



2017-18

MEAT STANDARDS AUSTRALIA
ANNUAL OUTCOMES REPORT

Delivering consumer confidence in eating quality

Contents

Overview	3
Program manager's report	4
MSA beef	5
MSA beef carcass compliance	6
MSA Index	7
MSA sheepmeat	8
Supply chain impact – education	10
Supply chain impact – producers	11
Supply chain impact – end users	12
Research and development & program integrity	13
MSA's top producers	15

Contact

Meat Standards Australia
PO Box 2363
Fortitude Valley, Queensland 4006

T: 1800 111 672
W: www.mla.com.au/msa
E: msaenquiries@mla.com.au

Published by Meat & Livestock Australia Limited

ABN 39 081 678 364

©Meat & Livestock Australia, 2018

This publication is published by Meat and Livestock Australia Limited ABN 39 081 678 364 (MLA). Care is taken to ensure the accuracy of information in the publication; however, MLA cannot accept responsibility for the accuracy or completeness of the information or opinions contained in the publication.

Readers should make their own enquiries in making decisions concerning their interests.

Overview

More than 3.1 million cattle and 6.1 million sheep were processed through Meat Standards Australia (MSA) pathways in 2017-18. Over that same period it's estimated the program delivered an additional \$152 million in farm gate returns for beef producers.

The cattle and sheep presented for MSA grading represented 43% and 26% of the national adult cattle and national lamb slaughter respectively.

94.3% of cattle presented for grading met MSA minimum requirements and the average MSA Index was 57.78.

More than 5,000 cattle and/or sheep producers became registered to supply livestock through the MSA program, and the average price differential for MSA young cattle (excluding accredited grainfed cattle) across all weight ranges was \$0.21/kg, and \$0.13/kg for cattle that met grainfed accreditation standards.





Sarah Strachan, MSA Program Manager

Program Manager's report

The MSA program has had another successful year delivering commercial outcomes along the supply chain. Now representing 43% of the national adult cattle slaughter and 26% of the national lamb slaughter, it is estimated that the MSA program delivered \$152 million in additional farm gate returns to beef producers.

MSA is a quality mark and independent endorsement used by industry to underpin the eating quality of Australian beef and lamb brands. In 2017-18, 16 new brands became MSA licensed, showing their commitment to underpinning their product with MSA science and protocols. There are now 172 MSA licensed brands. Twelve brands are now actively communicating MSA in international markets with their sublicensed supply chains.

MSA beef producers continue to embrace carcass feedback with a 32% increase in the number of producers accessing reports and benchmarking tools via myMSA in 2017-18. Their embrace of carcass feedback is reflected in outstanding compliance to MSA minimum requirements at 94.3% across all feed types, nationally. And the average MSA Index for compliant carcasses was 57.78.

Almost 3,000 producers received MSA education through more than 81 workshops or information sessions over the past 12 months, including the national MSA Excellence in Eating Quality Awards series. More than 500 producers attended six forums across Queensland, New South Wales, Victoria, Tasmania, South Australia and Western Australia, which aimed to raise awareness of MSA best management practice by recognising those producers in each state who

consistently deliver superior eating quality beef for the benefit of consumers and the profitability of the industry.

In May, Meat & Livestock Australia (MLA) attended Beef Australia 2018 in Rockhampton where the MSA team met with producers to discuss advancements in objective carcass measurement technologies, provide assistance with carcass feedback, run workshops in conjunction with processors, and delivered five eating quality demonstrations in the inaugural Butcher's Kitchen.

Research and development remains a focus for the MSA program to meet the 2020 goal of accurately describing fitness for purpose for all cuts from all cattle types. In 2017-18, this included a project focussing on testing new cuts and cooking methods, involving more than 900 consumers in sensory testing for 67 muscles.

Recognising 20 years of MSA

2018 marks the 20th anniversary of the MSA program. In that time 43,000 MSA registered producers supplied 26.5 million cattle for MSA grading, and 27,000 MSA registered sheep producers supplied 37.2 million sheep processed via the MSA pathways. The program has also conducted consumer sensory testing with more than 114,000 consumers on 800,000 samples of meat in 11 countries. I'd like to take this opportunity to thank past and present MSA staff, dedicated researchers and industry supporters of the program.



MLA General Manager - Producer Consultation & Adoption, Michael Crowley presents at the MSA Beef Industry Breakfast.



MSA End User Training Facilitator, Kelly Payne demonstrates eating quality principles at Beef Australia 2018.



MSA Business Development Officer, Jarrod Lees presents at the Queensland Excellence in Eating Awards 'What Makes the Perfect MSA Index' Forum in Gympie.

MSA beef

More than 3.1 million cattle were MSA graded through 41 Australian beef processors, representing 43% of the national adult cattle slaughter in 2017-18, which is an increase of 3% on the previous financial year.

By volume, Queensland continues to process the greatest number of MSA graded cattle with 1.3 million head, while New South Wales had the greatest proportion of the state slaughter with 62% MSA graded.

An additional 3,780 beef producers became MSA registered in 2017-18. MSA registered beef producers represent 25% of Livestock Production Assurance accredited cattle properties, and during 2017-18, 11,522 beef producers consigned cattle to MSA.



