network, said as well as assessing the fertiliser alternatives, the project was important in demonstrating the value of evidence-based decision-making.

MLA is combining the results of several other alternative fertiliser projects together with this project. Gerald Martin, Southern Coordinator of MLA Producer Demonstration Sites, said this will provide a fuller picture of the value of alternative fertilisers.

"The value of fertiliser is affected by the inherent fertility, particularly phosphorus levels, at the start of trials," Gerald said.

"The combined results, which will bring together individual trials from different sites and overall results for various fertilisers, will enable wider application of this work. It will also give each product a five-year opportunity to show its value."

Lessons learned

- Assess the value of fertilisers based on the amount of nutrients they supply.
- Make decisions based on solid evidence.
- Conducting research on paddocks representative of the region gave results that were immediately relevant on-farm.

Marcus Richardson
T: 0410 327 062
E: richarm@iprimus.com.au

Chris Cumming // T: 02 6036 3181
E: chriscumming@holbrooklandcare.org.au

Five easy steps phosphorous tool: **www.mla.com.au/phosphorustool**

The farm nutrient loss index tool: **www.asris.csiro.au/themes/nutrient.html#Nutrient_FNLI**

Setting targets

The South West Prime Lamb Group in Victoria, with support from South Australian Research and Development Institute's parasitology group, saw the PDS program as a weapon in tackling a rising issue to sheep producers – drench resistance.

Snapshot

Owen Dyson, Bessiebelle, Vic.

Property: 550ha

Enterprise: Prime lambs

Livestock: 3,800 Coopworth-cross ewes

Pasture: All improved pastures, mostly ryegrass and sub-clover; some phalaris and clover (white and strawberry)

Soil: Grey loam, with black clay flats

Rainfall: 850mm

The group set up a PDS to investigate the implications of using a strategic program in which only a portion of the flock was drenched.

According to producer and PDS participant Owen Dyson, the approach was effective, if a drenching program had previously been in place.

"The approach we looked at in the PDS is not a new worm control program; adequate worm control already has to be in place – it's about managing internal parasites while trying to slow drench resistance," Owen said.

South West Prime Lamb Group coordinator Kate Joseph said the approach began with determining the worm burden of the mob, using faecal egg counts from mature age ewes.

"We were interested in the average worm egg count of the mob, not individual animals," Kate said.

"While the averages didn't necessarily tell the whole story, they did provide the information we needed. Individuals can vary widely, so we tested a minimum of 15 animals out of a mob, using samples picked up in the paddock."

They then established what percentage of the flock – which could range from 0% to 100% – needed to be drenched to bring the average egg count down. If the calculation indicated 30% of the flock needed drenching, they aimed to drench only three out of every 10 animals, but it was more targeted than simply selecting the closest three.

"We assessed the ewe's condition through the race – anything skinny or daggy was drenched, but if she was big and fat and clean, she went through undrenched," Kate said.

"That isn't to say all the big, fat sheep were worm free, but there are two elements to it – resistance and resilience."

Resistance refers to the worms' resistance to the drenches; resilience refers to the sheep's ability to cope with its worm burden.

"Ten to 14 days after I'd drenched the mob, or a portion of the mob, I'd do another bulk egg count and make sure it was acceptably low."

By not drenching every animal every time, this approach aims to leave some larvae on the pasture, which helps prevent the worms building resistance to the drenches.

Putting theory into practice

On his farm, Owen Dyson still gives every sheep a pre-lambing drench in June ready for lambing in July.

"I also drench all the lambs and ewes in September, but if egg counts indicate in October that I need to give another drench, I don't drench any that are over-fat or clean.

"In autumn, I'll do an egg count, draft off the lighter sheep and drench a portion of them. Anything that looks like it might be struggling needs to be drenched."

The PDS results show that the producers have benefitted from reduced costs of drenching, but other cost implications are not yet known.

"We've had some pretty good results this way," Owen said. "We're confident it is reducing the build-up of drench resistance in worms and we are definitely using fewer chemicals, which is a good thing. But we don't really know what the productivity would have been like if we had drenched the whole mob.

"I don't think there would have been any effect on our lambing percentages, but it may have affected the selling weight of the lambs and the finishing time. That's the question we need to answer next."

Lessons learned

- You must know the anthelmintic resistance status on your farm to use fully effective chemicals.
- Faecal egg counts are integral to a strategic approach to worm control.
- All lambs and young animals must be drenched as they are more susceptible to worms than mature animals.
- You need to keep monitoring the flocks and be prepared to intervene if necessary.

Owen Dyson // T: 0427 403 504
E: dyson10@westvic.com.au

Invasive animals

Want help managing rabbits on your land? Try these resources:

Standard operating procedures for humane control of rabbits
(Source: RabbitScan)
www.feral.org.au/pestsmart/rabbits
Click on 'Standard Operating Procedures' for the humane control of rabbits.

More information about these techniques
www.feral.org.au/pestsmart-glovebox-guide-for-managing-rabbits/

Rabbit-Free Australia:
www.rabbitfreeaustralia.org.au/rabbit_control.html

Conventional Rabbit Control:
www.feral.org.au/wp-content/uploads/2010/03/6694.pdf

Rabbit reduction – what's next?

MLA-supported research is paving the way for improved biological control of rabbits.

Rabbits have been undermining livestock producers' profits and sustainability since soon after European settlement. Today they are found all over Australia across a range of environments, infest more than 530 million hectares and cause $206 million in agricultural production losses each year.

Dr Tarnya Cox, a project leader with the Invasive Animals Co-operative Research Centre, said biological controls had helped control rabbit numbers. These include myxomatosis, introduced to Australia in 1950, and rabbit haemorrhagic disease (RHD), released in 1990. However, climatic factors and growing genetic resistance to RHD have driven the need for more-effective tools.

"The RHD Boost Project, supported by MLA, expects to deliver a new virus strain in about 2015," she said.

"We expect better performance in our more temperate zones, where the present strain has had limited success or failed to establish at all, and we hope to achieve a 70–90% knockdown during its initial release phase."

Tarnya said that if RHD Boost proved successful, it would have a projected net present value of more than $1.4 billion over 15 years, and should substantially reduce rabbit impact on plant biodiversity. The RHD Boost will be released to rabbits via baits (most likely carrots) at strategic locations.

