

# Beyond the bale

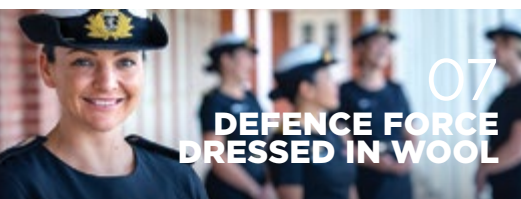
ISSUE 88 SEPTEMBER 2021

PROFIT FROM WOOL INNOVATION

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COMPANY



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# Beyond thebale

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Beyond the Bale is published by Australian Wool Innovation Ltd (AWI), a company funded by Australian woolgrowers and the Australian Government. AWI's goal is to help increase the demand for wool by actively selling Australian wool and its attributes through investments in marketing, innovation and R&D - from farm to fashion and interiors.

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## FRONT COVER

Woolgrower Michael Taylor with his two daughters, Nina and Lydie, on the family farm at Kentucky on the Northern Tablelands of NSW. Michael took part in an AWI-funded Natural Capital Accounting project that has helped Michael consider the contributions that his property's natural assets make to his farming business. See pages 31-33 for details.

Front cover, bottom right photo credit:  
Maksym Belchenko



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- Consultation
- Processing Innovation & Education Extension
- Traceability

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## AWI STATE-BASED GROWER NETWORKS

AWI-supported networks are present in each state.

- Sheep Connect NSW
- Sheep Connect SA
- Sheep Connect Tasmania
- BESTWOOL/BESTLAMB (VIC)
- The Sheep's Back (WA)
- Leading Sheep (Qld)

Find your grower network at [www.wool.com/networks](http://www.wool.com/networks) or call the AWI Helpline on 1800 070 099.

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## THE WOOLMARK COMPANY

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# A LETTER FROM AWI CHAIRMAN, JOCK LAURIE

Mr Laurie was elected by AWI shareholders to the AWI Board on 20 November 2015. He was appointed as Chairman of the AWI Board on 30 June 2021, following Ms Garnsey's resignation as Chairman.



**Jock Laurie** Chairman,  
Australian Wool Innovation

On behalf of Australian woolgrowers, I would first like to thank the immediate past Chairman Ms Colette Garnsey for her contribution to the wool industry through her role as Chairman and as a director of AWI. Colette's understanding of the industry beyond the farm gate has been of great value to the industry.

Stepping into the role of Chairman, I feel honoured to be given the opportunity to lead AWI given its critical role in supporting an industry I have been involved in all my life. I am a grazier from Walcha and Merinos are the backbone of my enterprise. They provide multiple income streams and have been very good for my family business over several generations.

An important part of my role as Chairman is to ensure that AWI is listening to woolgrowers and other stakeholders about the issues that concern them, acknowledging those concerns and making sure they are discussed at board level, and then agreeing on a plan to address the issues. Everybody should have a voice, everybody should be heard and all views should be taken seriously. I am listening and AWI is prioritising and addressing key issues for the industry.

## Marketing priorities

The first area of concern is the impact of COVID on the global market for wool. With the decline in demand for clothing due to lockdowns, AWI held back a lot of its marketing funds until a time when people started spending again. China was the first country whose economy recovered, so we invested in a big campaign there that resulted in strong demand. Other economies such as the UK are now recovering. It is absolutely crucial that we make sure that wool is front of mind of consumers when they return to buying clothes.

COVID and growing concerns about the environment have focused consumers' attention on the eco-credentials of products and we are doing more to increase people's awareness of wool's natural, renewable and biodegradable benefits. A worrying issue is the environmental impact labelling proposals in the European Union that, counterintuitively, would rate wool poorly in comparison to man-made plastic fibres. We are putting a lot of effort in the EU to help ensure that wool is considered by the authorities correctly and appropriately.

## On-farm priorities

In the on-farm area, concerns about a lack of shearers have been exacerbated by COVID, with some uncertainty as we head into spring. AWI already funds a lot of shearer and wool handler training but the industry needs more. It's very important that we get novices involved and get them trained, but also get them into work and give them support during the following few months so they can get from shearing a handful of sheep to getting some more competitive numbers, so they can make a living.

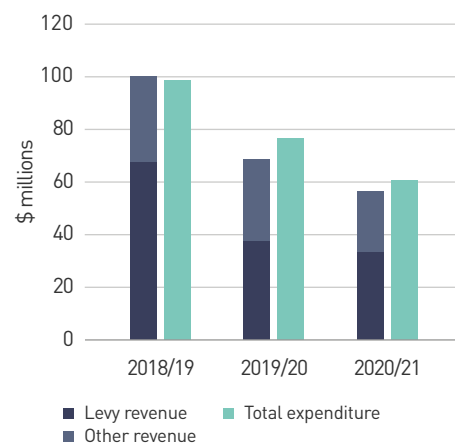
Flystrike management is the other big concern in the on-farm area. It is a critical issue and we have recently approved an extra \$650,000 to fast-track the potential development of a commercial vaccine. AWI is an R&D and marketing company, so we fund research and provide tools, options and market information to woolgrowers so they can make up their own mind as to how best to manage flystrike on their property. It's not up to AWI to tell any grower what they should or shouldn't be doing; we will support growers' right to make up their own mind.

## Reduced revenue = reduced investment

These key marketing and R&D issues for the industry, and many others, need investment. But AWI has been hampered in the past couple of years in this respect.

In 2020/21, AWI's expenditure (\$61 million) was 39% lower than it was two years ago. This was in response to the company's deteriorating revenue which fell by 44% to \$57 million in 2020/21. This is the lowest annual revenue that AWI has ever had in the whole of its 20-year history.

Our total revenue is to a large extent dependent on income from the wool levy, which has more than halved during the past two years due to the reduction in the wool levy rate from 2% to 1.5%, the unsettled EMI, and the fall in Australia's wool production caused by the drought.



AWI operates in a lean, efficient and transparent manner, but just like any business with a reduced income, we had to make cutbacks in staffing and projects. We are dipping into the reserves which the company has built up during past years for tough times like right now. But continued drawing down on our reserves is not sustainable in the long term. Reduced revenue equates to reduced investment.

Our industry has many opportunities but also many challenges. I assure you that I will work to ensure that AWI, your R&D and marketing company, will operate in the interests of you the woolgrowers of Australia that help fund AWI, and ensure the best possible results with the available resources.

## More information



Hear more from Mr Laurie in Episode 190 of AWI's *The Yarn* podcast, available at [www.wool.com/podcast](http://www.wool.com/podcast)

Detailed information about what level of investment AWI can undertake for each levy option is included in the Voter Information Memorandum being mailed out to woolgrowers this month.



# WoolPoll 2021

## What is WoolPoll?

WoolPoll is a poll of eligible wool levy payers, conducted every three years, to determine the levy rate paid to AWI for industry research, development (R&D) and marketing. Currently the levy rate is 1.5% (of the sale price woolgrowers receive for their shorn greasy wool).

At this WoolPoll, eligible woolgrowers are asked to consider five levy rate options: 0%, 1.0%, 1.5%, 2.0%, 2.5%. Eligible woolgrowers can vote for one or more levy rates in order of preference.

The levy rate that receives the highest number of votes will be paid by all woolgrowers for the next three years (2022/23 – 2024/25). The levy rate takes effect from 1 July 2022.

In the 2020 WoolPoll Review, it was suggested that an additional question be put forward to levy payers, for the 3-yearly cycle

of WoolPoll to be changed to 5 years with the objective of providing greater stability in the levy rate. This question is being put forward in the 2021 WoolPoll via the ballot paper to test the preference for a 5-yearly poll more widely with levy payers.

## Why vote?

WoolPoll is the opportunity for levy payers to directly influence how much funding AWI will receive for the ensuing period until the next WoolPoll to deliver R&D and marketing services for the Australian wool industry.

## Who can vote?

If you have paid \$100 or more in wool levies over the past three financial years, you are eligible to vote in WoolPoll. For each \$100 of levy paid, you are entitled to one vote. Your voting entitlement is determined from records of your wool sales.

## When is WoolPoll?

**September:** Eligible wool levy payers will receive their voting papers, a Voter Information Memorandum (containing details about how AWI proposes to invest the levy funds at each of the five levy rate options), details about AWI's levy rate recommendation, plus a summary of an independent review of AWI's performance (2018/19 to 2020/21).

**Monday 13 September: Voting opens.** Voting will be by post, email, fax or online – as per the instructions that will be sent with the voting papers.

**Friday 5 November: Voting closes** at 5pm (AEDT).

**19 November:** The WoolPoll result will be announced at AWI's Annual General Meeting. The levy rate takes effect from 1 July 2022.

B



Steven Bolt, Chairman of the WoolPoll Panel.

## Have your say on the wool levy rate

Chairman of the WoolPoll Panel, Steven Bolt, is a woolgrower from Corrigin, WA. He is principal of Claypans Merino stud and a Director of The Livestock Collective.

“We’re predominantly a mixed farming operation here, so we run our Merino operation 50-50 with our cropping operation. I’ve grown up with a real passion for the sheep and wool industry. I’m a third-generation sheep producer and looking forward to continue for a long time to come,” Mr Bolt said.

As Chairman of the 2021 WoolPoll Panel, Mr Bolt has been leading the efforts to get a strong turn out by growers when voting gets under way on 13 September.

“It is an honour and a privilege to be Chairman of the WoolPoll panel at a time

of enormous change and opportunity for the Australian wool industry. I think the outlook for the wool industry is really positive,” Mr Bolt said.

“WoolPoll 2021 is the opportunity for woolgrowers to vote on what levy rate they want for the next three years for our industry. Your levy choice will help determine the level of investment within key areas such as market development, on-farm research, education and training.

“It is vitally important for all woolgrowers – no matter where you live – to cast your vote for the levy rate you want to pay.”

**Steven Bolt,**  
WoolPoll Panel Chairman

## AWI recommends 2% levy

The Board of AWI is recommending woolgrowers vote for a 2% levy in the upcoming WoolPoll.

AWI Chairman Jock Laurie says an increased levy from the current 1.5% will deliver more industrywide investment that benefits all Australian woolgrowers.

“Our industry has opportunities but also many challenges and that’s why we need the extra investment. Without an increase in the wool levy, good projects that help growers will not be acted on or delivered as quickly. It would be like fighting with one hand behind our back,” he said.



**More information**  
[www.woolpoll.com.au](http://www.woolpoll.com.au)

The 2021 WoolPoll Panel members are:

- Steven Bolt, Panel Chair
- Jo Hall
- Kate McBride
- Dianna Martin
- John Murdoch
- Daniel Rogers
- Mark Waters
- Michael Wright
- Don Macdonald, AWI Board
- Christopher Dobbie, Department of Agriculture, Water and the Environment

“The Panel’s role is to encourage all growers to have their say,” Mr Bolt said.

Contact details of the WoolPoll panel members are available at [www.woolpoll.com.au](http://www.woolpoll.com.au)

# Independent Review of Performance

**Recognising the significant challenges faced by AWI and the wool industry during the past three years, a recent independent review of AWI’s performance concluded that “AWI’s performance has been appropriate” and the company “has shown notable improvement”.**

AWI has welcomed its most recent independent review of performance by Accenture Strategy. The key achievements highlighted in the report included demonstrated strength in AWI’s marketing, as well as its significant flexibility in pivoting to digital campaigns through COVID-19; and the improvement in AWI Board and organisational culture, being more positive, constructive and collaborative.

“We appreciate having a regular review by an independent company because the resulting report assists AWI to refine its processes and approach to deliver long-term profitability for Australian woolgrowers,” AWI CEO Stuart McCullough said.

The most recent review of performance was carried out by professional services company Accenture Strategy, with its report (available now on the AWI website) completed in August. A summary of the report, also prepared by Accenture, will be sent to woolgrowers with their WoolPoll Voter Information Kit.

AWI’s Statutory Funding Agreement (SFA) with the Federal Government allows it to request AWI, every three years, to undergo an independent review of its performance and make the results available to its stakeholders. Such an independent review of performance is a normal part of the WoolPoll cycle that AWI undertakes every three years to inform woolgrowers prior to the WoolPoll vote.

The report noted the “significant external and internal challenges that have affected the wool industry and AWI over the last three years”, including COVID-19 as a major interruption to marketing and consumer purchasing and the significant reduction in AWI’s budget.

In summary, the report concluded: “Given this difficult context, AWI has shown notable improvement in its performance. AWI has achieved several significant objectives with further improvement possible. Overall, results from activities, surveys of levy payers and interviews with AWI staff suggest that despite the difficult backdrop, AWI’s performance has been appropriate.”

Mr McCullough commented: “For woolgrowers, the report means that their company, AWI, is being rigorously evaluated every three years, so opportunities for AWI to do better can be identified and addressed.

“As well as being complimentary on many things that AWI does, the most recent report also highlighted AWI’s positive response to the previous (2018) review of performance.

“In contrast to the 2018 review’s 509-page report containing 82 recommendations, this year’s review has resulted in a 60-page report containing 14 recommendations. While we will address these new recommendations expeditiously, the recommendations in the latest review are a demonstration of both how seriously we’ve considered these reviews and, importantly, how far AWI has come in improving its performance.”