FIGURE 1: NATIONAL MSA BEEF GRADING NUMBERS

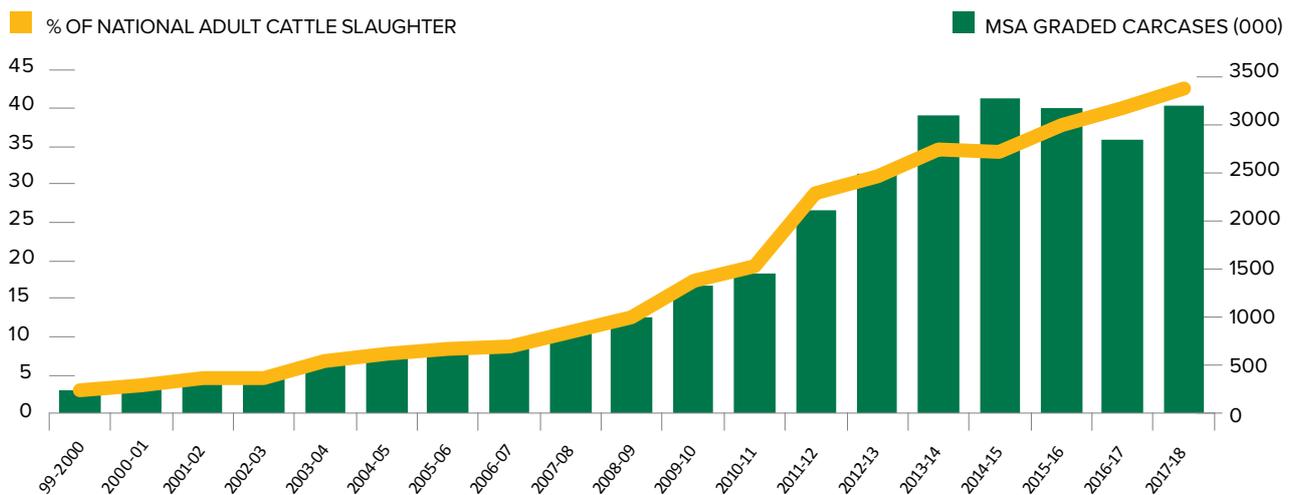
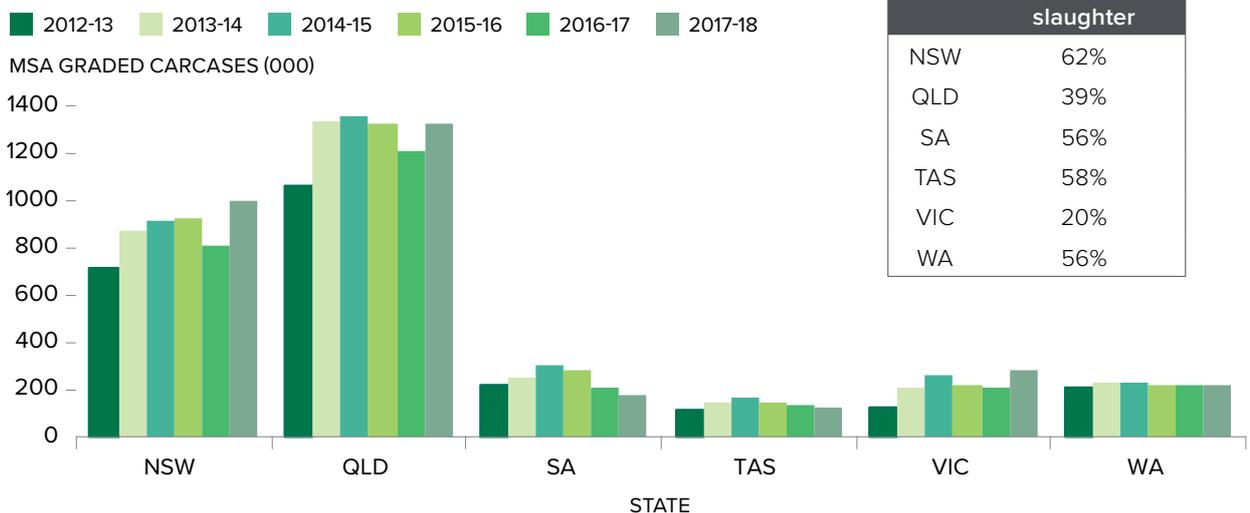


FIGURE 2: MSA GRADED CARCASSES



MSA beef carcass compliance

In 2017-18 compliance to MSA minimum requirements was maintained at 94.3%, nationally.

- > Grassfed cattle represented 57% of MSA-graded cattle, with compliance lifting from 90.8% in 2016-17 to 91.3% in 2017-18.
- > Grainfed carcasses represented 43% of MSA-graded cattle, with compliance lifting from 97.7% to 98.2%.

Compliance rates vary according to seasonal conditions in regions around the country. May 2018 experienced the greatest total non-compliance for the financial year at 7.7%.

Of the carcasses graded against MSA minimum requirements:

- > 5.1% had pH levels exceeding 5.71
- > 1.02% had less than 3mm rib fat.

In 2017-18, 2% of MSA compliant carcasses did not meet company specifications.



FIGURE 3: REASON FOR NON-COMPLIANCE 2017-18

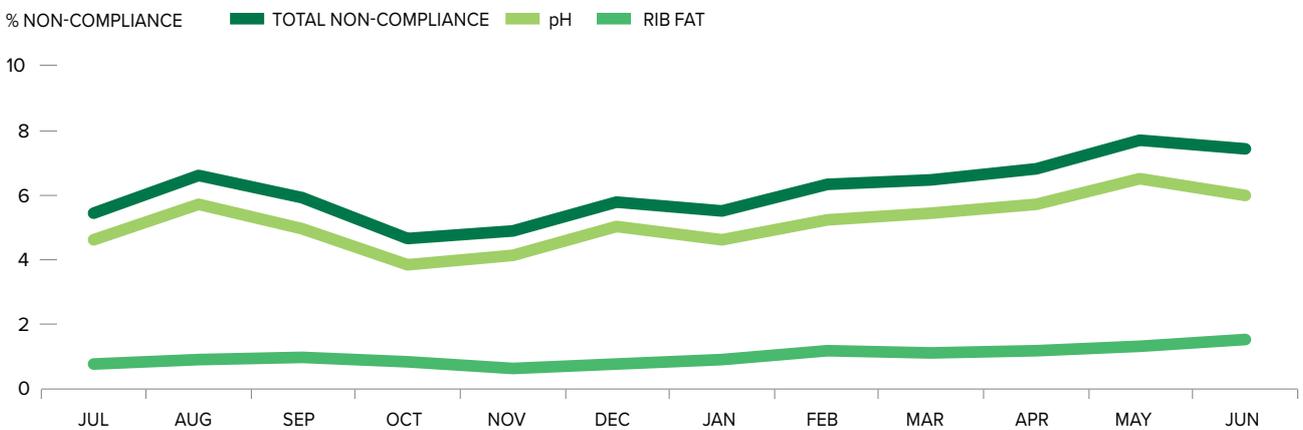
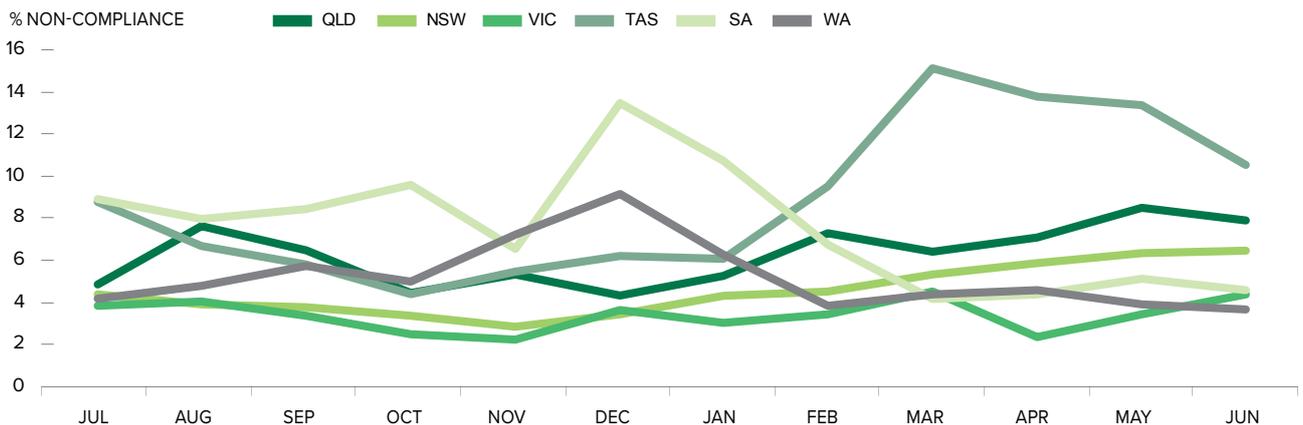


FIGURE 4: NON-COMPLIANCE BY STATE 2017-18



MSA Index

In 2017-18 the average MSA Index for MSA compliant carcasses in Australia was 57.78, an increase of 0.19 from the previous financial year.

The average MSA Index for grassfed and grainfed cattle was 58.35 and 57.08 respectively.

Figure 5 illustrates the change in the MSA Index over time. Since 2010-11 the average MSA Index has increased by 1.03 points.

myMSA

The online feedback tool, myMSA provides producers with easy access to feedback reports, including MSA Index performance, customised reports and benchmarking.