Senior Research Officer with Biosecurity South Australia, Greg Mutze, encourages producers who may have a rabbit problem to go to the RabbitScan website – **www.feralscan.org.au/rabbitscan** – where they can enter data about rabbits in their own area.

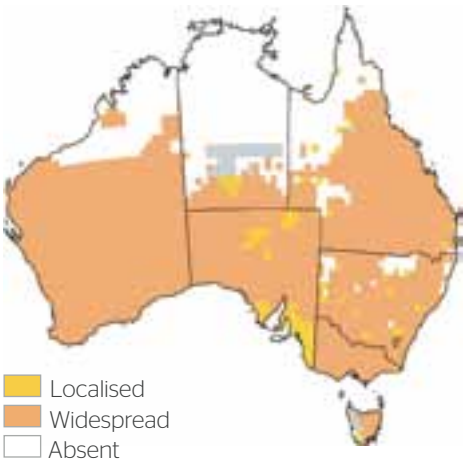
"This is an excellent mapping tool and information resource that has revealed the extent of the rabbit population on our coastal fringes," he said.

"I think it has raised general awareness of how widespread and serious the problem is, and highlighted how some infestations in higher rainfall areas are not receiving the attention they should."

Greg Mutze // T: 08 8303 9505
E: greg.mutze@sa.gov.au

Tarnya Cox // T: 02 6391 3952
E: tarnya.cox@dpi.nsw.gov.au

Figure1 Map of national rabbit distribution



Source data: Invasive Animals CRC, RabbitScan and NLWRA/IACRC 2008.

Above: Researcher Christine Arnold assesses ground cover damage and takes a dung count on Minburra Station (see story on page 30).

Left: Rabbits devastate country in South Australia's pastoral zone by competing with livestock and reducing the biodiversity of native flora.

An invasive app

Wild dogs, rabbits and pigs have now invaded smart phones. Andreas Glanznig, Chief Executive Officer of the Invasive Animals CRC, said that the Field Guide to Pest Animals of Australia App is the first of its kind in Australia.

"This app contains detailed species descriptions, photo galleries, maps, control techniques and quick links to plenty of useful pest control resources for 31 vertebrate pest species in Australia."

"Australia has 56 vertebrate pest species costing at least $1 billion a year in economic, environmental and social impacts," Andreas said.

Some of the many resources available through the app include PestSmart Toolkits, FeralScan webmapping and **www.feral.org.au**

The free app can be downloaded from the Apple App Store at: **https://itunes.apple.com/au/app/field-guide-to-pest-animals/id634197149?mt=8**

The app is compatible with iPhone, iPad and iPod touch devices.

The Invasive Animals CRC is looking at developing an Android version in the near future.

Rabbit control tips and tools

Chemical

- Ground baiting (with 1080 or Pindone)
- Fumigation of warrens

Mechanical

- Warren destruction by ripping (with a small tractor or bulldozer)
- Warren destruction using explosives
- Trapping
- Ground shooting
- Fencing to prevent rabbit entry
- Removal of surface habitat for rabbits, such as blackberry thickets

Biological

- Myxomatosis (also referred to as Myxo)
- Rabbit haemorrhagic disease virus (RHDV) formerly known as rabbit calicivirus disease (RCD).

Baiting tips:

- The most common method is to poison carrots or oats with 1080.
- Rabbits are attracted to turned earth, so make a shallow furrow and lay two or three free (non-toxic) feeds of oats or carrots along it at three or four-day intervals.
- In heavily infested areas, 20km of trails for every square kilometre (or 100ha) is recommended.
- If you are concerned about accidental poisonings of dogs or other domestic animals, Pindone is an alternative poison with an antidote. The safer option for native wildlife is 1080.
- Use the free feeds to judge the amount of poisoned bait you will need to limit non-target deaths.
- A well-conducted baiting program can eliminate more than 95% of rabbits.
- Follow-up with ripping and harbour destruction.

Warren ripping tips:

- Bait first to lower numbers to increase success.
- Plan and mark out where the warrens are before bringing in machinery.
- The best time to destroy warrens is late summer when rabbit numbers are at their lowest and the soil is dry and will collapse easily.
- Rip beyond the warren and in a criss-cross pattern.
- Ideally, tynes should rip to a depth of 900mm at a spacing of 500mm.
- In rocky terrain or areas where native vegetation is a concern, an excavator with one or two tynes or a bobcat with a similar arrangement has been successful.
- Check for any hole re-openings and follow-up with fumigation if required.

For further information on best practice control methods visit:
www.rabbitfreeaustralia.org.au/rabbit_control.html
www.feral.org.au/pestsmart/rabbits

Hop to it

The Rasheed family have found that warren destruction, combined with rabbit haemorrhagic disease, can defeat even the worst rabbit invasions.

Lessons learned

- In pastoral areas, rabbit control is the best way to improve profits and increase feed on offer.
- Get in and do it – the benefits are almost immediate.
- Rip warrens a track-width beyond where you think they end, to avoid missing burrows.
- Don't miss areas because of vegetation; you need to get rid of all the rabbits for effective control.
- Small vegetation sacrifices are repaid by the regeneration and regrowth that occurs once rabbits are removed.

Get in and do it. This simple and effective principle is the basis of the Rasheed family's rabbit control strategy, based on their generations of experience.

The Rasheeds run three properties in the notoriously rabbit-infested Flinders Ranges region of South Australia, and know how devastating rabbit plagues can be.

'Minburra' is 109,400ha of flat saltbush country about three hours' drive from Adelaide. It shares boundaries with the Rasheed's other two pastoral area properties, 'Koonamore' and 'Melton'. Together, they form a massive 314,100ha, which Jon Rasheed, his two brothers, and parents Peter and Kay have accumulated since the early 1990s.

Minburra, considered the home block, has a special place in Rasheed family folklore. Formerly owned by Jon's great-grandfather, the property was lost to the family during the Great Depression when Jon's grandfather was forced to walk off. It was held and managed by receivers until the rabbits and the wool market crash got the better of even them. In the early 1990s, the family was able to buy it back.

By then the rabbits had gained a firm foothold, and Jon and his brothers had to apply their 'just do it' rabbit control principle with gusto.

"We always reckoned that when rabbits colonised Australia, Minburra Station was headquarters and our other place, Melton, wasn't far behind," Jon said.