This review was the first review against five new Performance Principles contained in AWI’s new ten-year SFA that was agreed in October 2020 – those five Performance Principles relate to: (1) stakeholder engagement; (2) research, development & extension (including marketing); (3) collaboration; (4) governance; and (5) monitoring & evaluation.

Overall, Accenture’s evaluation is that AWI’s performance is meeting or part meeting most of the performance principles. In terms of areas for improvement, the report identified a need for AWI to clarify its strategic focus, and opportunities for AWI to improve its engagement with stakeholders.

“Although Accenture’s assessment of AWI was broadly positive, a key task for them was to identify any things we can do better as a business. That’s what they have done – and I assure woolgrowers that these opportunities for improvement will be looked at closely and addressed,” Mr McCullough added.

**More information**  
The full report and a summary report are available at [www.wool.com/statutory-obligations](http://www.wool.com/statutory-obligations)

# AWI consultation with woolgrower representative bodies

**A new method for AWI to consult with woolgrower representative bodies was developed with industry endorsement and rolled out in 2019. Here we outline the two consultation forums and the work that they undertake.**

**A**WI believes to be effective, accountable and productive, good consultation is essential.

A crucial component of AWI's consultation with industry is with woolgrower representative bodies. The new model for consultation that was rolled out in 2019 enables AWI to find out the key R&D and marketing priorities of these bodies and the woolgrowers that they represent, while also providing them with information on AWI activities and performance.

In developing the new consultation model, AWI sought to ensure that it was inclusive of more groups, to bring feedback from the varied regional and organisational perspectives, while ensuring there was a core group that AWI could engage more regularly with on more specific issues.

There are two key forums through which AWI formally consults and engages with woolgrower representative groups.

## AWI Woolgrower Industry Consultation Panel

The AWI Woolgrower Industry Consultation Panel (WICP) comprises a core group of members from the following seven national woolgrower organisations:

1. Australian Association of Stud Merino Breeders
2. Australian Superfine Wool Growers' Association
3. Australian Wool Growers Association
4. WoolProducers Australia
5. Pastoralists & Graziers Association (PGA) – Western Australia
6. Broad wool representative
7. Commercial Merino Ewe Competitions Association.

The WICP also includes representatives from the Department of Agriculture, Water and the Environment (DAWE) and the AWI Board, and is led by an independent chair.

The purpose of this forum is to ensure a clear two-way consultation between AWI and organisational representatives through to woolgrowers. WICP meetings were held four times during the 2020/21 financial year.

## AWI Woolgrower Consultation Group

The second forum, the AWI Woolgrower Consultation Group (WCG) is a broader group comprising 28 representatives of state and regional production-based woolgrower groups, as well as the members of the WICP.

## Chair of the WICP, Lyndsey Douglas

Agricultural communications specialist Lyndsey Douglas has been the independent chair of the WICP since July 2020. *Beyond the Bale* asked Lyndsey about the work of the consultation forums.

### What have been some of the key issues raised by woolgrower organisations?

There's a mix of macroeconomic issues discussed, as well as localised on-farm challenges, ideas and suggestions, and plenty of feedback from woolgrowers for AWI on projects or initiatives it has invested in, based on how woolgrowers value those projects.

Leading up to our August meeting, panel members conveyed the concerns of woolgrowers with regard to a range of issues, from the impact of the ongoing shortage of shearing contractors through to the rating of wool under the European Commission's Product Environmental Footprint system.

The meetings are a direct forum for questions to be asked and answered. Topics, issues and feedback can be raised prior to or during meetings and both AWI Board and senior staff are present to respond, as well as the Department of Agriculture.

### Has AWI's provision of information about AWI activities to the forums been well received?

AWI supplies the panel with a comprehensive business unit update on a range of topics and this has been well received. It covers market analytics, on-farm initiatives, process innovation, education extension, traceability, WoolQ, emerging markets, fibre science, extension networks, shearing, marketing, and communications, for example.

The WCG meets at least once a year to coincide with key dates in AWI's planning cycle, enabling industry feedback to be considered in the company's decision-making. However, in 2020 the WCG met more frequently (some online due to the current COVID-19 social distancing guidelines) because the WCG was the principal oversight body for delivering the 10-year strategic



### Have the forums been successful?

Success for the WICP is achieved when AWI clearly hears the opinions and feedback of a robust cross-section of regions, sectors, studs, commercial producers, fine wool, broad wools and so on that make up the industry. Those opinions shape marketing, research and development decisions for the future of the wool industry.

We're constantly reviewing and improving the efficiency of the forums.

### How would you characterise the forums?

Consensus isn't necessarily the aim of these meetings. It's about open, constructive and diverse input on the issues that affect woolgrowers today and into the future, as well as feedback on what woolgrowers believe should be the focus of the industry RDC.

The meetings are part information sharing, part debate, part idea generation but at the heart of it all is a cross section of individuals who – despite their differences of opinion and their leaning towards a particular region or sector – all want to create and maintain a prosperous and sustainable wool industry.

plan for woolgrowers – *Wool 2030*. In doing so, the WCG was joined in 2020 by next generation representatives. **B**

### More information

Woolgrowers wanting to provide feedback through the WICP or WCG are encouraged to contact their member organisation. [www.wool.com/consultation](http://www.wool.com/consultation)



# Australian Defence Force dressed in wool by Farage



Royal Australian Navy (above), Royal Australian Air Force (left) and Australian Army (below) personnel wearing their General Duty dress containing Australian Merino wool.



**All female personnel in the Australian Defence Force (ADF) have an entitlement to wear a wool blend General Duty dress produced by Australian clothing brand and Woolmark licensee Farage.**

Australian wool is contained in the new General Duty dress now being worn by female personnel in all three services of the ADF: the Royal Australian Navy, Australian Army, and Royal Australian Air Force. It is a completely new item of (non-combat) clothing for the ADF, providing female personnel with the option of wearing a tailored dress to present a contemporary and stylish appearance.

Renowned Australian brand Farage was contracted by the ADF in 2019 for the design and production of several corporate garments, in particular the General Duty dress.

Farage had previously designed and produced uniforms for the flight crew of the Air Force's 33/34 Squadron, a dedicated fleet servicing our top ministers and international delegates.

Following successful trials of the General Duty dress early last year by ADF personnel, from across a variety of ranks, the garments commenced being issued to female personnel in October.

Founder and Director of Farage, Joe

Farage, said it was important to produce a dress for the ADF that was durable, practical and comfortable.

"We worked with AWI's subsidiary The Woolmark Company on a wool blend fabric comprising 40% wool along with polyester and nylon, plus a little bit of elastane to give it that extra stretch. It is a very beautiful yet robust fabric that is fit for purpose," Joe said.

"All of the wool in the dresses is Australian wool, with the initial 9,000 garments manufactured onshore here in Australia, so the garments are very much Australian, which is very suitable given that they are being worn by the Australian Defence Force."

The dress has been certified by The Woolmark Company and carries the 'Wool blend performance' logo. It is a short-sleeved, scoop-necked and knee-length dress that has been produced in brown for the Army, black for the Navy and blue for the Air Force.

Farage has also produced a trench coat, for men and women, which has been issued to some of the personnel in the Navy and Air Force.

Farage was founded in Sydney in 1998 by Joe and his wife Katy, producing contemporary and modern tailoring, with a focus on heritage, provenance and authenticity. The brand has gained a reputation for its quality and craftsmanship and continues to attract a growing number of loyal customers from across Australia.

It has a flagship store on Sydney's prestigious Martin Place and a store in the heritage-listed Strand Arcade on Pitt Street. However, most of the company's retailing is via the brand's online store at [www.farage.com.au](http://www.farage.com.au). Online sales continue to grow significantly, especially since the COVID pandemic.

Uniforms are an important part of the business. As well as supplying the ADF, Farage designs and produces uniforms for large and small companies; the brand has also been the official tailor to AFL team the Sydney Swans for the past decade. **B**

**More information**  
[www.farage.com.au](http://www.farage.com.au)



Andy Murray competing in wool at Wimbledon, in June.  
PHOTO Clive Brunskill

# Andy Murray takes Merino wool to Centre Court, Wimbledon

**Andy Murray competed at Wimbledon this year in a Merino wool blend kit, developed in collaboration with British sportswear brand Castore and The Woolmark Company, which is available for tennis fans across the world to purchase.**

It was “Advantage Murray” at Wimbledon this year, due to the tennis icon wearing high-performance tennis apparel containing Merino wool to enhance athletic performance.

The apparel is part of a new tennis collection from AMC, a premium tennis clothing brand created by Andy Murray and British high-performance sports brand Castore. The collection – the AMC X Woolmark Merino Performance collection, which comprises elite playing kit, training kit and hoodie – was developed in collaboration with AWI subsidiary The Woolmark Company.

“I’ve been testing the kit for a few months now and am really happy with how it feels and performs,” said Andy just prior to the tournament.

“I work closely with the designers on every piece and give regular feedback; for me, the technical performance is vital. It’s also very important the kit is sustainable and I like the fact it looks and feels a bit different.”

Andy wore the Merino wool garments during his training for Wimbledon and for all his matches during the 2021 tournament. The collection was launched globally to coincide with the tournament, which started on 28 June.

“The launch of this innovative kit elevates Merino wool to an entirely new level of performance on a global stage and demonstrates that Merino wool garments are both stylish and suited for use in an elite sporting environment and in the most intense conditions,” said AWI CEO Stuart McCullough.

“It is a reflection of the increased awareness of Merino wool’s benefits at this elite level that Castore and Andy Murray approached The Woolmark Company for support in developing the collection. This partnership presented a great opportunity to develop a high-performance tennis product and also for marketing Merino wool’s technical and environmental benefits.

“Our involvement in the project has not only resulted in buoyant consumer purchasing of this particular wool-rich collection, but it has also increased the public’s awareness of Merino wool’s applications and benefits in high-performance sportswear, which should further increase demand for the fibre in future.”

## Wool returns an ace

This is the first time in the modern tennis era that such a major player as Andy Murray has worn wool at the Wimbledon Championships.

While wool was once common in sporting attire in the early days of tennis, the emergence of synthetic fibres saw a decline in the use of wool and other natural fibres. However, the development of new manufacturing techniques combined with the emergence of superfine Merino

wool, primarily from Australia, provides next to skin comfort and unparalleled natural performance.

“Wool is really starting to make a comeback in performance sportswear. Although leading manufacturers and brands in this sector are already promoting the natural benefits of Merino wool as a performance fibre, we believe there is still further significant potential for the fibre in this sector, such as for tennis,” Stuart said.

Merino wool is the world’s original performance fibre. No other fibre can match all of its natural benefits with exceptional breathability, thermoregulation and supreme softness next to the skin, helping tennis

**The AMC X Woolmark Merino Performance collection** has been certified by The Woolmark Company to ensure its durability, performance and quality. Pictured is the T-shirt from the collection.



Billboards around London were seen during the tournament.



players keep cool and comfortable on court. The fibre's excellent natural elasticity is ideal for stretching and the natural odour resistance abilities ensures players stay feeling fresher for longer.

Aside from its supreme performance attributes, wool is a 100% natural, biodegradable and renewable fibre, making it the perfect choice for those seeking clothing that has a minimal impact on the environment.

## The AMC X Woolmark Merino Performance collection

The AMC X Woolmark Merino Performance collection comprises five wool-blend circular knit garments: a polo shirt, shorts, T-shirt, long sleeve ¼ zip and a hoodie.

During the development of the collection, Castore and The Woolmark Company, and Andy Murray himself, tested the fabrics for high performance attributes, such as breathability and moisture management, to ensure a comfortable and high performing kit for the athlete.

The fabrics have been tested according to strict Woolmark quality specifications and have been produced through a Woolmark licensed supply chain. The products also comply with Castore's high-performance product criteria.

The collection is available to purchase (shipping worldwide) via the Castore website at [www.castore.com/amc](http://www.castore.com/amc). The collection is also available through retail partners including Selfridges, Mr Porter and Flannels.

## Marketing

As well as being showcased to a global audience during Andy's on-court matches and interviews at Wimbledon, the collection was featured on the home pages of the Castore and Woolmark.com websites, their social media channels, and the social media channels of Andy Murray and other Castore ambassadors such as England cricketer Jos Buttler, British Olympic swimming champion Adam Peaty, and England and Manchester United footballing legend Gary Neville.

An editorial campaign resulted in coverage in many UK newspapers – from the *Daily Telegraph* to *The Sun* – as well as consumer magazines such as *GQ* and textile industry trade titles. In total, the earned print, web and social coverage reached a quarter of a billion people.

Earned editorial reach

**250 million**



Andy Murray, wearing a special version of the hoodie with the word **Woolmark** prominently on the front, at the **Wimbledon pre-tournament press conference** on 26 June.

As well as its partnership with Andy Murray, Castore also has partnerships with the McLaren Formula 1 team, the West Indies cricket team, Scottish football club Rangers, English Premier League football clubs Newcastle United and Wolverhampton Wanderers, the London-based Saracens rugby club and the Bahrain Victorious road cycling team. In Australia, Castore has partnerships with the West Coast Eagles AFL team and the Sydney Roosters and Melbourne Storm NRL teams.