4,573 producers utilised the myMSA feedback system 17,163 times, which is an increase of 32% on the previous year.

MSA Index 2017-18 percentile bands

How do I use percentile bands?

If your average MSA Index results were equivalent to or higher than the figure shown in the Top 25% percentile band (Table 1), then your cattle fall into the top 25% of eating quality results for MSA-graded cattle for that group – nationally, grassfed or grainfed².

- > Grainfed cattle are defined as those that meet the AUS-MEAT requirements to be classified as grainfed. MSA-graded cattle that do not meet this requirement are classified as grassfed.

You can predict your MSA Index scores or calculate the impact of changing carcass attributes with the MSA Index calculator www.mymssa.com.au/msamobile

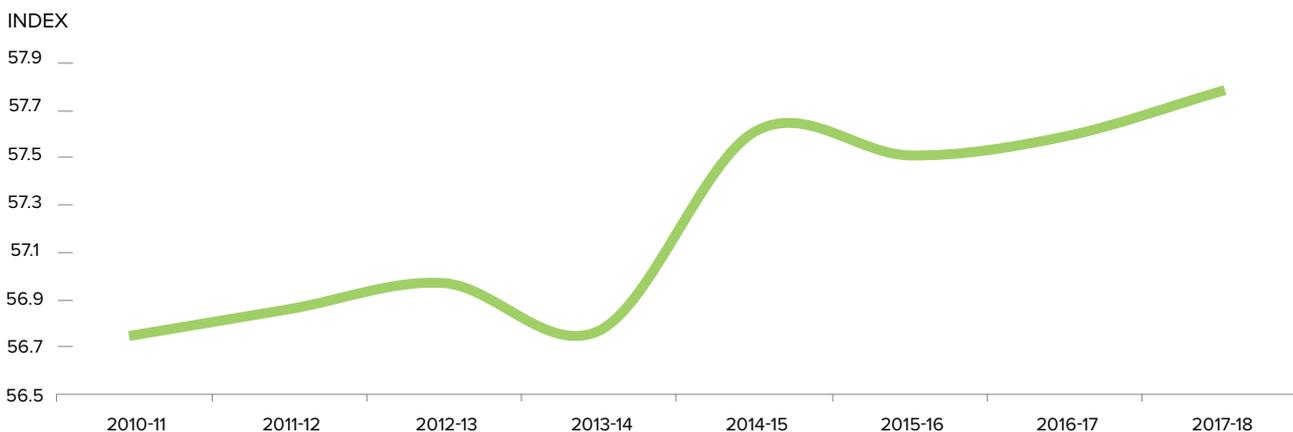
TABLE 1: PERCENTILE BANDS

Percentile band	Avg National Index	Grass Index	Grain Index
Top 1 %	66.78	66.02	67.29
Top 5%	64.09	63.61	64.74
Top 10%	62.79	62.58	63.17
Top 25%	60.74	60.94	60.20
Middle 50%	57.78	58.35	57.08
Bottom 25%	55.26	56.10	54.43
Bottom 10%	52.34	53.48	50.81
Bottom 5%	49.80	51.56	48.74
Bottom 1%	46.61	47.03	46.38

TABLE 2: THE EFFECT OF CARCASS ATTRIBUTES ON THE MSA INDEX

Carcass input	Relative importance of these traits in changing the MSA Index
HGP status	Very high
Milk-fed vealer	Very high
Saleyard	Very high
MSA marbling	High
Hump height (for cattle with greater than 0% Tropical Breed Content)	High
Tropical Breed Content (TBC)	High
Ossification score	High
Rib fat	Medium
Hot Standard Carcass Weight (HSCW)	Low
Sex	Low

FIGURE 5: MSA INDEX OVER TIME



MSA sheepmeat

In 2017-18 more than 6.1 million sheep were processed through 19 MSA-licensed processing facilities, representing 26% of the national lamb slaughter.

74% of compliant lambs processed through MSA pathways were subsequently trademarked to support MSA lamb brands, which is an increase of 3% on 2016-17. 95.2% of all lambs met the MSA minimum requirements.

By volume Victoria processed the greatest number of MSA lambs at 2.6 million head, while South Australia had the greatest proportion of the state lamb slaughter following MSA pathways at 55%.

More than 3,500 producers became accredited to supply sheep through MSA pathways in 2017-18, bringing the total number of sheep producers eligible to consign animals to the MSA program to 29,200, representing 33% of LPA accredited sheep properties.