"In just one paddock (about 3,500ha) we had up to three full-time rabbit shooters. They took about 20,000 pair in less than three months."

"In the same paddock, we ripped more than 2,000 warrens. When you consider there are 12 rabbits to 1 DSE, they severely diminish your carrying capacity."

According to Greg Mutze, Senior Research Officer with Biosecurity SA, at a stocking rate of 500 ewes and lambs in this paddock, rabbits accounted for about 70% of the grazing pressure.

Rip it up

For the Rasheeds, the size and logistics of their property meant baiting was too labour intensive. Warren ripping, however, has been highly successful.

"On Minburra we've ripped almost 30,000 warrens in the past 15 years. Whenever we get any spare time, we spend it on the dozer," Jon said.

> "I can't think of any better way to improve this country. You can't super it or improve pastures; you have to make the most of what nature delivers – but you can reduce the competition."

According to the Rasheeds, the secret to successful warren ripping is to make sure you get the entire warren and don't miss any burrows along the edge.

"We use a D4 and a D6 bulldozer, each fitted with a three-tyne ripper with winged boots and we make sure we always rip to a depth of at least three feet (90cm) and a track-width wider than where the warrens are," Jon said.

After 15 years of persistent control efforts and the impact of rabbit haemorrhagic disease (Calicivirus), which Jon said was highly effective in their district, the family can see considerable productivity gains.

"It's not something we've actively measured, and we haven't changed our stocking rate, but we definitely cut more wool per sheep and have more consistent wool cuts despite variations in seasons," he said.

"Our sheep are in better condition and, during dry years, we haven't been forced to destock."

Snapshot

The Rasheed family, Orroroo and Yunta, SA.

Property:
314,100ha

Enterprise:
Fine to medium wool production, sheep and cattle (Angus Shorthorn-cross) production

Livestock:
25,000 Merino ewes, 35,000 dry sheep, 240 Angus Shorthorn-cross cows

Pasture:
Salt bush, native pasture, weeds and scrub

Soil:
Red clay

Rainfall:
213mm

Above: Senior Research Officer with Biosecurity SA, Greg Mutze, measures bluebush regeneration after rabbit control on the Rasheed's property, Minburra Station, showing that rabbit control can allow regeneration of native shrublands during livestock production.

Jon Rasheed
T: 08 8658 1273
E: jonrasheed@bigpond.com

Industry collaboration

Partnering promotions

MLA, exporters and MSA brand owners are working together to build awareness of Australian beef and lamb, strengthen global supply chains, and deliver dividends for the whole industry.

MLA builds on generic campaigns that market Australian beef and lamb like the Sam Kekovich and 'Throw another steak on the barbie' campaigns by also providing dollar-for-dollar funding to companies to promote red meat under Industry Collaborative Agreements (ICAs).

MLA's Steve Edwards, who oversees the ICA program, said the agreements helped develop global and domestic business opportunities.

"By supporting companies with co-funded marketing activities in line with industry-endorsed MLA international and Australian marketing strategies, ICAs not only strengthen individual brands, but drive demand for Australian red meat – benefiting the whole sector," Steve said.

Co-funded activities include brand launches, trade missions, end-user promotions, point-of-sale material, in-store sampling, market research and product development.

"MLA's growing investment in ICAs complements our generic red meat marketing activities. Consumers connect with specific brands, so by promoting individual branded products, we are building ownership and awareness of a range of Australian brands across targeted market segments. The ICA program requires commitment – not just financial contribution – from the exporter or MSA brand owner," Steve said.

"This creates ownership, and delivers a more effective, whole of supply chain marketing activity. Often, the ICA activities rely on commitment from the in-country importer/end user as well, which really helps to open up international opportunities for Australian red meat.

"Many of the 50–60 beef and 20–30 lamb ICA participants each year are repeat participants who have experienced the value of the program. MLA encourages first-time applicants to broaden the exposure of Australian red meat, and each year we see new marketing innovations and activities funded by ICAs," Steve said.

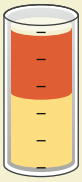
Licensed Australian exporters and MSA-licensed brand owners who trade in the Australian market can apply for funding for international or domestic marketing at **www.mla.com.au/industryagreements**

Stephen Edwards, MLA
T: 08 8471 5800 // E: sedwards@mla.com.au

Project dashboard: ICAs

Financial contributions to the project (2011-12):

$7 million



Lamb participants: **2.85%**

Beef participants: **47.15%**

MLA: **50%**

Length of project: financial year basis

Project is part of MLA's objective to:

Grow demand for Australian beef and lamb in global markets

OBE's starring role

Industry Collaborative Agreements (ICAs) and YouTube are giving Channel Country cattle producers a global voice by letting them cross the geographical and digital divide to talk directly to consumers.

OBE Organic group's General Manager, Dalene Wray, said a series of short videos that focus on "the people, not the product" were developed with ICAs to build consumers' trust.

"Our beef is produced in a unique environment by families who are passionate about sustainable, safe and healthy red meat," Dalene said. "These 'People Behind OBE Organic' videos are their chance to tell consumers how and where OBE products are produced, and by whom."

Dollar-for-dollar support from an MLA global beef ICA allowed OBE Organic to extend its conservative marketing budget.

"OBE only funded half the $6,000 spent on producing the videos, so the ICA allowed us to step outside our comfort zone and embrace new media.

Channel country producer, Nell Brook was profiled in a 'People behind OBE Organic' video.

→

Effective research, filming, editing and graphic design take a lot of work, but the ICA gave us resources to invest in the right expertise to refine our messaging," Dalene said.

OBE projected sales to grow by 16% in 2012-13, and Dalene is confident this wouldn't be achievable without the ICA.

"The OBE sales team has a great relationship with MLA representatives in Australia and around the world. Without ICA support, advice and guidance, we would not be in a position to undertake the global marketing initiatives that we do."

OBE released a second ICA-funded video series (with Arabic subtitles) in March, aimed at building trust in OBE's Halal process and allay any concerns of Muslim consumers about the Halal status of meat produced by OBE.

Channel country producer Scott Fraser was profiled in a 'People behind OBE Organic' video.

Dalene Wray
T: 07 3623 2880
E: dwray@obeorganic.com
Facebook/Twitter/YouTube: **obeorganic**
www.obeorganic.com

Going for gold

New England Gold lamb received a tick of approval from the food industry, winning Gold and Grand Champion at the 2012 Queensland Fine Food Show. It also won Gold in 2011.