Print and digital advertising that featured the collection was placed on billboards located around the Wimbledon area of London, targeting tennis fans travelling to the tournament.

## AMC and Castore

AMC is a premium tennis clothing brand, created by Andy Murray and Castore. Castore was founded in 2015 and has set out ambitious plans to take on global sportswear giants. The company operates a digital, direct-to-consumer business model that has allowed it to grow extremely rapidly since launch and avoid the challenges facing many traditional brick and mortar brands. It now sells into more than 90 countries globally.

### More information

[www.woolmark.com/](http://www.woolmark.com/)  
[andymurray](http://andymurray.com)  
[www.castore.com/amc](http://www.castore.com/amc)



Andy Murray, wearing the wool blend long sleeve ¼ zip and shorts from the AMC X Woolmark Merino Performance collection, in a promotional photo from the marketing campaign.

# Wool's eco rating challenge in the EU

**AWI is working to ensure that European Union (EU) policy makers rate wool's environmental credentials appropriately in its Product Environmental Footprinting (PEF) methodology, to prevent the introduction of a poor environmental score for wool on clothing labels across this very important market for Australian wool.**

The European Union (EU) is putting policies in place to introduce EU environmental labelling on consumer products, including apparel products, possibly as soon as 2023. This is being done in an effort to guide consumers towards choosing the most sustainable products.

Although the wool industry supports the intent behind the EU initiative, known as the Product Environmental Footprinting (PEF) project, the industry faces a major problem because the initiative in its current form will, counterintuitively, score wool and other natural fibre products poorly.

"Wool is natural, renewable and biodegradable and therefore should be well placed to take advantage of the increasing consumer demand for more earth-friendly products. But if the EU continues with the current PEF methodologies, products made from wool and other natural fibres are at significant risk of being rated by the EU poorly compared to synthetics," warned AWI CEO Stuart McCullough.

"This would result in a decline in demand for wool products in the EU because brands and consumers will look for alternative fibre options that have more positive ratings."

This is especially important for the Australian wool industry because the EU currently consumes about a quarter of all Australian wool. Furthermore, due to the EU being the driving force of environmental footprinting, it is anticipated that the PEF project will become the

most influential market-facing reporting system for environmental credentials, with other markets across the world potentially adopting similar initiatives in their jurisdictions.

Discussion regarding the proposed PEF methodologies is ongoing, but it is expected that legislation will be put to the European Parliament to vote on by the end of 2021. Labelling of textiles using the PEF methodology is anticipated to roll out in 2023.

## What are the flaws in the current PEF methodology?

Whilst the EU's PEF project has positive intent, the methodology remains immature and doesn't yet provide the full picture about a textile product's sustainability.

PEF is built on lifecycle assessment (LCA) methodology which focuses on measuring the harmful impacts of a product but makes no attempt to account for positive impacts.

"Consequently, the facts that wool is renewable and can be grown again each year, and that at the end of its life wool is fully biodegradable, releasing its nutrients back to the soil for use again, are not scored positively by the EU," Stuart said.

"In addition to ignoring the positives of natural fibres, PEF methodology currently overlooks some of the key negatives of synthetics – for example, it fails to account for the negative impacts of microplastics."

In summary, the EU's proposed PEF labelling currently show:

## FAST FACTS

- By 2023, products for sale in the European Union (EU) could be required to include a label that provides consumers with the EU's assessment of a product's environmental credentials.
- While this is a good initiative, the proposed EU methodology is flawed and needs revising so that wool (and other natural fibres) are on a level playing field with synthetic fibres.
- AWI is providing solutions to the European Commission to help ensure an accurate rating for products containing wool.

- Fossil fuels (from which synthetic fibres are derived) are considered 'sustainable' sources for textile fibres, while natural fibres (such as wool) are rated as less sustainable than synthetic fibres.
- Renewable material sources (such as wool) are not rewarded, while non-renewable sources (synthetic fibres) are not penalised.
- Biodegradable fibres (such as wool) do not receive any positive scoring, and fossil fuel-based fibres (synthetic fibres) receive no penalties for not being biodegradable.
- Microplastic pollution from synthetic materials does not carry any negative scoring.
- Natural fibres (such as wool) are negatively scored by including the impacts of forming the fibre on farm (land, water, GHG emissions etc), while fossil fuel-based fibres (synthetic fibres) receive no penalties for the formation of crude oil.

Furthermore, there are major inconsistencies between the PEF and the EU's other key environmental initiatives such as its Circular Economy Action Plan (CEAP). The European Commission rightly sees product circularity as a solution to wasteful processes like fast fashion, but PEF methodology has not been updated to reward the inherently circular attributes of natural fibres, including renewability and biodegradability.

"PEF labelling arising from the current process is not reliable and will therefore severely inhibit the laudable intent of the EU's own CEAP. By following its current

# Devold's reversible base-layers

With a focus on sustainability, Woolmark licensee Devold of Norway last month launched a range of Merino wool base-layers that have no inside or outside, just different sides. Turn the garment 'inside out' and you get a totally new garment.

Devold of Norway was founded in 1853, based on the idea of protecting people against the elements. The company has worked with wool – a 100% natural, renewable and biodegradable fibre – throughout its 168-year history and today produces apparel for sports and outdoor enthusiasts.

The company has designed a new range of Merino wool base-layers, with each garment being able to be used on both of its sides, which reduces the need for extra garments. The two-in-one function also provides the option to pack smart, reduce weight and limit the number of washes.

The base-layers are knitted in three col/thread jacquard patterns so that the two sides of the fabric look completely different – there are several different patterns in the range – but the garments

still have all the same benefits of the wool fibre, such as temperature regulation, breathability, elasticity and odour resistance. Developed for cold and harsh weather, and ideal for skiing, the super-soft fabric contains microscopic air pockets that provide optimal insulation.

Named after Kvitteggga, a mountain peak in the Sunnmøre Alps near where the Devold head office is still located, the base-layer range is made from 18.7-micron Merino wool. The range is available in men and women versions and comprises tops, long johns and headwear.

Kvitteggga was a finalist in the prestigious Scandinavian Outdoor Award for the Autumn/Winter 2021/22 season. The range is available now in stores and via the Devold online shop at [devold.com](http://devold.com). **B**

path, the EU risks not achieving its objective of a climate neutral, circular EU economy by 2050," Stuart said.

"Although current PEF methodologies are a threat to wool, if the methodologies are correctly rectified, they could provide significant opportunities for wool."

## What is AWI doing to improve wool's PEF rating?

AWI has been actively participating in the PEF process, advocating for robust science to underpin the PEF's rating methods.

"It is important to secure a level-playing field for wool by ensuring PEF textile rules and methodologies encompass all the environmental credentials of natural fibres and allow consumers to make a fair and informed choice," Stuart said.

"On behalf of Australian woolgrowers, AWI is working with the International Wool Textile Organisation (IWTO) to raise awareness of concerns with the PEF methodology and influence EU policy and decision makers to defer the use of the PEF methodology on apparel labelling until its limitations have been addressed."

To amplify its campaigning, a coalition of like-minded partners from global natural fibre organisations, NGOs and others have joined forces to influence EU policy makers about the need to improve PEF methodology and to influence policy and legislative development.

Stuart said AWI is engaging with the European Commission at the highest levels and is providing the scientific evidence to address the PEF methodological limitations.

"Our initial meetings with European Commission officials have been constructive, and a solutions-focused review of the PEF has been provided by AWI as follow up," Stuart added. **B**



The reversible base-layers in Devold's new Kvitteggga range for men and women enable you to have two different designs to wear in the one Merino wool garment.



# “Buy better, buy wool”

This year’s Wool Week in Australia campaign from AWI helped educate consumers that “not all clothes are created equal”, urging them to buy better by choosing clothes made from wool, the original eco fibre.

Promoting the natural, renewable and biodegradable properties of wool is an important element in most of AWI’s marketing of Australian wool. However, this year’s Wool Week campaign in Australia really pushed that message home, comparing these positive characteristics with the negative, polluting attributes of synthetic fibres.

Wool Week is an annual initiative of AWI and its subsidiary The Woolmark Company. It arose from the global Campaign for Wool that aims to educate consumers about the natural benefits of wool and increase sales of wool product.

“The theme of the campaign this year was that clothes made from wool are better for the environment than clothes made from synthetic fibres, which are derived from fossil fuels and crude oil,” said AWI CEO Stuart McCullough.

Using simple but clever imagery of mocked-up clothing tags on wool garments, the Wool Week ‘Ready to Care’ campaign highlighted the negative impacts on the environment that clothes made from synthetic fibres have, in comparison to clothes made from wool. Facts used on the wool clothing tag imagery included:

- “I won’t harm our ocean life because I’m made of Merino wool”
- “I’ll last a lifetime because I’m made with Merino wool”
- “You’d be wearing plastic if I was polyester”

The fact that wool is a natural fibre produced responsibly by Australian woolgrowers was another element of the campaign, with video clips of Australian woolgrowers showcasing the environmental credentials of their on-farm practices.

With most farms in Australia family owned and operated, it was emphasised that Australian woolgrowers are always thinking about their family’s next generation and how to preserve their property’s natural resources in the long-term.

## Campaign drives wool purchases

Key messages and imagery from the campaign were located on a campaign hub page on the Woolmark.com website. In addition to raising awareness of wool’s positive eco-credentials, an important element of the hub page was to drive purchases of wool products at retail.

Specially photographed wool garments from brand partners were featured on the hub page with links pointing to the brands’ online stores at which consumers could purchase the products. The brands featured included: Country Road, Sportscraft, R.M. Williams, Orotan, Assembly Label, Arnsdorf, Jacinta James, McIntyre Merino, Wah-Wah, ioMerino, Nagnata, Humphrey Law, Lindner Quality Socks, Helen Kaminski and Seljak.

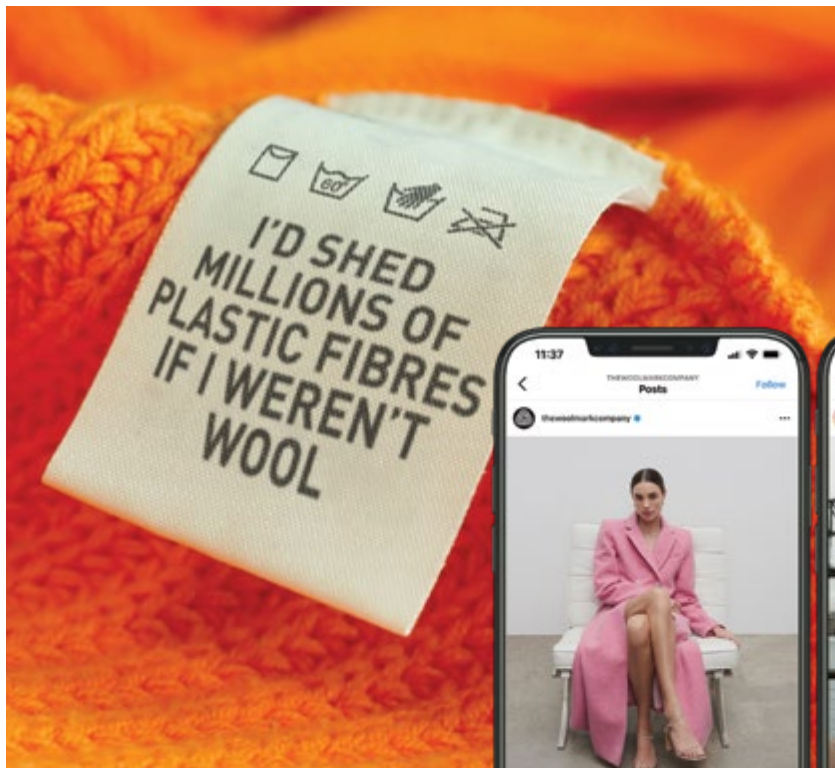
Many other commercially available wool garments and products located on the Woolmark.com shop page were also featured on the special campaign hub page, driving traffic to even more online stores containing wool products that consumers could purchase.

An email and social media campaign from The Woolmark Company directed consumers to the hub page. The Woolmark Company has more than 756,000 followers globally on Facebook and 86,000 followers globally on Instagram. Six high profile ‘influencers’, with a total following of more than 300,000 on Instagram, were engaged to amplify the campaign by posting items on their social media channels about the benefits of wool and drive consumers to the hub page.

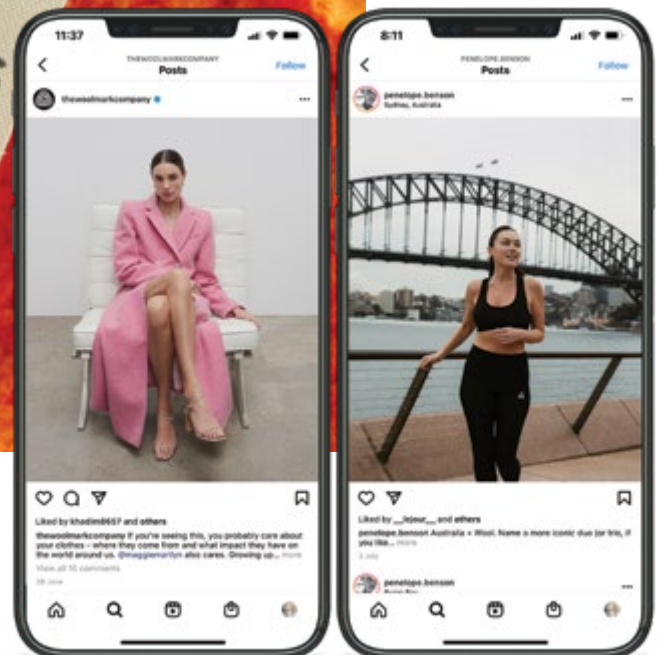
The campaign achieved 5.7 million impressions, which was above target.