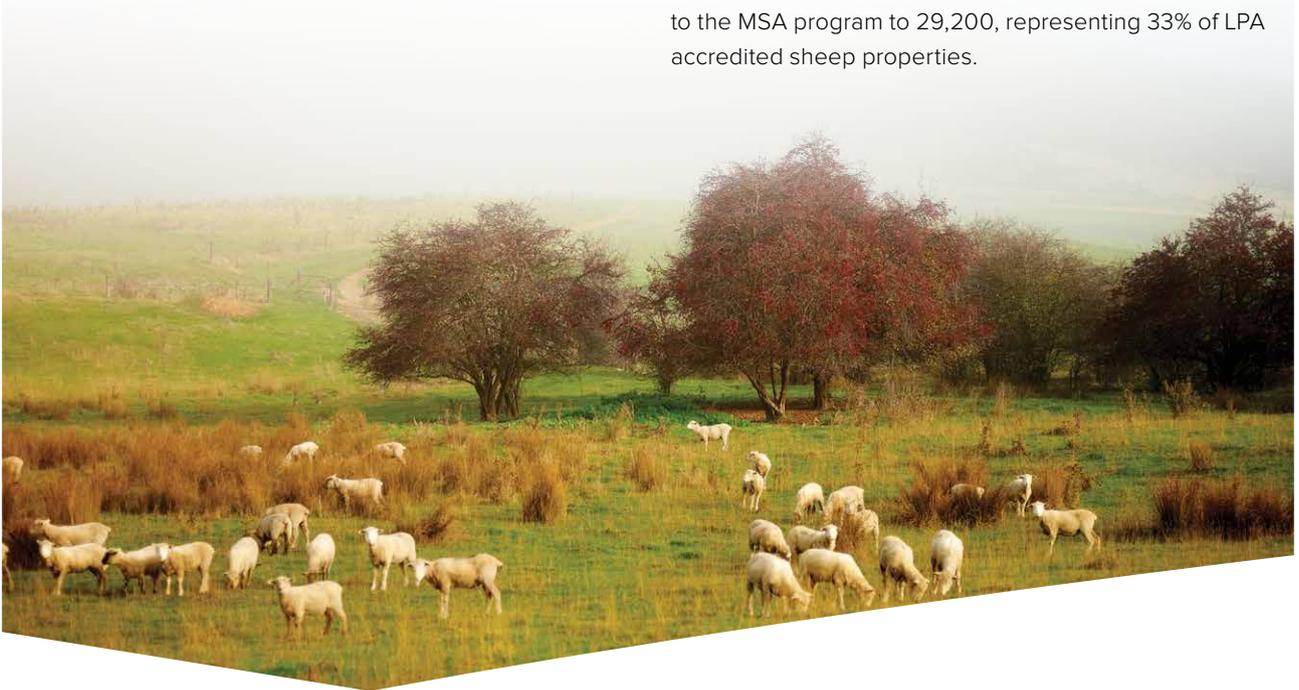


FIGURE 6: NATIONAL MSA SHEEPMEAT NUMBERS

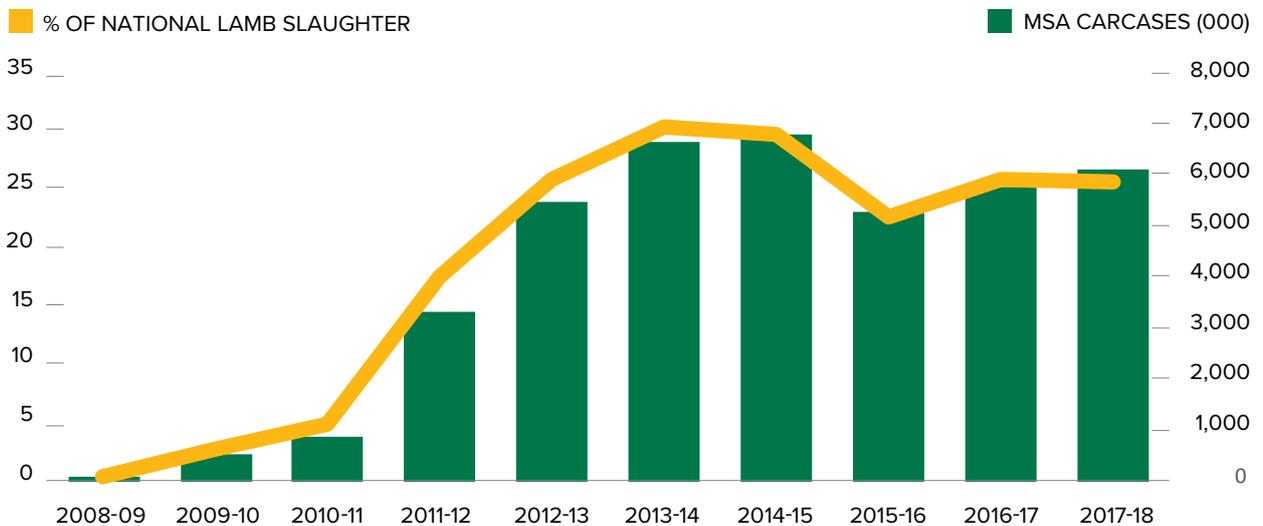


FIGURE 7: MSA TRADEMARKED LAMBS

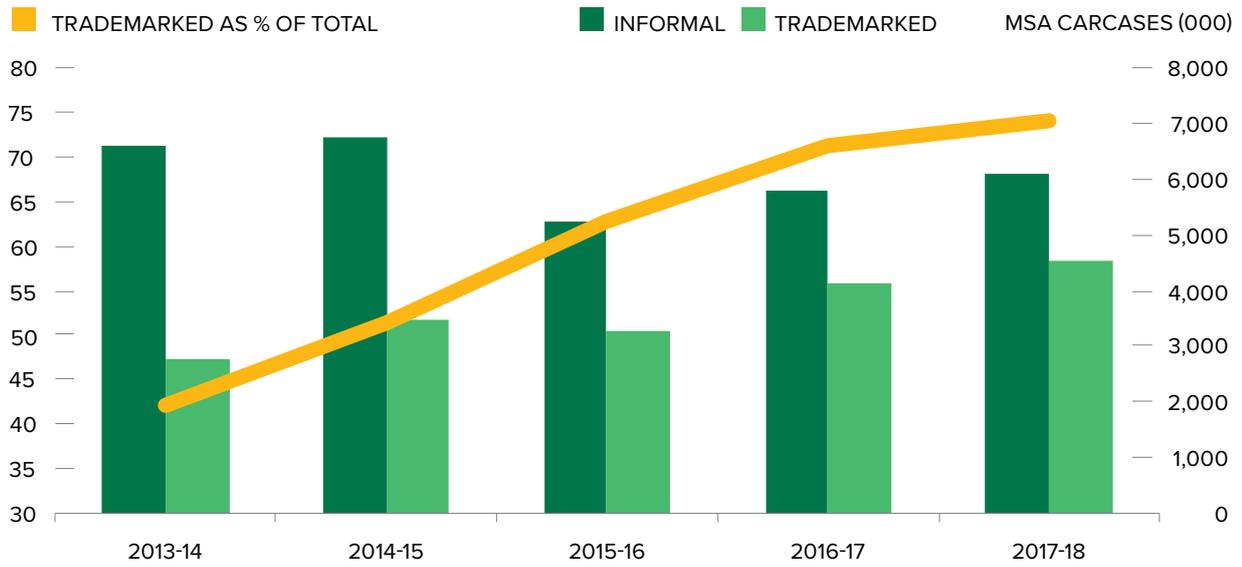
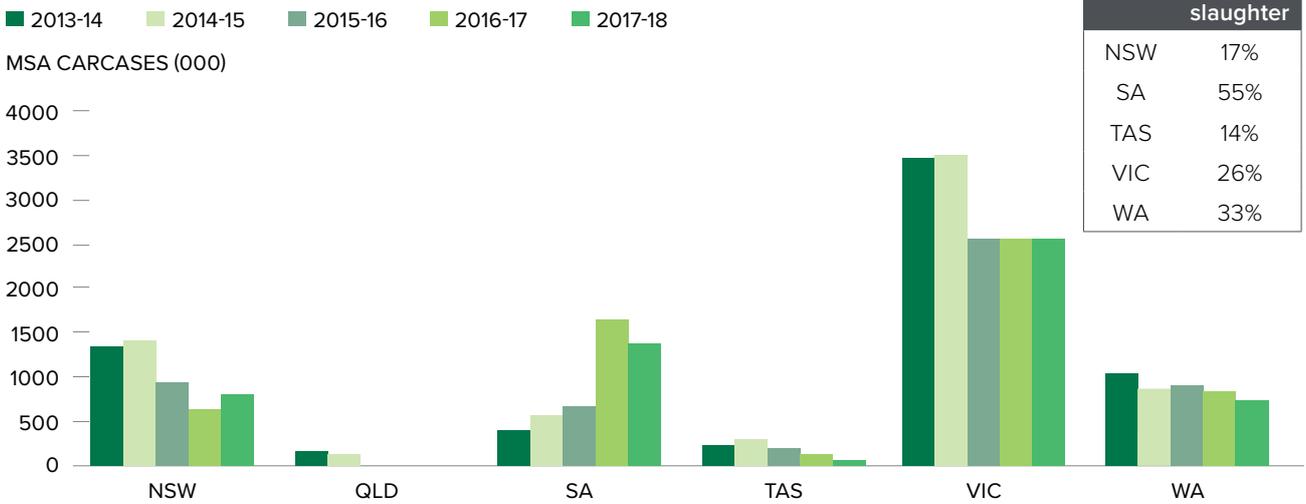


FIGURE 8: MSA SHEEPMEAT NUMBERS BY STATE



Supply chain impact – education



More than 5,000 cattle and/or sheep producers became registered to supply livestock through the MSA program in 2017-18, of which, 84% registered online. This year, 9.5% more producers became

MSA registered than in 2016-17.