Dollar-for-dollar industry funding underpins a fresh market for MSA lamb brand, New England Gold.

Michael White, marketing coordinator from the Brisbane-based meat supplier Country Fresh, credits co-funding through MLA's Industry Collaborative Agreements (ICAs) program for putting an important mark of confidence from the industry on the lamb brand, and building consumer awareness at farmers' markets.

"It tells our partners and consumers they support a company that represents Australian producers," he said. "As a bulk processor, we haven't had the chance to tell our story directly to consumers – until now. The ICA support, combined with MSA grading, has been an integral part of building the brand story and product consistency."

Country Fresh, a subsidiary of the Thomas Foods International group (formerly T&R Pastoral), launched New England Gold lamb in 2011 to add a domestic niche product into its bulk processing business.

The brand has strong awareness in the foodservice industry, with premium retailer Vic's Meats channelling product into top-end Sydney restaurants. The brand also features on menus in Brisbane's Southbank restaurant precinct, with cap-off racks of lamb available at Aquitaine Brassiere and cap-on rumps at The Point Bistro.

The lamb is also gaining momentum at Queensland farmers' markets, where an ICA co-funded campaign underpins a strong supply chain relationship with retailer Stockman's Choice.

"Stockman's Choice sells the majority of our lamb out of mobile shops at 35 markets throughout the Brisbane region, giving the brand exposure to a growing number of consumers, who are very conscious of where their food comes from," Michael said.

The company leveraged ICA-funding to advertise on Brisbane radio and produce point-of-sale material, including an information booklet.

"The ICA doubled our marketing budget for this campaign so we could access better time slots, broadcast more ads and reach a wider audience. Many people buying our lamb from Stockman's Choice said they heard the ads and personal recommendations from radio hosts."

Michael White
T: 07 3252 3844
E: mwhite@countryfresh.com.au
www.thomasfoods.com.au

Recipe

Vietnamese-style beef roast

Here's an Asian spin on a classic winter dish – roast beef. Vietnamese-style beef roast is just one of the many winter warmers in the latest edition of *Entice* magazine, now available through selected retailers or online at the newly revamped **www.themainmeal.com.au** website. This dish is an illustration of how beef and lamb are a perfect match for the 'Asianisation' of our taste buds.

Serves: 6
Preparation time: 10 minutes
Cooking time: 50 minutes

Ingredients

1.2kg bolar blade beef roast, fat trimmed

2 tbsp lemongrass paste or finely chopped lemongrass

2 tbsp fish sauce

3 cloves garlic, crushed

1 lime, juiced

1 long red chilli, finely chopped (optional)

6 star anise

½ cup beef stock or water

1 tbsp vegetable oil

4 carrots, peeled and cut lengthways

4 parsnips, peeled and cut lengthways

2 leeks, washed and halved lengthways and each length cut in half

Steamed broccolini, green beans, roast sweet potato wedges to serve

Method

1. Preheat oven to 220°C. Place carrots, parsnips and leeks in a roasting dish, drizzle with oil and sprinkle with pepper.
2. Combine lemongrass paste, fish sauce, garlic, lime juice and chilli in a small bowl. Make six 2cm long cuts on the top surface of the beef and press the star anise half way into the cuts. Place beef on top of vegetables and cover the beef with the lemongrass mixture, coating the top and sides. Pour stock or water in to the pan over the vegetables (but not over the beef).
3. Roast for 20 minutes and then turn over down to 160°C and cook for 30 minutes for medium rare or 40 minutes for medium. Remove beef to a plate and cover loosely with foil. Return vegetables to the oven and cook while beef is resting. Rest beef for 15 minutes before carving.
4. Service slices of beef with the roast vegetables, drizzled with some of the pan juices and steamed vegetables.