A poster campaign was also run in Melbourne, Canberra and Newcastle which featured the educational wool care labels and a QR code to the Woolmark.com hub. The poster campaign had a reach of 3.6 million people.

**More information**  
[www.woolmark.com/buybetter](http://www.woolmark.com/buybetter)



Clever campaign imagery of **mocked-up clothing tags** on wool garments emphasised the benefits for the environment of wool compared to synthetics.



The Woolmark Company (left) and influencers (right) posted images on **social media** of wool apparel alongside comments advocating the natural benefits and eco-credentials of wool.

# Natural dyes for a natural fibre

As fashion and textile brands focus more and more on the eco-credentials of their products, there has been renewed interest in natural dyes, which is good news for wool as the fibre works well with natural dyes.

Evidence of textile dyeing dates back thousands of years to ancient Egypt and beyond. Virtually all dyes were derived from natural materials until the mid-nineteenth century when the large-scale use of natural dyes declined due to the invention and widespread availability of synthetic dyes.

However, the demand for natural dyes in the fashion and textile industries is experiencing a resurgence.

Natural dyes are extracted from natural materials such as plants, minerals and even shells and insects.

Plant-based natural dyes include woad, indigo, saffron and madder. Invertebrate natural dyes include Tyrian purple, cochineal and crimson kermes. Other naturally occurring dyestuff alternatives include bacteria derived dyestuff and bi-product dyes (such as dyes from food waste).

Natural fibres such as wool absorb natural dyes better than synthetic textile fibres. The dyes have been proven to work well with wool textiles to produce a superior natural aesthetic quality and look.

Some dye manufacturers are successfully producing natural dyes in a commercially usable form at an industrial scale.

Fabric and yarn dyed with natural dyes are contained in the latest edition of The Wool Lab Digital sourcing guide at [www.woolmark.com/thewoolab](http://www.woolmark.com/thewoolab) – view the 'Living' theme. B

## More information

[www.woolmark.com/naturaldyes](http://www.woolmark.com/naturaldyes)



**Woolmark licensee Tintoria di Quarenga**, located at Biella in Italy, has created a natural dyeing process called NATURALE® that uses more than 200 natural ingredients – such as flowers, leaves, berries and roots – to create a wide range of colours and shades suitable for dyeing wool and other natural fibres. The wool products manufactured using the dyeing process have been rigorously tested for quality and approved under the Woolmark Certification Program. In addition to having its own collection of natural dyed yarns, the company can dye its customers' own fibre, top and yarn using the NATURALE® process. [www.tintoriadiquaregna.it](http://www.tintoriadiquaregna.it)

## Natural dyes...

- are created from renewable and natural sources.
- are biodegradable in land and marine environments.
- provide a superior natural aesthetic and look.



**2020 International Woolmark Prize winner Richard Malone**, in addition to several other recent finalists including 2021 winner Matty Bovan, used natural dyes in their wool collections. In Richard Malone's winning collection, extracts have been taken from the vembadam plant to produce a lilac colour, sky blue is achieved from the clitoria plant, marigold and myrobalan was used to complement the colour from the karungali plant and the wedlia plant produced luscious greens for the collection.

## Or no dye at all!


Melbourne-based knitwear brand **McIntyre** recently launched a new collection, known as RAW, made from untreated wool of black and brown sheep from several Australian farms. The wool was then blended together to achieve an 'Espresso' coloured yarn, which is Woolmark-certified. No chemicals are used in the whole process, leaving the jumper with its natural lanoline smell and hand feel.

[www.mcintyremerino.com/collections/raw-collection](http://www.mcintyremerino.com/collections/raw-collection)

Items in the latest collection of Australian knitwear brand **Wolfgang Scout** are available undyed in the wool's natural colour. Wolfgang Scout uses 100% Australian superfine Merino wool yarn sourced from the Finnigan family's Kia Ora Merino property at Winslow in Victoria. The rest of the brand's knitwear range is responsibly dyed using non-hazardous, non-chrome, low impact dyes with minimal water wastage.

[www.wolfgangscout.com](http://www.wolfgangscout.com)





# Hedrena's Aussie wool apparel at Fella Hamilton

**Made using 100% Australian Merino wool, the Woolmark-certified garments in Fella Hamilton's Hedrena collection showcase quality, style and a distinctive Australian wool provenance story.**

**F**ounded in 1992 by woolgrowers Hedley and Irena Earl on their superfine wool-growing property near Geelong, Hedrena's roots are strongly embedded in the world of Merino wool production. Hedrena's founders pioneered the next to skin base-layer market for Merino wool making beautiful soft, pure wool garments that are made to last.

Nearly 30 years later, the Hedrena brand is owned by iconic Australian retailer Fella Hamilton and still provides women with high quality 100% Australian

Merino wool apparel. Hedrena products are Woolmark-licensed and stocked in Fella Hamilton's 31 stores Australia wide, as well as through its mail order and online store.

Itself celebrating 52 years in Australian fashion, the Melbourne-based and family-run Fella Hamilton business, named after the brand's founder, has grown from a wholesale business, supplying garments to the leading department stores of the day, to become one of Australia's most iconic and successful fashion brands.

**The Hedrena brand, which specialises in 100% Australian Merino wool,** is now owned by iconic Australian retailer Fella Hamilton and the Hedrena garments are available to purchase at all Fella Hamilton stores across Australia and online. Pictured left, the man is wearing a short sleeve crew neck tee, while the woman is wearing a long sleeve zip polo and interlock room relaxed fit pant – all made from 100% Australian Merino wool.

## Australian wool and Australian made

Taking ownership of Hedrena last year, and proud of its Australian-made heritage, Fella Hamilton recently brought the production of its Hedrena garments back to Australia.

"Not only is the fabric produced using wool from Australian Merino sheep, but all the garments are designed by us in Melbourne and are locally manufactured exclusively for us right here in Australia," said Managing Director and son of Fella Hamilton, David Hamilton.

"We are very proud to be supporting local farmers using 100% Australian Merino wool.

"The benefits of wool for comfort and style through both warm and cool months have meant we can sell the products all year round. The yarn is dyed in seasonal colours to fit back in with the rest of our range.

"We sell a wide variety of tops from singlets and tees to cardigans and skivvies. Hedrena has even allowed us to venture into Merino wool pants, sleepwear, intimates and menswear."

## Connecting consumers with woolgrowers

Hedrena products continue to use high-quality Australian Merino wool that its customers know and love. The wool is now sourced from wool-growing clients of AWN through AWN's DNA (Direct Network Advantage) Provenance program.

Each Hedrena garment carries a QR code-enabled DNA swing ticket. When scanned, the QR code allows Hedrena customers to view a short video from one of the regions from where wool for Hedrena was sourced, showcasing a unique Australian wool provenance story.

"The DNA program offered by AWN has given us that extra ability to share important information with our customers. Having a great Australian story that they can follow is emotive and gives us pride in our offer," David said.

"In a world of synthetic fashion, we provide our customers with a natural, sustainable clothing choice."

## More information

[www.fellahamilton.com.au/hedrena](http://www.fellahamilton.com.au/hedrena)  
[www.awn.net/dna](http://www.awn.net/dna)

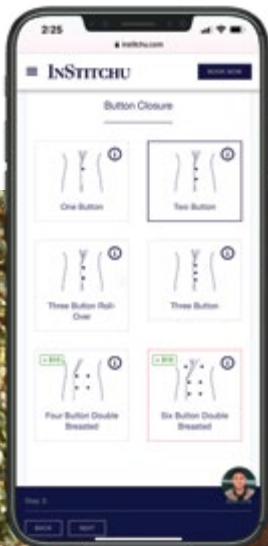
# Custom tailoring made easy with InStitchu

**www.InStitchu.com is an Australian tailoring brand that offers its customers customisable, made-to-measure apparel, including men's and women's suits and casualwear crafted from Woolmark-certified Australian Merino wool.**

Co-founded by James Wakefield and Robin McGowan in 2012, InStitchu ([www.InStitchu.com](http://www.InStitchu.com)) is an innovative suiting brand that bridges the gap between old world tailoring traditions and the modern digital retail landscape, offering a luxury experience and products at an affordable price (men's and women's custom, tailored suits from \$599).

The brand provides customers with the ability to design and customise their own garments from anywhere in the world in minutes using their simple online design tool on the InStitchu website, or alternatively in person at one of their 13 luxury showrooms across Australia.

Every InStitchu garment is made from scratch by their expert tailors to the customer's exact measurements and design, and is delivered to the customer's door in just 3-4 weeks.



The InStitchu online design tool enables customers to design a garment from scratch online or choose a product and customise it online to their own specifications.

While InStitchu was initially launched as a men's custom, made-to-measure suiting brand, it last year expanded its range into women's custom, made-to-measure suiting and has recently launched a customisable, casual offering for men.

## Premium Merino wool fabrics

Using only premium, natural fibres, all the wool fabrics used by InStitchu are 100% Australian Merino wool, certified by The Woolmark Company.

"Nothing comes close to wool as a premium suiting fabric, particularly if it's 100% Australian Merino wool," said InStitchu Co-Founder James Wakefield.

"All of InStitchu's suit fabrics are Woolmark certified, meaning that they have been certified through rigorous Woolmark testing to ensure the highest quality. InStitchu has hundreds of Woolmark-

certified Australian Merino wool suiting fabrics to choose from, ranging from Super 110s to Super 180s."

## Shop online or at a showroom

Customers can order garments online from the comfort of their own home, with two straight forward options. Firstly, they can select a product and then customise it (with the ability to choose all the details including the type of lapels, buttons, pockets, closure, monogramming and more); or secondly, if the customer knows exactly what they want then they can design a garment from scratch using their online design tool.

Alternatively, customers can visit one of InStitchu's 13 showrooms across Australia (there is also one in New York), where the customer is measured by an expert stylist, can peruse hundreds of premium fabrics and customisation options as they design their garment(s) down to the detail – all with a whisky or champagne in hand.

The order is then sent to InStitchu's tailoring partner in China where the fabric is laser cut to the customer's specific design and measurements and constructed by one of its expert tailors.

"Everything we make is crafted to the customer's precise measurements and design," said InStitchu Co-Founder Robin McGowan. "With a combination of the best fabrics in the world, leading technology, and premium customer service, we provide our customers with great value and high-quality garments such as 100% Australian Merino wool suits, jackets, trousers coats and casualwear."

Every InStitchu order (whether placed online or in a showroom) comes with the brand's Perfect Fit Guarantee – whereby InStitchu will cover customer alterations or remake their garments if they don't fit perfectly, free of charge.

## The recent addition of a more casual offering

The InStitchu brand has recently introduced a selection of more casual, customisable garments for men.

"This is a reflection of the casualisation of the workforce and new demand for customisable, made to measure casualwear," Robin said.

"Our Autumn/Winter 2021 collection includes wool sweaters, customisable wool overcoats, jackets and vests and our Australian Merino wool customisable suits, jackets and trousers – perfect for work (at home or in the office) and play.

"The collection, which is titled 'Lay Of The Land' is rich in Merino wool, and a celebration of our Australian landscape, our farmers, and the different lives we all lead. It is about rugged practicality at its core." **B**

**More information:**  
[www.InStitchu.com](http://www.InStitchu.com)

This InStitchu turtleneck sweater worn under a custom, made-to-measure Merino InStitchu wool suit provides a mix of classic tailoring and modern fashion in a very sophisticated way.





The MiniJumbuk Warm wool quilt is one of five quilts in the new Limestone Coast Wool Range.

# Limestone Coast wool quilt range

Located at Naracoorte in the heart of South Australia's Limestone Coast, leading wool bedding brand MiniJumbuk has recently launched a new range of quilts filled with Dorset wool sourced from local woolgrowers.

Although Woolmark licensee MiniJumbuk has been handcrafting wool bedding products for more than 45 years, its new Limestone Coast Wool Range realises one of the company's long held dreams: to produce premium quilts proudly filled with fine quality wool grown locally in the Limestone Coast.

MiniJumbuk Managing Director, Darren Turner, believes being located in a rural area offers a unique advantage to build relationships.

"Few farmers get the opportunity to see where their wool goes and the 'paddock to quilt' story is an exciting aspect of the project," Darren said.

"The Limestone Coast has historically been a great wool-growing region, and we've sourced wool from a number of Dorset growers. Dorset wool's characteristics of good crimp and good loft, offer a nice resilient wool ideal for our quilts.

"From the farmer through to the incredible MiniJumbuk team, there is a sense of pride seeing their raw materials, care and attention to detail transformed into premium quality bedding products and shipped to major cities within Australia and around the world.