2,928 beef and/or sheepmeat producers received face-to-face MSA education through more than 81 workshops or information sessions and 4,420 people undertook training via the MSA producer and end user e-learning portals.

491 end users (wholesalers, retailers and foodservice operators) participated in MSA training, with 43% of this training conducted online.

236 operatives across 54 processors completed MSA training in the impact of processing on beef or sheepmeat eating quality.

29 new MSA graders were trained and accredited in 2017-18 and 31 supply-chain participants engaged in the week-long MSA meat science course.

Refresh your knowledge of MSA using our online learning tools at www.mla.com.au/msa.

Supply chain impact – producers

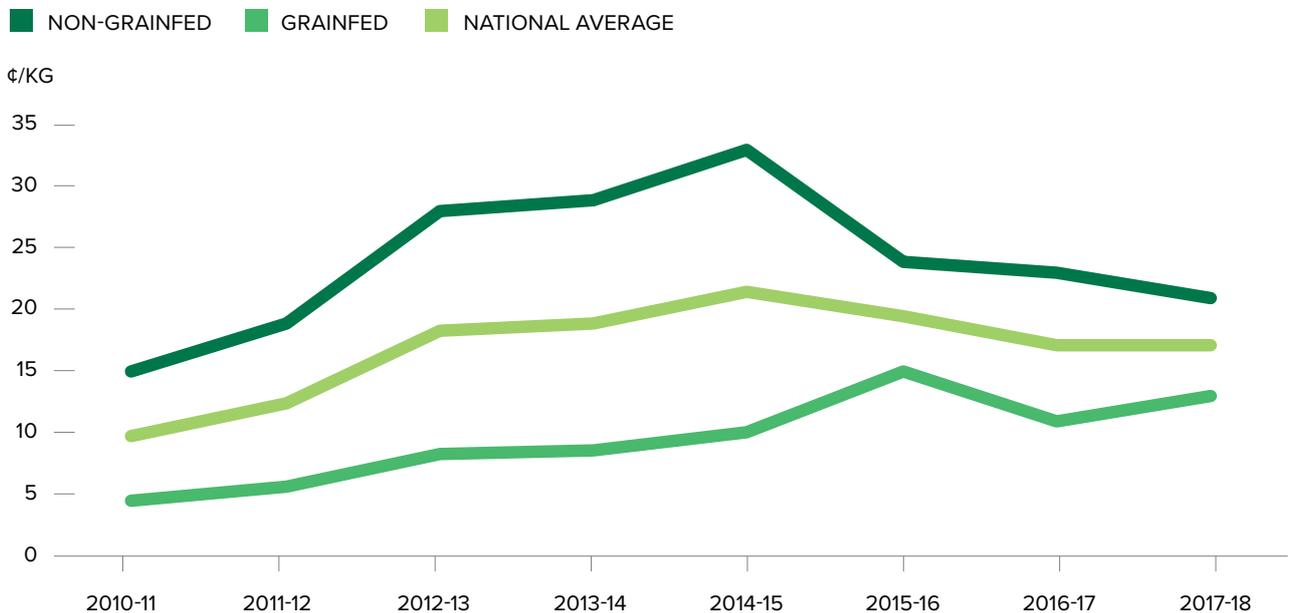


The National Livestock Reporting Service (NLRS) reported over-the-hooks cattle price indicators for MSA cattle as higher on average than non-MSA cattle in 2017-18.

The average price differential for MSA young cattle (excluding accredited grainfed cattle) across all weight ranges was \$0.21/kg, and \$0.13/kg for cattle that met grainfed accreditation standards.

Based on the average carcass weight of MSA cattle in 2017-18, MSA beef producers potentially received an additional \$60 per head for young, non-feedlot cattle and \$42 per head for cattle that met grainfed specifications.

FIGURE 9: OVER-THE-HOOKS PRICE DIFFERENTIALS – YOUNG CATTLE



Supply chain impact – end users

Brands

MSA is a quality mark and independent endorsement used to underpin the eating quality of Australian beef and lamb brands. In 2017-18, 16 new brands became licensed to use the MSA trademark taking the total to 172. Twelve brands are also now utilising exporter guidelines to communicate MSA in international markets.

End users

As of June 30 2018, there were more than 1,377 licensed end users representing 3,681 outlets (including wholesalers, retailers, supermarkets and foodservice businesses) to promote and sell MSA products.

Retail

600 independent butcher surveys were conducted in 2017-18 by Kantar Millward Brown, of the butchers surveyed 58% sold MSA beef. Of those selling MSA beef, 71% rated their satisfaction with MSA beef as 'good to excellent' and 70% of surveyed butchers were aware of MSA lamb.

The average price differential for MSA beef compared to equivalent non-MSA cuts at independent butcher stores was \$0.80/kg.

MSA cube rolls averaged the highest price differential at \$2.17/kg followed by tenderloins at \$1.84/kg.

The average price differential for MSA lamb compared to the equivalent non-MSA cuts was \$0.83/kg with lamb cutlets averaging the highest price differential at \$1.90/kg.