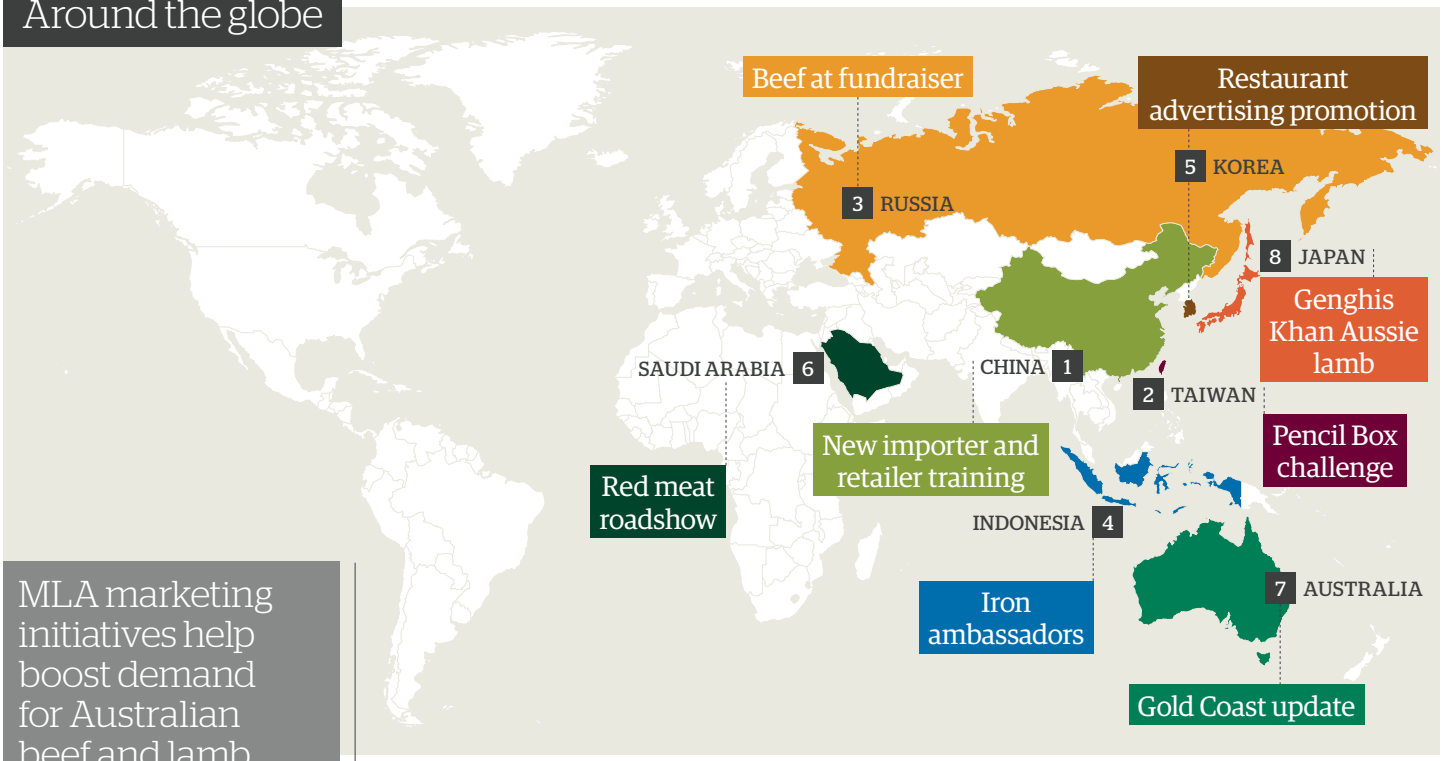
Tip

Use any leftover beef to make Vietnamese beef rolls. Fill wholemeal rolls with slices of beef and leftover vegetables or salad leaves.

Switch to make Chinese-style roast beef

Swap fish sauce for soy sauce, swap lemongrass for grated ginger and add one tsp sesame oil. Serve with rice and steamed Asian greens such as choy sum, bok choy or gai laan.

Around the globe



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

The Young Chef Pencil Box Culinary Challenge judging underway and (below) the Champion beef dish.

1 CHINA

Supermarket support

Twenty employees of a new importer of Australian beef and a local supermarket chain have completed intensive training provided by MLA.

The training in Australian beef and retail business management included a theoretical component, a question and answer session and practical demonstration involving beef knuckle and chuck roll.

2 TAIWAN

Out of the box

Twenty-four young up and coming chefs from various culinary schools competed in the second Young Chef Pencil Box Culinary Challenge. The challenge was to test the competitor's adaptability by working with secret ingredients to create dishes with quality Australian beef and lamb non-loin cuts.

The competitors were supplied with Australian beef oyster blade and lamb neck fillet roasts along with 10 basic ingredients. Before the competition, MLA senior technical trainer Jerry Shen gave a beef and lamb cutting demonstration.

The celebratory dinner for 80 guests was a red meat feast – Chinese style stir-fried beef and lamb, striploin and salad prepared in Thai dressing, roasted beef D-Rump and lamb shoulder rack.

3 RUSSIA

Down Under flavoured fundraiser

Australian beef took centre of the plate for Moscow's second 'Down Under Ball' in April where 320 locals and expats raised money for the charity 'Big Brothers Big Sisters' – a global mentoring program for at-risk children and orphans.

Attendees included Australian, New Zealand and Irish ambassadors, and aside from the goodwill generated, it provided an opportunity to lift the profile of chilled Australian beef.

4 INDONESIA

Ambassadors for iron

Around 400 students from two international schools in Jakarta were invited to enter a cooking competition where they had to create and cook their own Aussie beef burger. MLA invited a 5-star hotel chef to be on the judging panel and to demonstrate how to prepare healthy, easy and delicious dishes using Australian beef. He encouraged the students to get into the kitchen to cook their own lunches.

400

Indonesian students invited to cook Aussie beef burgers

5 KOREA

Clean and safe advertising

MLA has collaborated with Chaesundang, the largest Shabu-Shabu franchise restaurant in Korea, to promote their use of clean and safe Australian beef at all of their 300 restaurants. Chaesundang ran a three-month advertising campaign that included television commercials which ran 150 times and advertisements in three major daily newspapers.

300

Korean restaurants promote Australian beef

6 SAUDI ARABIA

Hitting the road

Two roadshows were run in May to promote Australian beef and lamb to the Saudi Arabian market.

The MLA Australian Red Meat Roadshows showcased the beef and lamb production process, from paddock-to-plate, and highlighted Australia's halal integrity, as well as demonstrating the consistent quality attributes of the Australian product range. The roadshows included a butchery master class where MLA's chef Tarek Ibrahim demonstrated how to get the best beef and lamb cuts while minimising waste.

Saudi Arabia has been a long-term importer. In recent years, there has been a much greater uptake of more premium end products such as Wagyu beef and chilled vacuum sealed lamb.

7 AUSTRALIA

Information update

Around 50 representatives from the processing, retail, foodservice and wholesale sectors attended an industry information update night organised by MLA on the Gold Coast. The night included presentations on industry trends, MLA programs and activities and a session on the future direction of the MSA program. The retail and foodservice attendees gave support for the direction and implementation of MLA marketing programs. Two of the attendees are investigating the development of an MSA four star brand supply chain.

8 JAPAN

A Genghis Khan revival

MLA is working with the Hokkaido Genghis Khan Association and local wholesaler, retailer and foodservice companies and community groups to increase Genghis Khan consumption (grilled mutton and lamb on a convex metal skillet) and bring consumers back to lamb on the skillet. This follows consumers, in recent years, being attracted to other choices – more affordable proteins, different cuisine styles or less consumption of meat or seafood. A Genghis Khan campaign is being held with retailers from June to September. As part of the campaign consumers can purchase lamb labelled with a special Genghis Khan sticker and then register it for a chance to win prizes including lamb racks.

70%

of the lamb and mutton consumed on Hokkaido is estimated to be Australian

On the ground

Korea

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

Following tough trading conditions in Korea at the start of 2012, a number of factors are continuing to make trading conditions to Korea challenging.

These challenges include:

- The US received its second tariff reduction in January 2013, giving US beef a 5.6% tariff advantage over Australian product. This is on top of the high US $. The only factor that has seen Australia retain strong market share in the first quarter is the tight supply from the US due to its drought.
- The local Hanwoo cattle herd numbers remains high, despite increased processing significantly boosting Hanwoo product in the market. This has seen the price of Hanwoo products fall by 9%. The heavily marbled Hanwoo meat is usually sold at significant premiums and therefore doesn't generally compete directly with Australian beef. However, the price fall, coupled with significant discount and promotion activities, has reduced the price gap and made Hanwoo products more affordable.
- There are significant pork volumes in the market. Pig numbers have rebounded since an outbreak of foot and mouth disease in 2011, and tariffs on EU and US pork products have been reduced following completion of free trade agreements with those countries. This has seen price reductions in pork putting pressure on the beef sector.