"Our farmers are delighted to partner with MiniJumbuk and know that their wool is improving someone else's life through better quality sleep."

For the launch of the Limestone Coast Wool Range, MiniJumbuk profiled three of the farms that supply their wool for the range. In the videos, the farmers explain how the region's Mediterranean climate ensures their sheep have a consistent source of green feed for most of the year, which helps ensure healthy and happy sheep. The farmers also tell how pleasing it is for them to know not only

where their wool is used, but that it is used in a quality product produced locally by MiniJumbuk, which strengthens the rural community.

There are five quilts in the Limestone Coast Wool range, each with a different number of wool layers to suit individual sleeping needs. They range from the 500gsm Thermal quilt designed for colder climates or sleepers who really feel the cold, down to the 150gsm Super Cool quilt which is perfect for warm nights and hot sleepers.

The quilts are all made with MiniJumbuk's Airlight Technology™ that creates warmer quilts with less weight. They are also naturally low allergy and come with a 7-year warranty. **B**

**More information**  
[www.minijumbuk.com.au](http://www.minijumbuk.com.au)



"We want to be part of the Limestone Coast Wool Project with MiniJumbuk because it's really good to keep our wool local because we've never had any idea where our wool goes previously."

**Will Limbert,**  
'Tarloop', Bool Lagoon



"Being a farmer within the Limestone Coast, I think helping a business within the Naracoorte region is a really good news story because it's helping the community throughout."

**Kerry DeGaris,**  
'Killanoola', Bool Lagoon



"It's great to see one of our products being distributed around the world and by a renowned business like MiniJumbuk that has done great things promoting the Limestone Coast worldwide."

**Nanni DiGiorgio,**  
'Sterita Park', Lucindale



# Knitting yarns in big demand at Nundle

Knitting has always been popular, but lately its uptake has seen real growth. Whether this is a result of people looking for a home-hobby during lockdown, or simply a desire to relax and slow down, demand for knitting yarn is increasing – and manufacturers such as Nundle Woollen Mill are working hard to keep up with demand.

About an hour's drive from Tamworth in NSW, Nundle is a small town with just under 300 inhabitants. But each year, thousands of people flock there to visit Nundle Woollen Mill and witness woollen yarns being made on machines dating back to the early 1900s.

Opened in 2000, it is one of only a few mills left in Australia. Nick and Kylie Bradford bought the enterprise in 2007 and have expanded it into a vibrant manufacturing business and popular tourist destination.

"Each year we usually we get 30,000 visitors, but the numbers have grown during the global COVID pandemic to about 40,000 due to domestic tourists heading this way to escape the cities and heavily populated coastal areas," Nick said.

"While COVID has been challenging for many businesses, our hand knitting yarns have been in high demand, with online sales doubling since 2019. This is partly driven by people increasingly interested in authentic Australian made products, but a large part

of the rise in demand is due to people finding a renewed love of the crafts of their grandparents and picking up knitting needles for the first time during lockdown.

"British gold medal Olympic diver Tom Daley, who has gained notoriety across the world by knitting to relax during breaks in competition, exemplifies how a new generation is taking up knitting. Being young, sporty, cool and male, he shows how knitting can be for everyone."

Tasmanian woolgrowers, the Youl family, supply the Bradfords with their wool, which is then scoured at EP Robinson in Geelong. From there, the wool makes its way north to Nundle where it is transformed into an extensive range of contemporary yarns: 4-ply, 8-ply, 12-ply, 20-ply, 72-ply and Wool Vine (equivalent to about 200-ply).



## Did you know? Knitting is good for relaxing

Knitters have long acknowledged amongst themselves that knitting is an excellent form of therapy – the repetition is meditative and fuses function with therapy, improving the mental health and wellbeing for those who practice this ancient craft. Science backs this up: A study conducted by Harvard Medical School's Mind and Body Institute found that knitting lowers the heart rate, by an average of 11 beats per minute, and induces an 'enhanced state of calm'.

Having its own dye-house, Nundle Woollen Mill manufactures each of its yarns in about 40 colours, making it one of the best colour selections of dyed yarns in the country.

**More information**  
[www.nundle.com](http://www.nundle.com)



**FREE  
KNITTING PATTERN**

## Get knitting with Australian wool!

There's never been a better time to pick up a pair of knitting needles, order some **Australian wool** yarn, and knit a present for yourself or your loved ones.

This pattern for a ribbed beanie was designed by 2018 International Woolmark Prize finalist Kathleen Kye. But don't worry, it is suitable for novice knitters!

When you have finished with this pattern, **pass it on to a friend, family member or a city cousin** – and don't forget to tell them to use the world's greatest fibre, **Australian wool!**

[woolmark.com/knitting-patterns](http://woolmark.com/knitting-patterns)



### SIZES

To fit head 52cm (S4, S6, S8)  
Check your head measurement carefully. You don't want it too tight and you don't want it too loose.  
Read all the instructions carefully before commencing your beanie. If you are unsure about a technique or stitch, there are many helpful YouTube videos that can provide additional guidance.

### SKILLS REQUIRED

- Knit and purl stitching
- Cast on
- Cast off
- Increases and decreases
- Working in the round

### MATERIALS

- 100% Merino wool yarn, 8 Ply (DK Weight).
  - For the 52cm and 54cm Beanie: 100g \*\*
  - For the 56cm and 58cm Beanie: 150g \*\*
- A set of 4mm (UK 6) double-pointed knitting needles (DPN) or one 4mm (UK 6) 80cm circular Needle for the Magic Loop method.
- Wool needle for sewing in ends.
- Stitch Marker
- Row counter or row counting App.

### ABBREVIATIONS

**beg** = begin, beginning; **cm** = centimetres; **K** = knit; **P** = purl; **rep** = repeat; **st/s** = stitch/es; **stocking st** = knit right side rows, purl wrong side rows; **top** = together; **PM** = Place marker; **SM** = Slip Marker; \* = start of row

## Get knitting with Australian wool!

With so many people across Australia spending more time at home, there has never been a better time to pick up a pair of knitting needles, order some Australian wool yarn and knit a present for yourself or your loved ones.

To highlight the versatility of Australian wool and help increase the demand for yarn made from the fibre, AWI last year brought together five International Woolmark Prize alumni to release a series of exclusive knitting, crochet and cut-and-sew patterns, which can all be created from the comfort of home.

The free patterns, plus links to buy related products such as wool yarns and knitting needles, are available on the Woolmark.com website and have been promoted on social media. The AWI initiative has

proved popular across the world with a high volume of traffic headed towards the patterns on the website.

Accompanying the hard copy version of this edition of *Beyond the Bale* is one of the five patterns, a ribbed beanie designed by 2018 International Woolmark Prize finalist Kathleen Kye from South Korea.

Why not give it a go? Don't worry, it is suitable for novice knitters! **When you have finished with this pattern, pass it on to a friend, family member or a city cousin – and don't forget to tell them to use the world's greatest fibre, Australian wool!**

**More information**  
[woolmark.com/knitting-patterns](http://woolmark.com/knitting-patterns)

# International Woolmark Prize

## It's a lot more than a fashion prize!



INTERNATIONAL  
WOOLMARK PRIZE

The International Woolmark Prize is an illustrious fashion award and talent development program that generates long-term demand for Australian Merino wool by building and strengthening the reputation of the fibre as the ultimate ingredient of sustainable luxury fashion.

Relaunched in 2012 by AWI's marketing arm, The Woolmark Company, the International Woolmark Prize is an award for the world's most promising design talent. Every year, the designers develop and present their most innovative designs, made from at least 70% Australian Merino wool, to a panel of judges comprising distinguished industry heavyweights.

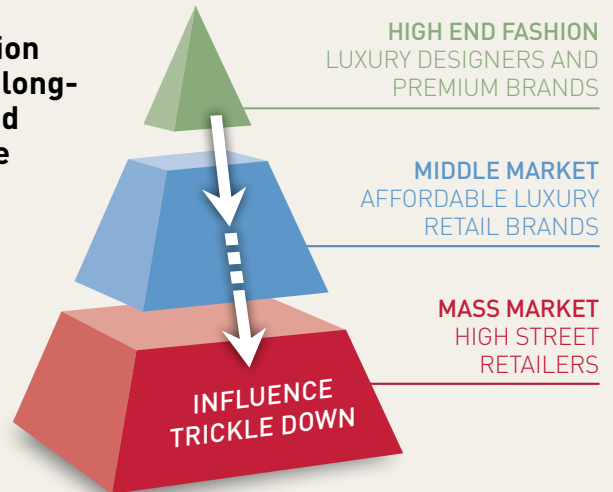
But the International Woolmark Prize program is a lot more than a fashion design award.

The program runs across an 18-month cycle and provides the international designers with education, mentorship, networking opportunities, early-stage funding, global wool supply chain access

and commercialisation.

**Importantly, it generates long-term demand for Australian Merino wool** by increasing the knowledge of and lifetime loyalty to the fibre amongst the award's designers and more than 400 alumni around the globe.

Furthermore, the phenomenal interest in these awards from fashion communities and media globally has helped put wool back on the agendas of a broader range of fashion designers, manufacturers, brands and retailers, and consequently into retail stores for consumers to purchase.



Connecting the world's leading fashion designers with Australian Merino wool is extremely important due to the enormous influence these designers have in setting global textile trends for mainstream retail brands.



2021 International Woolmark Prize **Advisory Council member**, supermodel **Naomi Campbell**

"I have learned even more about the benefits and uses of Merino; I feel we have all created something beautiful."

**Matty Bovan,**  
2021 winner

## 1. Education and mentoring

The International Woolmark Prize's mentoring and education program, known as the Innovation Academy, offers finalists unparalleled access to partners and mentors, product development support, fibre and fabric research and development, and business and sustainability strategies.

This world class program continues to elevate the prize with an unrivalled 'unique selling point' amongst competitor programs attracting the best talent to apply.

The Innovation Academy program currently services more than 600 young designers and wider industry representatives including retail and media. It comprises the following activities:

- **Early-stage investment** for finalists for the research and development of their wool collection.
- **Innovation Academy workshop** – A kick-off event with industry partners and mentors to prepare finalists for the development of their wool collection and business strategies.

- **Sourcing and collection development support via 43 international trade partners** supporting designers with product ideation, development and commercial realisation of concepts.
- **190 hours of mentoring for finalists** – the 2021 program offered exclusive access to 10 expert mentors and 6 industry partners.
- **Industry Masterclasses** – A new webinar series drawing on The Woolmark Company's vast network of industry experts to provide unparalleled industry insights and is housed on the company's online Woolmark Learning Centre.

"The level of knowledge bequeathed to us from the International Woolmark Prize was astonishing. Their priority was always to educate and develop how we looked and worked with wool as a fabric."

**Charaf Tajer,**  
CASABLANCA, 2021 finalist



A 100% Merino wool dress by **2017 winner Gabriela Hearst**, worn by Australian model Victoria Lee, at the launch of the Gabriela Hearst Spring Merino collection at the brand's flagship store in New York in April 2019. Gabriela Hearst was last year appointed as **Creative Director at luxury fashion house Chloé**.

## 2. Building a network of wool advocates

*“As a designer it’s a huge honour to be recognised and I cannot wait to promote more Merino wool in the world as I believe it is the yarn of future.”*

**Gabriela Hearst,**  
2017 winner

The International Woolmark Prize aims to secure and build future demand for Australian wool by engaging a large audience of emerging design talent with the wool supply chain, at an early stage of their careers.

The program's alumni network is now made up of more than **400 of the world's**

**best young fashion design companies** that have been taught how to source and promote Australian Merino wool. By taking part in the program, the alumni are imbued with a love of wool that often translates into their subsequent collections being rich in wool.

The alumni are building resilient businesses and taking leading roles within the industry, increasing wool's position as a dominant fibre in major fashion companies. For example, in 2020, 2017 womenswear winner Gabriela Hearst was appointed as Creative Director at luxury fashion house Chloé.

Survey results show that, following their participation in the prize, alumni continue to advocate for wool:

- **84.2%** of alumni promote wool's eco-credentials.
- **74%** of alumni prioritise fibre composition in their marketing.

- **6.6** additional Merino wool garments were produced (on average) by alumni in their Autumn/Winter 2021 collections.
- **3.9** additional Merino wool garments were produced (on average) by alumni in their Spring/Summer 2021 collections.

The International Woolmark Prize continues to receive the support of local fashion bodies such as the Council of Fashion Designers of America and the British Fashion Council as well as industry tastemakers to identify the best talent for the prize.

*“We’ve created great connections which we will keep for a long time after the competition.”*

**Marie-Ève Lecavalier,**  
2021 finalist

## 3. Driving wool sales on a global scale

*“I am thrilled to be stocked in some of the best retailers in the world thanks to AWI.”*

**Rahul Mishra,**  
2014 winner

The Woolmark Company partners with the world's leading boutiques and e-commerce platforms including Farfetch.com, Matchesfashion.com, Lane Crawford and Boon The Shop to build a robust commercialisation strategy to drive awareness of Merino wool and a direct path to purchase.