FIGURE 10: AVERAGE RETAIL PRICE DIFFERENTIALS BY CUT 2017-18 – MSA BEEF

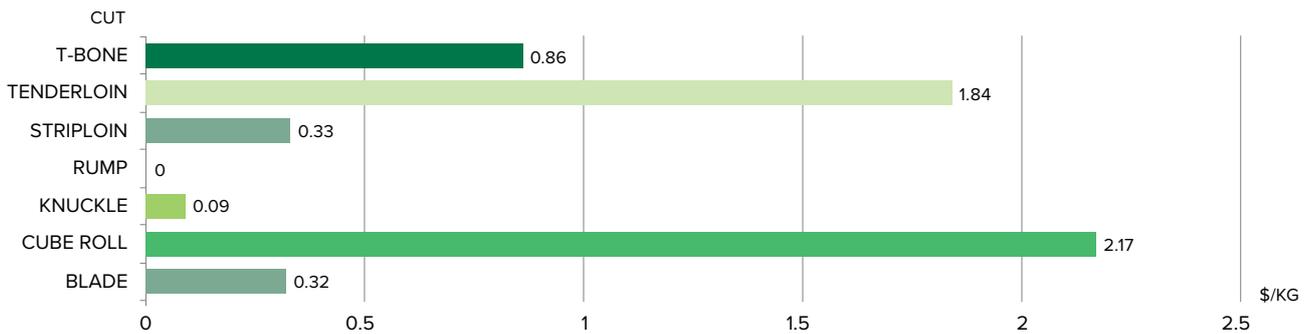


FIGURE 11: AVERAGE RETAIL PRICE DIFFERENTIALS BY CUT 2017-18 – MSA LAMB

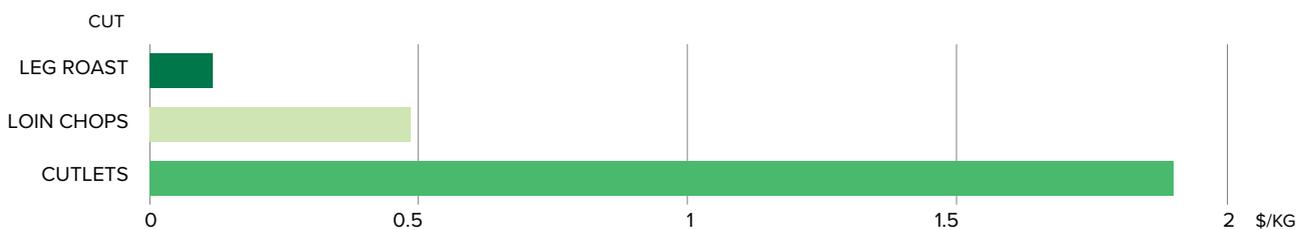
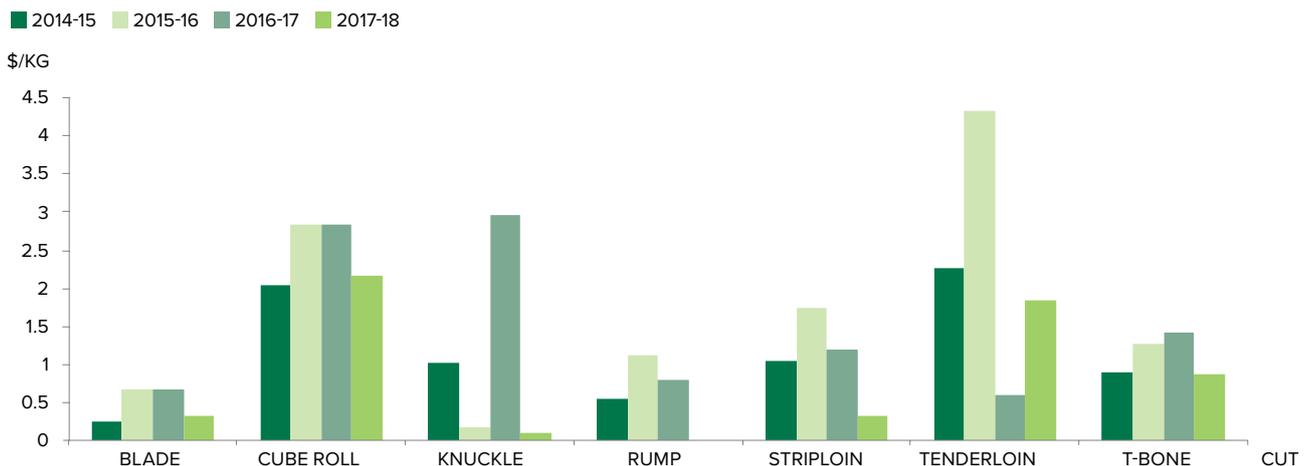


FIGURE 12: AVERAGE MSA BEEF RETAIL PRICE DIFFERENTIALS OVER TIME



Research and development

In line with the MSA 2020 program goals, MSA completed and initiated a large program of work based on research priorities, which were identified and endorsed by the MSA Taskforce and Pathways Committees for both beef and sheepmeat.

In 2017-18 enhancements to the MSA program were endorsed, including updates to the MSA Model. Research was also completed to determine the difference between grain and grassfed and ageing periods of lamb with American consumers.

Sensory testing, of more than 9,000 consumers for 67 muscles across seven cook methods, was completed in this financial year with results embedded in the development of the updated MSA Model. This builds on research that commenced in 2016-17 on new cuts and cooking methods, as well as collecting more data for existing cuts in the MSA model.

This research enables the expansion of the MSA Model from 169 to 311 cut-x-cook combinations. New cook methods reflective of commercial uses of MSA product included sous vide and combi roasting as well as testing bone-in versus boneless primals.

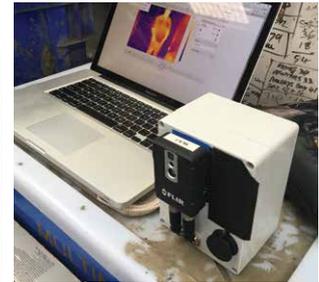
The research aims to better utilise the whole carcass. For example, from the chuck primal, 11 muscles have been tested across bone-in and boneless cooking methods to identify new opportunities for value adding.

New research to commence in 2018-19 includes:

- > Determining the impact on eating quality of long distance rail versus road transport for cattle destined for processing.
- > Estimation of the age/maturity of beef and sheep in the live animal using visible-near-infrared spectroscopy.
- > The effects of lamb turn-off on eating quality for new versus old season lambs.
- > Additional Australian and international consumer research into low and slow cooked brisket and rib cuts to further value-add secondary cuts in the body.
- > Further validation of on farm camera technologies (examples include the FLIR camera) to predict stress and impacts on eating quality.
- > Evaluating the feasibility of an MSA veal pathway with particular reference to eating quality.



The FLIR camera mounted above the on farm cattle race.



The FLIR camera uses infra-red technology and radio frequency to measure the temperature, respiration and heart rate of cattle.

Program integrity



During 2017-18 more than 850 audits were conducted on MSA licensees from saleyards and processors through to retailers, wholesalers, supermarkets and foodservice outlets. A risk-based approach has been implemented for end user auditing.

3% of end user outlets audited received corrective action requests (CARs).

TABLE 3: AUDITS CONDUCTED IN 2017-18

Audits	
Processor	95
Saleyard	34
End User Audits	
Wholesaler	233
Supermarket	143
Retailer	207
Foodservice	141

The attention to integrity was recognised with MSA achieving certification for ISO 9001:2015 Standards and successfully maintaining approval as a USDA Process Verified Program.

Australian beef language enhancements

In October 2017, the AUS-MEAT Beef Language was enhanced to include a new cipher to describe beef that meets MSA requirements.

The *EQG* cipher, which is now available for use, allows product to be packed according to its predicted eating quality, bypassing dentition restrictions.

What is the *EQG* cipher?

Eating Quality Graded, *EQG* is a new, cipher in the Australian Beef Language to describe MSA product when trading Australian beef and can be used to replace the need to use an AUS-MEAT alternative category cipher.

It describes beef that has met the stringent requirements of the MSA program and been packed according to its predicted eating quality outcome for consumers.

Traditionally, Australian beef has been described by the dentition (number of teeth) of an animal, which MSA research has shown is not an accurate predictor of eating quality.

The MSA grading system will continue to be the independent quality system underpinning the eating quality claims of Australian beef brands.

What is the benefit?

Packing product under the *EQG* cipher:

- Reduces complexity for beef processors and customers.
- Allows product to be sold on the basis of its true eating quality.
- Captures more value from product, bypassing the restrictions of dentition-based categories and directly describing consumer outcomes.



Setting the benchmark

The 2017 Australian Beef Eating Quality Insights (ABEQI) report revealed that the national average MSA Index reached 57.56 in 2015-17, 0.84 points ahead of 2010-11.

The report aims to help beef producers optimise the eating quality of cattle by demonstrating the impact production factors have on the MSA average.

MSA Program Manager Sarah Strachan said the report highlighted the traits of carcasses in the top 1% through to the bottom 1% of the MSA Index scale to identify the areas producers can focus on to improve their own Index results.

“The report showed the top 1% of producers have an average Index of 66.19, and those in the top 25% are averaging an Index of 60.61. Producers in the bottom 10% had an average Index of about 52.17,” Ms Strachan said.



“The report also found that 10.8% of MSA-graded grassfed carcasses did not meet MSA requirements compared with 2.3% of grainfed cattle.

“And while seasonal conditions vary for each state, on average, non-compliance was highest in the winter months. The main reason for non-compliance across all cattle was consistently having a high meat pH above 5.70.”