Despite these factors, Australian beef has a strong retail presence in the Korean market. Many major Korean franchise restaurant chains use only Australian beef. MLA has focused on these loyal customers by supporting their promotional campaigns. In March, we jointly funded a beef burger promotion with Lotteria, Korea's largest hamburger chain (Lotteria has more than 1,000 stores, compared to McDonalds' 300). The promotion included promotional banners at the counters of all Lotteria stores stating that "the burger is made using only clean and safe Australian beef". These messages were also displayed on 5.5 million tray mats.

These promotions allow MLA to deliver key messages about the positive attributes of Australian beef by leveraging these restaurant chains' large advertising and promotional budgets.

Market observations

Lamb supply forecasts revised

Drier than expected weather has led to 5.5 million head of lambs being processed in the first quarter of 2013, half a million higher than MLA's original forecast.

Tim McRae
MLA Economist

The second quarter is also likely to be higher, especially in April and May, before supplies tighten noticeably going into winter.

Forward contracts for June/July delivery have been more than $5/kg cwt, compared to saleyard prices around $4/kg cwt in early May.

With reports of between 5% and 15% lower scanning rates in NSW and Victoria in the past couple of months compared with the same time last year, the spring flush of lambs later in 2013 is expected to be smaller than previously estimated. A tighter supply of lambs in summer 2013-14 is also expected compared with summer 2012-13.

Lamb supply for the remainder of 2013 and into 2014 is likely to be lower than originally forecast by MLA, at close to 2012 levels, suggesting around 5 million head slaughtered in third quarter and 5.3 to 5.4 million head in the last quarter.

Average lamb carcase weights will probably be lower, with a poor winter a likely prospect. This could lead to a drop in production from 110,000 and 115,000 tonnes in the last two quarters of 2012 to around 107,000 and 112,000 tonnes for the same periods this year. At these levels, lamb production would still be 7% (third quarter) and 4% (fourth quarter) above the five-year average.

If the season improves by spring, slaughter numbers are expected to be lower until early 2014, further limiting production in late 2013. Such an outlook will put some upward pressure on lamb prices throughout winter 2013 and beyond, especially if demand for Australian product in overseas markets is sustained.

While a return to the record price levels exceeding $6/kg cwt is not forecast, the higher than expected liquidation of stock throughout 2012-13 will constrain future supplies, and hopefully benefit producers in the medium term.

Of course, the head wind that continues to impede the industry is the high A$, which is expected to continue into 2014.

Tim McRae, MLA
T: 02 9463 9112
E: tmcrae@mla.com.au

Cattle seasonality

2013 defies long term trends

The past two years followed the usual slaughter and price trends in Australia's cattle market, but this year the picture has been different. Slaughter rates have tracked above average and prices have tracked below.

Cattle supply

Cattle slaughter patterns vary considerably in the eastern states. Queensland is typically more consistent, regardless of the season, due to a steady supply from feedlots, while NSW, Victoria, South Australia and Western Australia have more pronounced peaks and troughs, reflecting spring calving and autumn weaning. Queensland has spring and autumn supply flushes, but the trend remains much smoother.

Cattle slaughter across the eastern states this autumn has trended generally higher than the 10-year average, underpinned by the prolonged, widespread dry spell and exacerbated by a large national herd.

The previous two wet seasons in the north brought plentiful rain, and allowed for significant herd growth. However, the past year has been the exact opposite and slaughter rates have reflected the conditions.

Similarly, in the southern states, and in particular western Victoria, where it has been dry for more than 12 months, the prolonged dry spell has been reflected in cattle supply and prices.

In Queensland, since September 2012, when the first fears of a drier-than-normal wet season in the north emerged, cattle slaughter rose above the 10-year average (Figure 1). As the fears were realised, slaughter numbers remained above average through summer and autumn.

While male cattle slaughter was high, driving the increase was a significant rise in female cattle slaughter, with consistent weekly averages exceeding 34,000 head – and hitting the highest weekly female kills since May 1998 (MLA's NLRS weekly slaughter collection).

A large proportion of the cattle produced in northern NSW are most likely slaughtered in Queensland, however, NSW has also recorded slaughter increases (Figure 2) for the year-to-date. The usual autumn increase started one month earlier than usual.

In Victoria and SA, while cattle slaughter for most of 2012 was significantly lower than the 10-year average (with the same peaks and troughs as NSW), from March onwards, numbers began to creep above the long-term trend.

Slaughter in the west, tracked well below the 10-year average during 2012, which is more the result of fewer cattle in the region, particularly in the south, than improved seasonal conditions (Figure 3). Slaughter so far in 2013 has been above that of 2012, partly due to the restrictions on live cattle exports in the north, causing more cattle destined for slaughter, as well as the continued run of dry weather.

Seasonally, slaughter tends to decline over the winter months, although the rate at which it declines this year will largely be