The commercialisation strategy has evolved from supporting International Woolmark Prize winners with the commercialisation of a capsule collection with exclusive retail partners (2013-

2017) to supporting all finalists with commercialising a wool-rich mainline collection (minimum of six looks) with the finalists' international stockists.

The number of Merino wool units sold, wholesale value and stockists have continued to increase year-on-year. In 2020, the program saw a 270% year-on-year increase in retail partners and 57% increase in wholesale value showing the high demand for the finalists' collections despite the COVID-19 pandemic reducing wholesale sales industry-wide.

A 2018 survey reported that 47% of (retailer) respondents confirmed that garments created by International Woolmark Prize designers were more desirable resulting in increased sales, showing the cultural relevance of the prize amongst millennial consumers.



Ribbed wool-blend sweater from 2020 finalist **GmbH** available to purchase on the **NET-A-PORTER** website.

Continued from the previous page.

## 4. Increasing Woolmark and Merino wool awareness

“This award lets us ignite the magic of wool, so the customer sees the romance in wool.”

**Teatum Jones,**  
2016 winner

The International Woolmark Prize has sustained its reputation as the industry's most sustainable and inclusive talent development program.

The PR and content strategy focuses on profiling Australian Merino wool and the finalists, winners, ambassadors and commercial collections through an innovative, creative lens partnering with leading creative and events agencies.

Although this year's award was restricted to an online event (due to the COVID-19 pandemic), the event strategy has in past years seen high-profile events

hosted during international fashion weeks in Shanghai, London, New York, Paris, Milan and Florence driving awareness for Woolmark and Merino wool in key markets. Cumulative media results 2012-21\*:

- **52 billion** earned media reach
- **247 million** owned social media reach
- **\$235 million** earned media value

\* 2021 prize results are not included within these results.

“[The most valuable thing I've learned through the program is] the use of Merino wool and how we can use this fabric to elevate our collections above and beyond fellow contemporaries in our field.”

**Charaf Tajer,**  
CASABLANCA, 2021 finalist



Photo that appeared in the international press (including *The Australian*) of 2019 winners **Nicole and Michael and Colovos** visiting wool-growing property 'Millpost' at Bungendore on the Southern Tablelands of NSW, during their visit to Australia in 2019 to launch their winning collection at **David Jones**.



Fashion designer **Victoria Beckham** and then Chair of British Fashion Council, **Dame Natalie Massenet** DBE, on the judging panel of the 2017/18 International Woolmark prize.

## 5. Generating new business leads

“The International Woolmark Prize gives emerging talent from wherever they are an incredible opportunity.”

**Victoria Beckham,**  
designer and program judge

The International Woolmark Prize platform and ambassador program has resulted in new business leads for The Woolmark Company, enabling the company to forge relationships with some of the fashion industry's most influential media, retailers, designers and trade, to promote Australian wool.

For example, International Woolmark Prize ambassadors and judges have included *Business of Fashion* Editor-at-Large, Tim Blanks; designer Donatella Versace; designer Victoria Beckham; *British Vogue* Editor-in-Chief, Edward Enninful OBE; Dior Men's Artistic Director, Kim Jones; *InStyle* Editor-in-Chief, Laura Brown; actor Colin Firth; supermodel Naomi Campbell... and many more.

**More information**  
[www.woolmarkprize.com](http://www.woolmarkprize.com)

## Placing the premium credentials of Australian wool centre stage

“Many woolgrowers rarely have the opportunity to see the end products created by our precious fibre – especially at the stunning level we see here tonight. Each and every designer here tonight has done Australia's wool industry proud. I am so looking forward to going home and sharing this unforgettable experience with other growers.

“I would like to congratulate AWI on the initiative of the International Woolmark Prize. The encouragement and opportunity they provide to young designers and countless people across the fashion industry to empower the use of our amazing, low impact, and traceable fibre is simply outstanding.”

**Anthea Sutherland, woolgrower**  
[Extract from her speech to the 2020 event audience]



Woolgrower **Anthea Sutherland** from 'Pooginook', in the southern Riverina of NSW, with 2020 winning designer **Richard Malone**, to whom she presented the International Woolmark Prize at an event in London attended by global fashion celebrities, influencers and media.



# 2021 International Woolmark Prize

Some of the designs from the finalists that featured in the film of the 2021 International Woolmark Prize. The design in the centre is by winner **Matty Bovan**.

**British fashion designer Matty Bovan won both prestigious awards at the 2021 International Woolmark Prize with his technically advanced Merino wool collection that showcased his unique style and rich storytelling.**

Selected by an illustrious panel of judges, the United Kingdom's **Matty Bovan** was announced as the winner of both the 2021 International Woolmark Prize and the Karl Lagerfeld Award for Innovation, following a special virtual judging event held in June.

The emerging designer was praised by the judges for his technically advanced jacquard weave designs, unique style, intricate designs which tell a story, advanced understanding of both knit and weave techniques, strong colour combinations and sustainable approach to local sourcing and production.

"What impressed me about Matty is his capacity to win both awards – for his innovation and creativity and I really think he deserves it," said Carine Roitfeld, who was on the judging panel and is one of the most influential figures in fashion. "He is pure fashion, he makes me dream and he reminds me of a young Vivienne Westwood or a John Galliano and we desperately need that sort of designer in the fashion world of today."

Based in York, Matty Bovan collaborated with local mill and Woolmark licensee AW Hainsworth and Sons Ltd to produce the 100% Merino wool looks in his collection.

"It's a huge honour to win these prizes and I'm so excited for where it's going to take me – I was already so thrilled with the Woolmark Prize platform and experience," he said.

## Six fabulous finalists

Prior to the final, an expert Advisory Council was tasked with selecting the six finalists from more than 380 nominees. The other five finalists for this year's award were Bethany Williams (UK), Casablanca (France), Kenneth Ize (Nigeria), LECAVALIER (Canada) and THEBE MAGUGU (South Africa).

The six designers were supported by The Woolmark Company's Innovation Academy, a fast-track mentoring and education program. The Innovation Academy in 2021 comprised 10 mentors, 45 trade partners and eight industry partners. This year, it was extended to the International Woolmark Prize alumni network, comprising more than 600 members, and the wider industry. A series of Industry Masterclass webinars was also made available.



Manufacturing of Matty Bovan's 100% Merino custom jacquard at a local mill in Yorkshire.

In honour of the six finalists, Saint Heron, the multidisciplinary platform, studio and creative agency established by celebrity musician and artist Solange Knowles, conceptualised a short film to reveal the finalists' collections to consumers. The film features 5x Grammy Award-winning artist Dionne Warwick and actress and model Dominique Jackson and is available to view on [woolmarkprize.com](http://woolmarkprize.com) alongside a virtual showroom presenting 3D looks modeled for each designer via Innovation Academy partner Hologarment.

Six looks from each of their Woolmark-certified collections, plus other

wool garments they have developed, will be available for consumers to buy during the upcoming northern hemisphere Autumn/Winter retail season.

## Focus on sustainability

With the theme 'Less is More', this year's International Woolmark Prize focused on slow and responsibly produced fashion and craftsmanship, placing an emphasis on sustainable practices, supply chain connections and future-proofing designs whilst shining the spotlight on Australian Merino wool as the green thread in responsible fashion.

Each finalist created a sustainability roadmap in partnership with Innovation Academy partner Common Objective and presented traceable collections using technology from partner Blue Bite to integrate the garment's story into their collection via NFC Chips.

## Woolmark Supply Chain Award

This year also saw the introduction of the Woolmark Supply Chain Award, which was presented to the **Nanshan Group**, one of China's leading woollen textile enterprises, for its outstanding contribution as a trade partner of the International Woolmark Prize.

The award aims to encourage enterprises that have made significant contributions to the wool industry by continuously supporting young talents and devoting resources to technological research and development. The Nanshan Group has a long-standing relationship with the International Woolmark Prize, working in close collaboration for many years with finalists to bring their visions to life. **B**

**More information**  
[www.woolmarkprize.com](http://www.woolmarkprize.com)

# Wool education is tops in China

Staff from two prominent top-makers in China, Tianyu and Red Sun, recently received information about the latest developments with wool from AWI staff at the Wool Education Centre in Shanghai.

AWI's team of experts delivered information on a range of topics including an introductory wool appreciation course, sustainability and traceability, the Woolmark Licensing Program, innovations with Merino wool, The Wool Lab sourcing guide to wool yarns and fabrics, as well as marketing case studies.

The program was attended by 30 staff from Tianyu and eight staff from Red Sun, including the sales and marketing executive and the frontline production teams. Tianyu and Red Sun have a greasy wool processing capacity of 80,000 tons and 30,000 tons respectively, making 28,000 tons and 16,000 tons of wool top in 2020.

Most of the attendees were of Gen-Y age, which illustrates how the younger generation is devoted to the wool industry in China and that with the right education the fibre has a promising future.

"As a natural fibre that supports sustainable development, wool is favoured by more and more consumers," commented Marketing Director from Tianyu, Jane Guo.

"We appreciate AWI and its team in China for providing such professional and wonderful training, from farm to fashion, so that our young team has a more comprehensive and in-depth understanding of the entire supply chain. I believe they will have great passion to contribute to the wool industry in the future."

AWI's web-based education platform, the Woolmark Learning Centre, was also highlighted for the attendees so that they can continue their wool education.

## Wool Education Centre in Shanghai

The Wool Education Centre was opened in May 2018 at Donghua University in Shanghai to help teach the next generation of textile professionals about Australian wool.

"Donghua University is the ideal tertiary institution in China to have the Wool Education Centre as its fashion and textile science programs are well established and well respected in the country," explained AWI Country Manager China, Jeff Ma.

"AWI helped establish the centre to enable students, designers and partners throughout the supply chain to explore the benefits and possibilities of Australian wool, and learn about current trends, new technology and supply chain developments."

As a research space devoted to promoting Australian wool, the education centre highlights the fibre's unique farm-to-fashion journey. Students can learn all about the different stages of wool manufacturing, including the process of turning greasy wool fibres into yarn and the latest information on AWI's fabric and textile innovations.

"Designers are also welcome to seek inspiration by browsing The Wool Lab sourcing guide to discover the wide variety of fabrics and yarns currently commercially available, as well as the trends forecasted for upcoming seasons," Jeff added.

AWI hosts workshops, exhibitions and forums at the education centre for aspiring designers and supply chain partners. **B**



Staff from top-makers **Tianyu** (main image) and **Red Sun** (smaller image) at the **Wool Education Centre** in Shanghai.



Staff from top-maker **Tianyu** receiving from AWI an education about Australian wool.

## Summer School at Donghua University

AWI also recently delivered high-level courses on wool science and technology to tertiary students at the 2021 Donghua University Undergraduate Summer School. The courses, which were delivered remotely (live-online), included a Wool Fibre Science course delivered by AWI's Program Manager, Woolmark Education Course, Dr Allan De Boos; plus a Knitwear Design and Make course delivered by Prof Sheila-Mary Carruthers of Heriot-Watt University (funded by AWI).

Dean of the College of Textiles at Donghua University, Prof Bohong Gu, thanked AWI for its involvement at the Summer School, which he said helped provide, "a high-quality learning platform for our students".

"With your participation and support, the Summer School was a great success," he added.

# Japan wool education initiative demonstrates its long-term value

trip to Australia to learn more about the wool industry and its supply chain.”

## 2017 winner Kenta Nishimura sticks with wool

In 2017, the judging panel chose Kenta Nishimura as the winner, praised for his thinking behind how to use Merino wool along with his bold and creative design that maximised the inherent benefits of the natural fibre.

During his subsequent trip to Australia, Kenta met with key AWI staff to further broaden his knowledge of wool, and visited Ian, Pam and Austin McLennan's property 'Connen Hill' in the Goulburn district of NSW to see first-hand the source of the fibre.

Kenta was so impressed with the visit, he afterwards stated that he had a strong will to be an ambassador for wool and to help others to know the benefits and origin of the fibre. And that is what he is doing right now..

Kenta Nishimura last year started working for Japanese menswear brand Homme Plisse, part of the prestigious fashion company Issey Miyake, and he recently reached out to AWI.

“Kenta is a true wool convert and has asked for our help to introduce and promote the latest innovations in Merino wool to his colleagues,” Samuel said.

“Following our initial meeting with Kenta we sent him samples for him to show his colleagues and it seems the reaction was very positive. The samples include a variety of innovative yarns, fabrics and special finish technologies, including some developed by manufacturing partners in partnership with AWI both in Japan and abroad. We

have also introduced their design team to several mills.”

## Building relationships with wool

“While it is still early days and there are no specific products lined up just yet, it is a great win for us as we hadn't previously been able to progress a relationship with Issey Miyake, precisely because the brand has previously been so centered on synthetic fibres,” Samuel said.

“This new relationship is a really good illustration of the long-term outcomes of AWI investing in educational projects.”

Other winners of the AWI-supported Next Generation Award include Daniel Hirozawa (in 2018) who is now Apparel Designer at the Asics global headquarters, and Genki Ban (in 2020) who joined knitting machine manufacturer Shima Seiki after graduation and works at its global headquarters in its Total Design Center, programming and making samples, mainly with wool. **B**



One of Kenta Nishimura's designs made from Merino wool that won the Next Generation Award at the Bunka Fashion Graduate University in Japan in 2017.