The ABEQI can be downloaded from www.msa.com.au/msa.



MSA's top producers

2017 Excellence in Eating Quality Awards

MLA hosted the MSA Excellence in Eating Quality Awards as part of a series of national events held throughout September and October 2017.

The awards aim to raise awareness of MSA best management practice by recognising those producers in each state who consistently deliver superior eating quality

beef for the benefit of consumers and the profitability of the industry.

The criteria for the awards include outstanding compliance rates to MSA specifications, as well as high eating quality performance as represented by the MSA Index results for MSA graded cattle during the 2015-16 and 2016-17 financial years.

NEW SOUTH WALES

Most Outstanding Beef Producer

Winners: Jason and Ann Lewis and Jason's parents, John and Lynne, 'Clevecourt', Bingara.

Enterprise: JAC Wagyu, a vertically integrated business on 2,000ha with a breeder herd of 400 Angus and 100 Wagyu females, producing offspring sold at 650–700kg for Coles and for their own brand.

Winning formula

Management: Cattle are yard-weaned over two weeks, where they are introduced to supplementary feeding gradually. Dogs, people and motorbikes are introduced to cattle when young and then used on a weekly basis. To minimise stress, cattle are not processed for transport in extreme hot or cold weather.

Nutrition: To reach target weights, cattle spend 400 days grazing sub-tropical grasses with a hay–grain supplement in small paddocks. This is having a positive impact on MSA marbling scores.

Feedback: After making the top three finalists in 2016, Jason and Ann looked to MSA results to keep fine-tuning.

"We're dealing with a very high value animal and asking for quite a large premium from customers for our product, so it's important to aim for 100% compliance."



Most Outstanding Beef Producer - Grainfed

Winner: Japan's Marubeni Corporation, 'Rangers Valley', Glen Innes, NSW.

Enterprise: A 40,000-head feedlot turning off 11,000 head/year, with 80% directed at export markets and the remainder directed to the Coles Finest brand, underpinned by MSA grading. Marubeni exports grainfed Wagyu and Angus beef under its brands including Black Market, Black Onyx and WX to China, South Korea and Europe (France, Italy, Monaco, Switzerland and Finland).

Winning formula

Handling: "The cattle are backgrounded for a minimum of three weeks as part of a pre-conditioning program allowing the cattle to settle, and very importantly, with their mob, before going into the feedlot to start their feeding term," Managing Director Keith Howe said.

Among the initiatives undertaken to further enhance animal welfare and boost productivity is the installation of woodchip bedding in pens to boost the comfort of their long-fed cattle throughout the year. "MSA science has transformed meat grading and instigated good supply chain practices like breeding for temperament, low-stress handling and welfare in the feedlot."

Genetics: "We work with very good producers to provide us with the genetics and deliver the cattle at the starting weight we require, when we want them. It takes a lot of collaboration."

Cattle are also selected on structural conformation and body condition.



QUEENSLAND AND THE NORTHERN TERRITORY

Most Outstanding Beef Producer

Winner: Kaylene Wonka, 'Blue Poles', Chinchilla, Queensland.

Enterprise: 300 Murray Grey–Angus breeders turning off 100 head/year to JBS Australia's Dinmore plant. Also supplies a number of local butchers.

Winning formula

Nutrition: Cattle are predominantly grassfed (Rhodes grass and leucaena) and grain-assisted approaching turnoff (sorghum, barley and wheat grown on the property). Kaylene, with her late husband Daryl, first planted leucaena in 1994 and now has about 25ha of Cunningham and Tarramba varieties.

Feedback: "I like to turn them (cattle) off young to help with the MSA ossification score. When I draft the cattle, I estimate fat depth and then compare what comes back on the kill sheet. I like to check pH and marbling – they play an important role in MSA scores."

Genetics: "I look for quality bulls that are early maturing and have a good temperament and medium birth weight."

Management: "Every day I check the cattle so they get used to my voice and having that contact. This plays a big part in developing good temperament."



Most Outstanding Beef Producer - Grainfed

Winner: Robert and Jenny Reardon, 'Reardon Operations' feedlot, Worrall Creek.

Enterprise: A cattle finishing enterprise in an irrigated cotton, dryland cropping and grazing operation that spans 25,000ha on the Queensland–NSW border. The 1,000-head feedlot sources weaners from the Reardons' properties at Goondiwindi, Mungindi and Moree, and turns off 300 head/year, with plans to turn off 600 head/year from 2018. Cattle are supplied to Woolworths, Coles and Teys Australia.

Winning formula

Feedback: "We joined MSA to receive feedback about the performance and eating quality of our cattle at processing, particularly for traits important to consumers and to monitor any changes in those traits," Reardon Operations General Manager Tristram Hertslet said.

Background: Feedlot finished weaners are a mix of Angus, Santa Gertrudis and Simmental-cross breeds.

Stress management: The aim is to have a smooth transition from pastures to feedlot finishing, to preparing for transport, to processor. Getting the cattle used to a different ration and to different staff helps with the transition.

Nutrition: Reardon Operations uses its own silage, grain (mostly gradings) and cotton seed in starter, intermediate and finisher rations. Breeding stock are grazed on the Worrall Creek property and, if the season is good and weight gain is sufficient, weaners are left on native grasses or improved pastures. If conditions deteriorate, they are shifted to the feedlot after induction to grain and hay in self-feeders in the paddock. Target entry weight is 300kg for 70–120 days feeding.



SOUTH AUSTRALIA

Most Outstanding Beef Producer

Winners: Michael Famularo and James Sackl, 'Blue Lake Station', Kongorong.

Enterprise: Blue Lake Station, which turns off 1,600 Angus steers/year, trades cattle and undertakes contract feeding for clients. The steers are sourced from their own breeding herd and are grazed on pastures. They are then finished in a 400-head undercover feeding facility that is currently working towards National Feedlot Accreditation Scheme (NFAS) accreditation, and turn off at 580–625kg for Coles.

Winning formula

Management: Genetics are sought for temperament traits. MSA feedback on pH is monitored as a measure of stress and low-stress handling techniques, which include preparing cattle with mineral supplementation and extra handling for the two weeks leading up to transportation.

Nutrition: "Calving is on improved phalaris and ryegrass pastures, where calves also have access to extra protein and grain supplements from three weeks of age. By supplementary feeding the calves in the paddock, we are setting up the rumen for the best potential feed conversion efficiency and easy transition to the feedlot."



Most Outstanding Beef Producer - Grainfed

Winner: Lynton and Sonia Joyce, 'Englefield Grange' feedlot, Wandearah.

Enterprise: A 1,600ha mixed farm with a 300-head feedlot turning off 300–500 head/year to processors for two main buyers – Austral Meat Adelaide and Woolworths.

Winning formula

Background: Processor feedback shapes future purchasing decisions. The preference is to source British breeds, but Bos indicus types are occasionally purchased.

Systems: Newly purchased cattle graze on native and improved pastures before moving on to crop stubbles in early summer, and into the feedlot for finishing in January. Farm-produced barley and wheat and locally purchased grain, legumes and hay are fed for 70–100 days to reach 420–450kg live weight. "The whole system is highly integrated and works well, reducing business risks and helping to optimise whole-farm profitability through diversity," Lynton said.

Nutrition: Good nutrition ensures carcasses meet minimum MSA standards of adequate rib fat coverage (minimum of 3mm) and a meat pH below 5.71.