Figure 1 Queensland slaughter

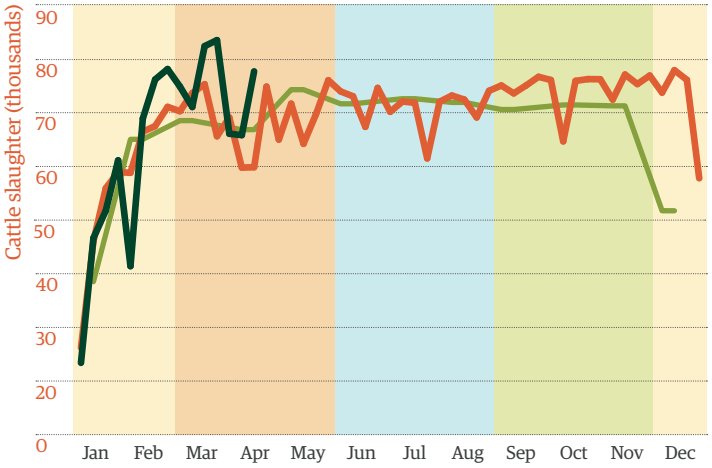


Figure 2 NSW slaughter

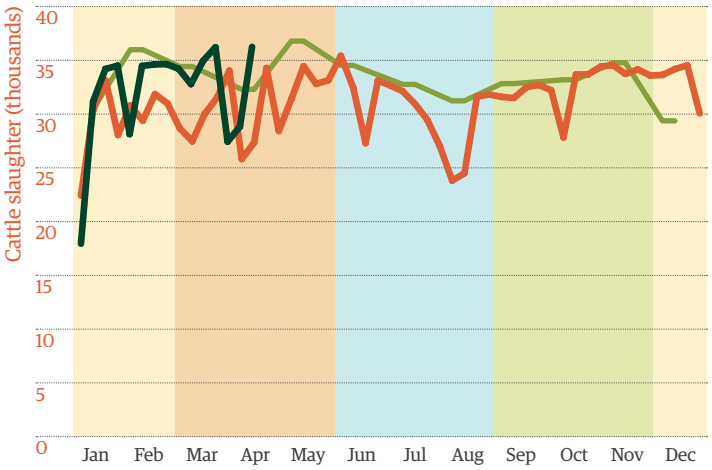


Figure 3 Western Australian slaughter

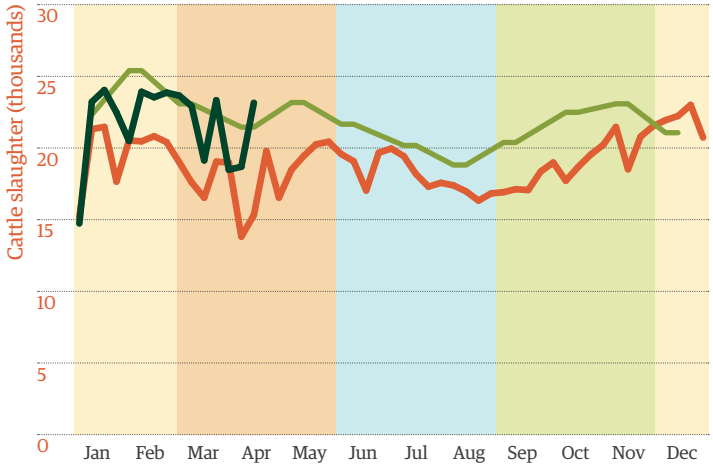
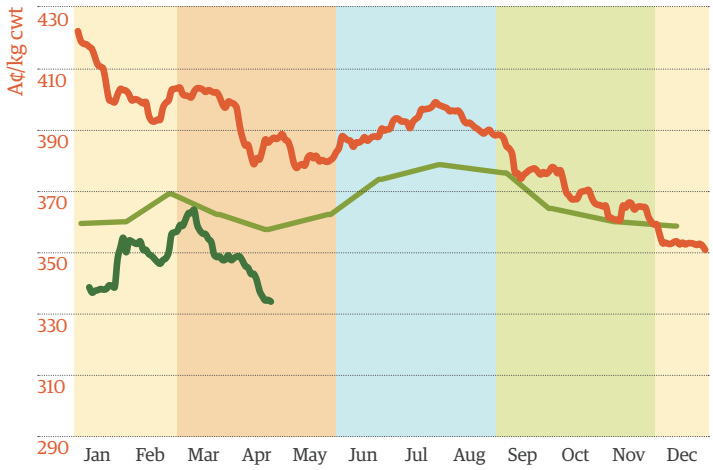


Figure 4 EYCI



2012 2013 Ten-year average Summer Autumn Winter Spring

influenced by the effectiveness of any winter rain in the north, and the extent of a break in the south.

If dry conditions persist in the north and producers cull numbers, the higher throughputs are expected to be sustained.

A good indication of the capacity for future herd rebuilding, or liquidation, will be female slaughter through winter, when female throughput traditionally declines.

Prices

The Eastern Young Cattle Indicator (EYCI) generally tracks the inverse of slaughter, declining with the autumn and spring cattle flush, and then improving as supply shortens over the winter months.

Prices are also affected by rainfall and feed conditions, sheep and grain prices and other external variables. Despite these factors, seasonal calving and weaning, and slaughter, clearly have a heavy influence on prices.

For the past two years, cattle prices have sat above the long-term trend, however, this year prices over the summer and autumn slowly drifted south, as northern conditions deteriorated, and feedlots and processors became fully booked – up to six weeks in advance in some cases (Figure 4).

Cattle prices have felt the pressure of increased numbers and reduced demand, with the EYCI falling to the lowest levels for a number of years. Prices in WA have also felt the pinch and are considerably lower than the strong prices received in mid 2012.

On the bright side

While slaughter has been surging, encouragingly exports have been tracking at a record pace for the year, with preliminary forecasts for the 2013 volumes to exceed the 963,000 tonnes swt record set in 2012.

Continued strong demand in China, the Middle East and other developing markets has offset subdued demand from Korea and Japan, although these markets are still large outlets for Australian beef.

Ben Thomas, Beef Market Analyst, MLA
E: bthomas@mla.com.au

MLA's *fridayfeedback* e-news provides the latest data on cattle supply and price trends. To subscribe T: 1800 675 717 or E: publications@mla.com.au

The Australian beef industry projections also highlight these and other trends and provide an overall assessment of the health of the cattle industry in 2013 and beyond. See **www.mla.com.au/industryprojections**

The Beyond the gate Sydney group at Murray Valley Meat Co.

Sydney supply chains

MLA's Beyond the gate Sydney tour on 16 April gave 42 producers a better understanding of the beef and lamb supply chain. Producers from NSW and South Australia visited wholesalers, Murray Valley Meat Co and Andrews Meats, and indulged in a degustation lunch at ANZ Stadium and dinner at the Chophouse.

More information: Megan Davies, MLA
T: 02 9463 9383
E: mdavies@mla.com.au
www.mla.com.au/events

MSA Development Officer Deme Lollback examines carcases at Murray Valley Meat Co.

BusinessEDGE workshop

On 7-8 March, 20 people attended a BusinessEDGE workshop at Hughenden, in northern Queensland. BusinessEDGE is a two-day financial and business management training workshop for northern beef producers to enhance producer knowledge and skills in basic financial and business management to improve beef business efficiency and profitability. Producers learnt basic accounting principles, business performance and benchmarks, business risk, capital allocation, business analysis and business finance.

More information: Liz Allen, MLA
T: 07 3620 5237
E: lallen@mla.com.au
www.mla.com.au/edgenetwork

Ian McLean, Bush Agribusiness, speaking at BusinessEDGE.