Kenta Nishimura at the Big Merino, Goulburn, during his trip to Australia in April 2017.



## Sponsorship of an education award in Japan by AWI nearly five years ago is beginning to show results with wool potentially to be introduced into the range of leading Japanese clothing brand Issey Miyake.

AWI fosters the development of tertiary textile and fashion students, inspiring and educating them in the early stage of their careers about the properties and benefits of Australian wool. The aim of this education is for the students to use the fibre in their designs as they progress through their professional lives.

Sometimes it can be a few years after a student's graduation until they have an opportunity in their employment to use wool. But it can lead to a very worthwhile return on AWI's investment in education.

During Fashion Week at Bunka Fashion Graduate University (BFGU) back in February 2017, AWI sponsored a Next Generation Award, with students encouraged to incorporate Australian Merino wool into their graduation collections. AWI also ran a Wool Appreciation Course and organised for Japanese suppliers to provide wool fabric for students to create their collections.

BFGU is the graduate school of the Bunka Fashion College which has produced many internationally renowned fashion designers and is currently ranked the eighth best fashion school in the world.

“AWI and BFGU established the annual award competition to enhance BFGU students' understanding of the benefits of wool, and to strengthen the relationship between the school and the wool industry,” said AWI Country Manager for Japan, Samuel Cockedey.

“The judging panel is comprised of teachers, industry influencers and our own personnel. Winners are awarded a

# Latest wool fashions showcased locally

Campbell Town show in May. Pictured (top) are three wool looks from Uniqlo; Sportscraft (knit) and Max Mara (coat); Zimmermann (coat) and SABA (knit/skirt); and (right) a 100% wool dress from Kookai. PHOTO: Island Light

**AWI presents commercially available wool garments at the fashion shows of regional shows across Australia, to help showcase the fibre and build demand for the wool products.**

Showing the latest wool apparel of some of Australia's greatest brands and retailers, AWI's Runway 101 Kit was launched nine years ago and has been on tour ever since.

The runway kit was created to assist the organisers of regional shows to showcase great examples of wearable wool fashion at their events. The readymade kit includes commercially available wool outfits from mainly Australian brands, as well as information and accessories to help run a fashion parade.

The current kit includes 28 looks from the Autumn/Winter 2021 collections of leading Australian designer labels including Country Road, SABA, Sportscraft, Witchery,

Zimmermann, Kookai, Decjuba, Glassons, SEED and M.J. Bale, as well as a couple of international brands available in Australia, Uniqlo and Max Mara.

Recent shows at which the collection has been exhibited include Karoonda Farm Fair (SA) and Campbell Town Show (Tas).

"We are pleased that our Runway 101 Kit can continue to bring the latest wool fashion trends to our regional communities," said AWI's National Events Manager, Wendie Ridgley.

"The runway kit professionally showcases wearable and commercially available wool products from the current collections of some of AWI's retail and design

partners. Each year, the kit usually visits more than 30 events, from the east coast to the west coast, and from the largest shows to the some smaller, more local events."

The runway kit is available for loan to suitable wool-focused events across regional Australia – it is contained in a robust wardrobe case for ease of storage and transport. **B**

## More information

Enquiries from event organisers interested in borrowing the Runway 101 Kit should be directed to AWI Events Project Manager Vanessa Peyton at [vanessa.peyton@wool.com](mailto:vanessa.peyton@wool.com).

## Perfect Perendale wool bags



Readers of the March edition of *Beyond the Bale* will remember Eve Girdwood of Ardmona in central Victoria, who for a Year 12 Product Design and Technology project, arranged the processing of wool from her own Two Pines Perendale Sheep Stud into fabric which she then used to create a beautiful wool coat.

With 76 metres of wonderful wool fabric left over from the project, enterprising Eve has been using the fabric to hand make these fantastic bags, available in navy or black. The inner 100% cotton fabric features the indigenous artwork of Lee Nangala Gallagher and Pauline Napangardi Gallagher and the button (navy or yellow) is made from a Corozo nut, making the whole bag a renewable and sustainable item.

The bags are available to purchase for \$60. See @evegandfriends on Instagram for more details or to purchase. **B**





Australian Wool  
Innovation Limited

# AWI WORKING TO SUPPORT THE FUTURE OF AUSTRALIAN WOOL-GROWING

With the support of AWI, the Hay Inc Rural Education Program continues to help young people gain hands-on agricultural skills and experience – see page 54. PHOTO: Mads Porter Photography



# Woolgrowers and COVID-19



**With the highly contagious Delta variant of COVID-19 getting a foothold in Australia during the past few months, it is important that people in regional as well as metropolitan areas are vigilant. Here we provide information (previously issued in June 2020) for woolgrowers on how to help ensure that their farming operations, staff and contractors, family and friends are as protected as possible.**

**W**oolgrowers should be proactive and already have plans in place to ensure that their farming operations, staff and contractors, family and friends are as protected as possible. However, the following points are useful as a guide to help ensure your farm's planning has been robust. The following points are not an exhaustive list. Use these points as discussion topics with your team, agree on actions, and then put the actions in place. Act now! As the coronavirus pandemic is rapidly evolving, we suggest you keep up to date on official government announcements. This article should only be used as a general aid and is not a substitute for specific advice.

## Protecting staff from exposure

- Employers and employees all have a legal responsibility to help provide a safe workplace.
- Employers and employees all have a moral responsibility to help reduce the spread of coronavirus throughout the community and protect health and lives.
- Are all members of your team taking coronavirus seriously and taking reasonable actions now?

## Managing visitors, trips off your property and close contacts

- Consider how you manage people coming from overseas or from areas that put them at higher risk of having the disease. This could include any city, town, or your local area.
- If team members generally pick up parts or supplies, how can those purchases be planned ahead to be done differently? Could you instead get things dropped off or left outside instead to reduce the exposure risk?
- Would it be useful to enhance your existing farm biosecurity measures and further restrict visitor access to your farm/business or put signage and processes in place to advise visitors of your protocols on arrival?
- How do team members and their close contacts plan to manage their personal lives and trips to grocery stores? Each workplace is a community that will need to work together

to look after each other. Different people will have different ideas about managing risk and the level of risk involved. Try not to butt heads – make sure everyone has access to up-to-date information on coronavirus and a good understanding of how it may impact the business and the people in each team member's network.

## Goods & services your business needs

- What goods (eg chemicals, fertilisers, equipment) do you rely on to keep your business going in the coming months? Consider contacting suppliers to discuss if there will be any impact on availability or to let them know what you will need.
- What services (eg mechanics, shearers, fuel deliveries, agents, advisors) do you require over the coming months? Can you arrange systems so that they can service you without coming on farm? If they need to come on farm, are they aware of the processes you have in place to reduce the risk to your team? Do you know their expectations around protecting their staff? Is there an alternative service provider available in the case that the one you normally use can no longer deliver the service?
- Contact your major suppliers and services providers now to find out how they are preparing and talk to them about your requirements.
- If you are a farm service provider, consider contacting your clients now to ask if they have new protocols in place for property access and to let them know about how your business is responding to deliver continuity of service and minimise risk of spread.

## Changing how you use shared spaces & surfaces

- Do you have shared vehicles, work spaces, hand-washing facilities, bathrooms or kitchen facilities and are they set up to reduce risk of transmission?
- Are there processes in place to clean down shared surfaces regularly or to reduce the need to share them? For example, think about things multiple people touch like door handles, taps, food surfaces, steering wheels, operating screens, switches, the inside of vehicles, the fuel bowser.

- Could you stop team members sharing vehicles and machinery, or could you clean the cabs, hand rails and door handles down between operators?
- Can your team members adequately clean their hands before they eat or after they have touched shared surfaces?
- How are shared / staff meals being prepared and are there adequate hygiene practices in place?
- Consider ensuring that soap and hand sanitiser are readily available and whether you need protocols in place to ensure they are used regularly and correctly. If you can't get hand sanitiser at the shop, are there other ways you could source or safely make it?
- Could you replace shared hand-towels with disposable paper towels?
- Are all members of the team and their close contacts practicing social distancing of one person per 4m<sup>2</sup>?
- If you have shared accommodation, has it been set up to reduce risk of transmission?
- What measures could you put in place to protect other staff in shared accommodation if one of them developed symptoms or tested positive?

## Responding as the situation changes and keeping the team informed


- Are you regularly accessing accurate and useful information in order to update your team and your business continuity plan?
- Is the information you are accessing from a reliable source?
- If you need to make changes to your business's response to coronavirus, how will you communicate it with your team to make sure everyone is on the same page?

## Responding to members of the team being out of action

- How would the business be impacted by limited labour due to staff having to self-isolate, or the closure of schools or childcare? What can you do to prepare?
- How could you respond if one of your team members or someone they have regular contact with was required to isolate or tested positive?

- How could you respond if a team member displayed symptoms?
- What policies are in place for sick or 'isolation' leave? If there are none in place or you work with casuals, will they feel financial pressure to keep working if they feel unwell? Would putting a plan in place reduce this risk?

## Supporting each other

- How could you support a team member if they or their family are required to isolate or tested positive?
- Are there members of your team who are not coping well due to stress or anxiety?
- How can you keep a sense of team and social contact while social distancing measures are in place?
- How could you support a farm neighbour or a similar service provider if their business is impacted and they are struggling to deliver their farming program or business services? 

## FURTHER INFORMATION

The AWI website at [www.wool.com/covid-19](http://www.wool.com/covid-19) provides links to several useful resources issued by external organisation, including:

### AUSTRALIAN GOVERNMENT DEPARTMENT OF HEALTH

- COVID-19 resources
- COVID-19 health alert

### POSTERS FOR YOUR FARM PREMISES

- How to avoid infection or spreading the virus ([healthdirect](http://healthdirect))
- Hand hygiene (Chamber of Commerce and Industry WA)

### ADVICE AS AN EMPLOYER

- Coronavirus and Australian Workplace Laws (Fair Work Ombudsman). For employers and employees under the national industrial relations system, ie those on the Pastoral Award 2010 for companies.
- Coronavirus (COVID-19): Advice for Employers (Safe Work Australia)
- COVID-19 Employer Guide (Australian Chamber of Commerce and Industry)
- Farmhub COVID-19 resources (National Farmers Federation)

# SHEARING OPERATION PROTOCOLS IN RESPONSE TO COVID-19

The protocols were updated and issued last month by WoolProducers Australia, the National Farmers Federation and the Shearing Contractor's Association of Australia.

- If you don't feel well, don't risk going to work. Let your employer know you are not well.
- COVID vaccination is strongly encouraged for all producers and wool harvesting staff.
- If you have questions about safe work practices, contact your Safe Work representative in your state.
- Wear face masks where possible.
- Ensure sign-in procedures are adhered to.

## MAINTAIN 1.5 METRE DISTANCE BETWEEN PERSONNEL AT ALL TIMES

### Shed staff considerations:

- Travelling separately in vehicles unless the vehicle can allow for 1.5 metre distancing, eg bus.
- Wool handlers waiting until the shearer is in the catching pen before they pick-up.

### Woolgrower considerations:

- Only using every second shearing stand.
- Must have own rooms in camp out jobs (consider utilising other buildings).
- Meals – ensure eating areas can provide 1.5 metre distancing.

## IMPLEMENT AND FOLLOW STRICT HYGIENE REGIMES

### Shed staff considerations:

- Wash frequently with soap and water, before and after eating and after using the toilet.
- Bring own soap, alcohol-based hand sanitiser and towel.
- Don't share cups or water bottles.
- Encourage sweat band use and use of own towels – the virus cannot be transmitted from an infected person through sweat alone but can be transmitted through coughing or sneezing.
- Keep gear separated – workers to bring storage bags or tubs for their gear.

### Woolgrower considerations:

- Provide running water (no basins), soap, alcohol-based hand sanitiser and paper towel.
- Ensure adequate space in eating rooms to enable 1.5m distancing between staff.

## OVER-COMMUNICATE

### Talk to staff each day

- Remind them to practice social distancing and/or isolation each night in suburban jobs – recommend that people don't visit friends and family.
- If they feel unwell do not come to work, or leave work if feeling unwell.
- Don't pressure staff to work – if they are nervous and don't want to work, find alternative workers.

### Contractors & woolgrower communication

- Forewarn, accept and manage for lower productivity/higher costs – safety and welfare are prioritised over profits and time. Considerations for woolgrowers include animal welfare and additional labour costs.
- Plan for several months ahead.
- Plan to be restricted to 'essential shearing only'.
- Encourage communications via phone where possible.
- Essential personnel only – do not allow people that are not essential to the wool harvesting process, ie visitors, children etc into the shearing shed, especially older people.

## WHAT TO DO IF SOMEONE BECOMES UNWELL AT WORK

- Isolate as soon as possible.
- Notify relevant people including contractor or woolgrower.
- Follow dept of Health procedures: [www.health.gov.au/resources/collections/novel-coronavirus-2019-ncov-resources](http://www.health.gov.au/resources/collections/novel-coronavirus-2019-ncov-resources)



FeralScan™ can be accessed at [www.feralscan.org.au](http://www.feralscan.org.au) or the app can be downloaded by searching for 'FeralScan™' in Apple or GooglePlay stores.