TASMANIA

Most Outstanding Beef Producer

Winner: Katrina Simpson, Wynyard.

Enterprise: Buying in weaners, generally locally bred Angus or Hereford steers, and growing them out to a 300kg dressed weight at 12–18 months. Cattle are sold to Greenham's at Smithton for the Cape Grim Beef brand.

Winning formula

Selection: "When I buy cattle, I pay close attention to their temperament and only source quiet, well-bred animals."

Management: "Low-stress stock handling is a management tool to ensure the cattle meet MSA specifications, in particular the requirement for pH to be below 5.71. The only times they're really in the cattle yards are when they first arrive and then when they're ready to be sent for processing. The property is a combination of low and high country, which I understock to manage



the impacts of the high rainfall on the low country. There is also some bush here, which provides winter shelter and summer shade for the cattle."

Nutrition: "The cattle are fattened on pastures year-round and then, when grass quality starts to drop, they're fed on silage and hay, which I grow on the property as well."

VICTORIA

Most Outstanding Beef Producer

Winners: Ross and Colin Coyle, 'Murray View', Barnawartha.

Enterprise: Steers bought in at 8–12 months old from the nearby Barnawartha North saleyards to grow out to more than 600kg. While they favour Angus, the Coyles also buy Herefords, Shorthorns and Black Baldies from a range of breeders. The cattle are sold to Greenham's Smithton plant in north-west Tasmania.

Winning formula

Management: "Grading in the top of the MSA Index is 90% what you put down their throats and the rest is keeping them quiet through handling. On arrival, cattle are drenched, ear tagged and their individual number recorded, then put out into lightly-stocked hill country, which grows mainly native pastures. We might take a round bale up to them to get them coming to us, but otherwise there's not too much contact. After 6–8 months, the cattle are brought on to the flatter, improved country for another 6–8 months and handled more often.

Selection: "We select more on type, and we recognise good cattle. If the same vendor is at the saleyards next time, we'll go back and buy from them. We used to select mainly on size – animals with as big a frame as fitted our budget, but now I take temperament into account a lot more."

Feedback: "Once you get involved in adhering to MSA protocols, you start to see the benefits in grading, and that what you do on farm has an impact on things like the number of dark cutters. Twelve months ago I went to watch the MSA graders working and that helped me to understand the reasoning behind the standards."



Most Outstanding Beef Producer - Grainfed

Winner: David Gillett, RM Gillett & Co, 'Jalna' feedlot, Anakie.

Enterprise: A 7,000-head facility (registered in 1969) delivering 70-day trade cattle and 100-day, custom-fed Angus steers for the Coles Finest brand.

Winning formula

Stress management: "Our MSA figures showed how stress in cattle had a direct correlation with meat colour and pH levels. If you've got cattle that want to run or that spook easily, the pH levels go up very quickly," David said.

The combination of introducing horses, re-designing feedlot facilities and continual education of staff has resulted in incremental gains that show up in the MSA data. In the early days, pen riding at Jalna was done on foot or by motorbike, but now 100% is done on horseback.

Professional support: The feedlot works closely with companies and producers that supply grain and supplements, nutritionist Dr John Doyle from Toowoomba (who visits monthly to design rations) and a consulting vet. There are 14 staff between the farm and the feedlot and knowledge of animal welfare and pen riding techniques is continually upgraded with Dr Kevin Sullivan, an expert on low stress and acclimation.

Improving compliance: Construction is underway for a roof to cover 1,800 head of cattle, to reduce the effect of muddy winters, which cause the cattle hair to become matted and problematic during processing. Funded by a grant from the Coles Nurture Fund, it will reduce the cost and stress of washing cattle. For the last 30 days of feeding, cattle will rotate through the roofed pens on a woodchip base. A jump in weight gain and a reduction in the feed requirement they would usually require to keep warm is forecast. With a long-term average winter rainfall of around 480mm, it is anticipated that the roof will harvest five million litres/year of drinking water for use in the feedlot.



WESTERN AUSTRALIA

Most Outstanding Beef Producer



Winners: Shane and Leanne Ablett, Cowaramup.

Enterprise: A Murray Grey–Angus breeding herd turning off 400kg milk-fed vealers/year for Woolworths.

The winning formula

Genetics: “We target high growth rates, good eye muscle and low birth weight, and we get rid of any poor performers in the herd.”

Management: “Calves (born in February) are first weighed in late September to early October, and paddocks and feed are allocated accordingly. Animals are treated quietly to reduce stress and the calves are kept with their mums until the last minute. Because we have low stock numbers and an abundance of pasture in most seasons, we can run mobs of 20–30 head. In the final eight weeks, we fine tune our feeding to optimise our growth rate.”

Compliance: “Monitoring our MSA Index results across multiple years gives insights into overall eating quality. Meat pH is tracked as a measure of animal stress and the success of low-stress handling techniques. Other attributes important to us are carcase weight and fat coverage. Our target for MSA rib fat measurements is 10–12mm and we consistently achieve this, with a long-term average of 10mm.”

Most Outstanding Beef Producer - Grainfed

Winner: Carpenter Beef Pty Ltd (of Rami Koyu’s Central Agri Group), ‘Joanna Plains’ feedlot, Dandaragan, WA.

Enterprise: A 10,400 head enterprise at Marianna’s Background Facility, a 3,000 head feedlot and a further 10,000 head backgrounding at the 9,300ha ‘Joanna Plains’.

The facilities are also licensed live export depots. Most of their output is processed with Harvey Beef or for WA supermarkets, with some destined for export. For domestic markets, weaners enter the feedlot at 300–400kg and exit at 400–550kg.

Winning formula

Consistency: From 2015–17, Carpenter Beef achieved MSA Index averages that placed it in the top 5% of eating quality for grainfed beef nationally. This included achieving MSA compliance rates of 99.9% for fat coverage and 96.9% for pH.

Animal welfare: MSA feedback led to improvements in animal handling, particularly in yard function and feedlot exit strategies. Cattle are drafted into specialised ‘trucking pens’ before transportation and continue a feeding regimen almost to the exit point.

Supply: About 80% of the cattle are sourced from the Pilbara and Kimberley, mostly through long-term supply relationships.

“Our business needs to be highly adaptable, due to northern and local seasonal conditions, the ever-changing cattle market and the availability and pricing of grain and fodder,” manager Nathan Lidgett (pictured) said.

Nutrition: All grain and hay is sourced from within a 60km radius and, at peak times, could be feeding up to 10,000 head a day. At 10–13kg/head/day, that equates to 100–130t/day. The target growth rate is above 1.8kg/head/day on the short-fed (72-day) ration program for cattle over 400kg. High end (Wagyu–Angus) long-fed (200-day) programs require a slower growth rate (closer to 1kg/head/day) to ensure high quality marbling.





**MSA – Taking the guesswork
out of buying red meat.**

MLA
ABN: 39 081 678 364
PO Box 1961
North Sydney, NSW 2059
Tel: +61 2 9463 9333
Fax: +61 2 9463 9393
www.mla.com.au

For MSA enquiries:
PO Box 2363
Fortitude Valley BC QLD 4006
Tel: 1800 111 672
Fax: 1800 999 672
www.mla.com.au/msa
msaenquiries@mla.com.au