Upcoming events

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

Innovation workshops – Pacific Beef Expo

Take part in MLA's Innovation workshops to pick up new ideas and skills to help build a better beef business. The one hour workshops will focus on the key profit drivers in your beef business and deliver practical information and tools that can make a difference to your bottom line.

When and where:
20-22 June, Casino NSW

Bookings: www.mla.com.au/pacificbeefworkshops or 1800 675 717 (option 4)

Planning for success

This workshop is designed to enable sheep producers to review their business, undertake a SWOT analysis, develop achievable goals, strategies and actions, and develop a monitoring program. The process will also allow producers to identify areas where they can create joint projects to maximise efficiency and pool resources.

When and where:
Session 1: 18 June, Carrieton SA
Session 2: 10 September, Carrieton SA

Bookings: 08 8841 4500
www.makingmorefromsheep.com.au/events.htm

Graham Centre sheep field day

This field day provides an opportunity for producers to hear the latest news and research in sheep management and production, and network with researchers and industry experts.

When and where:
28 June, Wagga Wagga NSW
9 August, Wagga Wagga NSW

Bookings: 02 6938 1806
tnugent@csu.edu.au

More information:
www.mla.com.au/events
www.csu.edu.au/research/grahamcentre/field-day/sheep.htm

Influential Women's workshop

On 30 April, women came from all over Northern Territory to attend the Influential Women's forum. The forum, sponsored by MLA's Target 100 program, aims to create conversations that connect urban and rural Australia by building women's confidence and capacity. The event's message was: "It is so important to maintain our social licence in agriculture and to do this, we need to invite people in on our daily lives, what we do and why we do things". The next event is on 27-28 June at Carnarvon, WA.

Sally Towne from Helen Springs station (second from left) presenting at the workshop.

More information:
Catherine Marriott
T: 0400 129 279 // E: Catherine@influentialwomen.com.au
Bookings:
www.influentialwomen.com.au

WA BeefUp forums

BeefUp forums were held at Paraburdoo and Gascoyne Junction in northern Western Australia on 9 and 11 April. The 59 attendees heard presentations on business management, feeding phosphorous, weaner management, Producer Demonstration Sites and lifting the performance of breeding herds. MLA's Manager Livestock Services - Asia Pacific Allister Lugsdin gave an update on live exports and Western Australia Beef Council member Steve Meerwald spoke on what's happening in the marketplace.

Allister Lugsdin updating producers on the live export industry.

More information: Liz Allen, MLA
T: 07 3620 5237 // E: lallen@mla.com.au
www.mla.com.au/beefup

John Feehan, the 'dung beetle expert', was one of the presenters.

Reef Rescue Grazing Forum

The Reef Rescue Grazing Forum, held at Mackay on 13 March, brought together producers, scientists and industry representatives to share ideas and discuss the best ways to improve pastures and increase profits from sustainable grazing. The forum, sponsored by the Federal Government's Reef Rescue program and MLA, covered topics including cattle nutrition, dung beetles, wild dog control, fire for pasture improvement, giant rats tail grass control, native forestry and carbon management. Feedback was positive; Rod McFadzen, a producer from Sarina, reported that the event was a "great opportunity to discuss coastal grazing issues".

More information: Michael Boyd, Reef Catchments // T: 07 4968 4213
www.reefcatchments.com.au
Dung beetle expert: www.dungbeetleexpert.com.au

AgForce state conference 2013

This conference is your chance to hear speakers relevant to your business, to talk to AgForce staff and to meet other primary producers from across the state. The conference is also the place to communicate the issues and concerns which need to be addressed by industry.

When and where:
17-19 September, Townsville Qld

Bookings:
www.agforceqld.org.au

BEST WOOL/BEST LAMB Annual Conference

This annual conference enables networking, facilitates information exchange and supports producers to implement improvements in key aspects of their businesses.

When and where:
25-26 June, Bendigo Vic

Bookings: Cathy Mulligan
03 5258 0229
cathy.mulligan@dpi.vic.gov.au

More information:
www.mla.com.au/events
www.dpi.vic.gov.au/agriculture/beef-and-sheep/sheep/bestwoolbestlamb

Tasmanian Farmers and Graziers Association

The theme of the 2013 policy forum is 'Building Trust' and will address the reality of farming, food and fibre production in Tasmania; and look at how to better engage with the broader community to reinforce the message.

When and where:
11 July, Launceston Tas

Bookings: 03 6332 1800
nardia@tfga.com.au

More information:
www.tfga.com.au/in-the-news/events

BeefUp forums

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

When and where:
28 August, Adelaide River NT
30 August, Mataranka Station NT

Bookings: 1800 675 717
www.mla.com.au/events

Want to beef up your business?

Take part in one of MLA's daily Innovation workshops for new ideas and skills to help build a better beef business

Innovation workshops

Focusing on the key profit drivers in your beef business, MLA's series of one hour Innovation workshops will deliver practical information and tools that can make a difference to your bottom line.

10am–11am
Does MSA make the grade?
Terry Farrell, Livestock Supply Chain Coordinator, MSA
Jake Phillips, Trade Development Officer, MSA

MSA is making its mark at retail – learn what makes MSA beef different and how you can tap into MSA premiums. You will also get the opportunity to put the MSA science to the test by taking part in some consumer testing for yourself.

12pm–1pm
Make better beef business decisions
Bill Hoffman, Hoffman Consulting

Test the health of your beef business by benchmarking it against other enterprises. You'll also hear about the latest financial and business management tools to improve business efficiency and assist with investment decision making.

2pm–3pm
Producing cattle for the EU market
Ben Larkin, EU Market Specialist, MLA

Australian beef producers have the opportunity to supply cattle for the European Union market, provided they meet the market's requirements around traceability and HGP-free status. Hear from a panel of experts on how you can meet these specs.

MLA staff will be available for discussions throughout the Pacific Beef Expo.

When:
Thursday 20, Friday 21 and Saturday 22 June 2013

Where:
Pavilion 1
Primex Field Days, Bruxner Highway, Casino

Cost:
FREE

Register:
www.mla.com.au/pacificbeefworkshops or 1800 675 717 (option 4)

Register by Monday 17 June to receive FREE ENTRY into the Primex Field Days

mla
MEAT & LIVESTOCK AUSTRALIA