# FeralScan:

## the modern way of broadcasting wild dog activity

**Displaying dead wild dogs on fences and trees was once a way of letting local farmers know that wild dogs were in the area, but now these displays undermine support for wild dog management activities. FeralScan™ offers an effective answer for the 21st century. This easy-to-use and free electronic resource enables farmers to record and view information about wild dog and other pest animal activity in their local area.**

In parts of rural Australia, an historic practice saw the bodies of trapped or shot wild dogs strung from trees and fences. This was done to alert landholders in an area that wild dogs were active but also to show which dogs had been captured so that they could identify how many were still around. In some cases, it was also used by trappers to demonstrate that they were doing their jobs effectively.

However, with more and more travellers visiting regional areas, the open display of dead wild dogs hanging from trees has become an issue. Many visitors – from tourists on staycations to grey nomads (many with their own dogs) – don't realise why the carcasses are there and they simply see it as a gruesome and macabre display.

With most members of the public having a camera on their mobile phones, it doesn't take long for such images to be circulated widely amongst their friends, family and on social media, often drawing criticism and condemnations from followers. Animal rights groups are also happy to use these images to try and paint farmers in a negative light. Politicians are under increasing pressure from these groups, who are often from urban areas and are unaware of the impacts that wild dogs and other feral animals have on agriculture and biodiversity.

"While I and others fully understand the historic purpose of this activity, travellers

from urban areas do not. They do not see that the pest animals were humanely controlled to protect our livestock, communities and biodiversity," said National Wild Dog Management Coordinator, Greg Mifsud.

"These images are captured on camera and distributed widely, which does nothing but erode our social licence to maintain wild dog and feral animal control, something we have worked so hard to develop.

"Those images are being used to call for an end to wild dog management and particularly lethal control, including the use of 1080. It is a real risk to ongoing wild dog management activities across the country into the future.

"Farmers and wild dog controllers are moving away from these old practices into the 21st century by recording wild dog control using the WildDogScan tool in the FeralScan™ app."

### FeralScan™: Up-to-date pest monitoring

FeralScan™ is a free online resource that woolgrowers – plus other landholders, community groups and professional pest animal controllers – can use to record information about pest animal activity in their local area.

It can be accessed and works through

a user-friendly website and phone app. There are sections devoted to the key pest animals that affect the businesses of woolgrowers: wild dogs, foxes, rabbits, feral pigs and deer. The WildDogScan section alone contains more than 125,000 entries of wild dogs, attacks, and management actions.

You can use FeralScan™ to map pest animal activity, document problems, upload photos, and record control activities. Information you enter about pests in your local area is managed securely and privately at all times. The resource uses an ingenious way of keeping you, your neighbours and community informed about current pest activity through 'private' groups. By using FeralScan™ to record pest animal activity in your local area, you are helping protect agricultural production, livestock, pets, biodiversity and communities.

Peter West, FeralScan™ national coordinator and invasive species specialist with NSW Department of Primary Industries (DPI), says FeralScan™ has grown from a simple citizen science project into a popular, community-led monitoring and management program with more than a quarter of a million pest animal records. The platform is now being used to inform management decisions and pest management plan development by community groups.

"FeralScan™ contains data entered by more than 25,000 people, making it the largest community-driven pest animal monitoring program in Australia," Peter said.

"Continuous input from farmers and other users has delivered an important resource which informs pest animal management programs across the country. More than 450 community and biosecurity groups now use the resource in a strategic way to monitor pest animals, keep everyone informed, plan control, and evaluate outcomes. More than 160 full-time professional pest controllers also use it to ensure the communities they work for are protected from pest animals.

Helen Lawson, sheep producer and Hargraves-Hill End Pest Control Group Secretary in the Central Tablelands of NSW, is a proud FeralScan™ user.

"We use FeralScan™ to monitor wild dog activity. It automatically notifies landholders and the local community of wild dog reports, which helps us plan and undertake control measures," Helen said.

The group has used FeralScan™ to record wild dog sightings, attacks on livestock and control activities across their district to improve the effectiveness of management. It has become increasingly useful as more people use the resource.

FeralScan™ receives funding from AWI, the Department of Agriculture, Water and Environment and NSW DPI through the Centre for Invasive Species Solutions. **B**

**More information**  
[www.feralscan.org.au](http://www.feralscan.org.au)

# PURE VENOM TO LICE



Viper® is the only pour-on lousicide for sheep that contains thiacloprid, next-generation chemistry that is up to six times more potent against sheep lice than imidacloprid.<sup>1,2,3</sup>

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# Making More From Sheep

## best practice education package

Are you a youngster interested in learning about the key profit drivers in a sheep and wool enterprise? Or maybe you've been in the industry for a while and would like a refresher on some key management practices? If so, take a look at the 'Making More From Sheep' online information package.

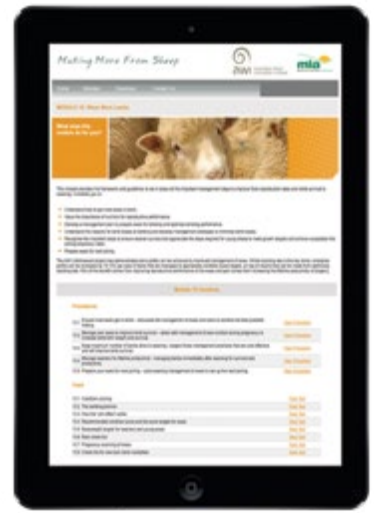
'Making More From Sheep' is a best practice package of information and management tools for Australian sheep and wool producers, containing the very best information on sheep production.

Developed by AWI and MLA about 15 years ago, the handy education package is still very useful for helping producers increase their productivity, profitability and sustainability. The modules are available free, online on the Making More From Sheep website at [www.makingmorefromsheep.com.au](http://www.makingmorefromsheep.com.au).

The 12 Making More From Sheep modules were developed with input from more than 250 leading sheep producers and technical experts. The package helps users identify the 20% of decisions that have 80% of the impact on business profitability and controlling risk in wool and sheepmeat production.

### Making More From Sheep modules

The 12 modules are available to view or download (free) from [www.makingmorefromsheep.com.au](http://www.makingmorefromsheep.com.au)



The condition scoring section in the 'Wool More Lambs' module.

#### BUSINESS BASED MODULES

1. Plan for Success
2. Market Focused Wool Production
3. Market Focused Lamb and Sheepmeat Production
4. Capable and Confident Producers

#### RESOURCE & PASTURE BASED MODULES

5. Protect Your Farm's Natural Assets
6. Healthy Soils
7. Grow More Pasture
8. Turn Pasture into Product

#### SHEEP TECHNOLOGY BASED MODULES

9. Gain from Genetics
10. Wean More Lambs
11. Healthy and Contented Sheep

#### PASTORAL MODULE

12. Efficient Pastoral Production

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# Natural Capital Accounting

Reports are now available from an AWI-funded project that used Natural Capital Accounting to objectively measure the environmental credentials of 11 Australian wool-growing properties. The first of its kind study demonstrated that natural capital metrics can be easily calculated, which could potentially help many woolgrowers to market the eco-credentials of their wool to prospective buyers and stewardship payment schemes.

## What is Natural Capital Accounting?

With some 80% of the investment in a farm tied up in the land base, it makes good sense for producers to incorporate a measurement of the condition of this important business asset into their thinking on profit.

Natural Capital Accounting is a new way of thinking that can help producers objectively measure their farm's environmental assets (ie natural capital, such as soil, water and vegetation). It can help producers view the environmental impacts of their farming alongside their existing financial measures of profit – and help them track changes in natural capital over time, in the same way they do for other forms of farm capital such as stock and farm infrastructure.

Furthermore, given that there is a growing demand by brands to source wool from woolgrowers that produce wool in an environmentally conscious manner, Natural Capital Accounting provides an opportunity for woolgrowers to clearly document and market the positive environmental impacts of their on-farm management to interested buyers and the wider industry, in language they can understand.

## AWI-funded study of 11 properties

As reported in the September 2020 edition of *Beyond the Bale*, an AWI-funded study, undertaken by Vanguard Business Services, applied a Natural Capital Accounting approach to calculate the impact of farm environmental assets on the business performance of 11 wool-growing properties (see box below) known to be undertaking some form of positive land management.

The 11 farms are located in grassy woodland regions of eastern Australia and were selected to cover a diverse range of climates, production systems and landscapes.

A detailed Natural Capital Accounting report was prepared for each farm which assessed the farm's natural capital. This covered ecosystem function across 12 criteria; assessed ecosystem type, use and capacity; estimated carbon storage; and undertook a detailed Environmental Profit & Loss statement (Kering methodology – see below) covering 31 key criteria. A summary report was also provided to each woolgrower for their property.

## Study results back wool

The study found that most of the 11 farms, as an outcome of their normal management practices, are conserving and, in many cases, regenerating the iconic grassy woodlands. Ground cover averages that were examined over a long-term historical period ranged from 75% to 100%, which is consistently higher than regional averages.

The rates of CO<sub>2</sub> emissions and sequestration varied greatly across the 11 farms, depending on the farming system used and the type, extent and condition of vegetation. However, seven of the farms captured and stored more carbon through their business activities than they emitted. Greenhouse gas emissions from the 11 farms averaged 29kg CO<sub>2</sub> equivalent per kg of clean wool, which is much lower than previous estimates for the wool industry.

Many of the 11 farms have created new and valuable income streams from their natural capital. The reports produced for the woolgrowers are already being used to provide valuable empirical information to support these opportunities.

## Study adds to industry knowledge

In 2015, French luxury group Kering (which owns brands including Gucci and Saint Laurent) released its pioneering Environmental Profit & Loss (EP&L) methodology for measuring and quantifying the environmental impact of its activities. Kering shares the EP&L as an open source tool which has resulted in it becoming highly influential with its peers in the luxury industry and other sectors.

In the past, the Kering EP&L has always been calculated using a generalised industry methodology. However, the AWI-funded study prepared inputs to the Kering EP&L methodology using actual farm data to estimate the environmental impact of each farm's operations on the environment across Kering's 31 criteria.

Interestingly all farms in the study had substantially lower impacts on the environment than had been previously published by Kering using their generalised methodology. This was particularly the case for greenhouse gas emissions and impact on the ecosystem.

The new study, while small in sample, suggests that the generalised Kering EP&L findings could overestimate the impact of wool-growing on the environment, particularly for woolgrowers who have restoration of the environment as part of their management goals.

This AWI study will help advance and improve assessment of wool by the fashion and textile industries and help AWI to position the wool industry as a proactive, leading and forward-looking industry, carefully stewarding the environment. **B**

## More information

[www.wool.com/nca](http://www.wool.com/nca)

## Properties in the project

The 11 wool-growing properties that were examined as part of the project were:

**Pete and Bundle Lawson**  
'Trewalla'

Book Book (near Wagga Wagga), NSW

**Colin Seis**

'Winona'  
Gulgong, NSW

**Norm and Pip Smith**

'Glenwood'  
Wellington, NSW

**Michael Taylor**

'Taylors Run'  
Kentucky, NSW

**Tim and Suzanne Wright**

'Lana'  
Uralla, NSW

**Alistair Lade**

'Glenrannoch'  
Seymour, Vic

**David and Susan Rowbottom**

'Rowensville'  
St Helens, Vic

**Richard and Jenny Weatherly**

'Connewarran'  
Mortlake, Vic

**Simon Cameron**

'Kingston'  
Conara, Tas

**Matt and Vanessa Dunbabin**

'Bangor'  
Dunalley, Tas

**Simon and Penny Foster**

'Fosterville'  
Campbell Town, Tas



Read more about Michael Taylor's 'Taylors Run' overleaf. →

Michael Taylor's family business on the Northern Tablelands of NSW includes a superfine Merino enterprise.

# Land stewardship benefits confirmed at Taylors Run

**Natural Capital Accounting, which considers the contributions that a property's natural assets make to the farming business, has helped woolgrower Michael Taylor of Kentucky in NSW to get a deeper understanding of his family farm's profit.**

The 647-hectare property 'Taylors Run', located in the southern Northern Tablelands of NSW, is a family owned and operated property that has been producing superfine Merino wool since 1839. Sixth generation woolgrower Michael Taylor took over management of the property in 2008 from his parents Jon and Vicki.

On average their 3,000 Merino sheep graze on a mix of native and improved pastures, each year producing about 11,000 kg of soft and bright superfine wool averaging 16.5 micron and >55kN staple strength.

The wool has been purchased directly by some of the top processors and spinners in the world, including the Schneider Group and most recently the REDA Group, and is used in premium Italian fabrics from the likes of Ermenegildo Zegna, Vitale Barberis Canonico and REDA 1865.

"Our family has been running sheep on the land here for generations, through all sorts of seasons and market fluctuations, but the sheep business is resilient and has always come through. As a dual-purpose animal producing wool and meat,

Merinos are hard to beat, especially when seasons get tough," Michael said.

"We're seeing a renaissance in the use of wool through innovative fabrics and consumers' renewed interest in natural fibres. We really love the style of wool that we're producing here and it's providing a good income and a profitable enterprise.

"I'm passing the farming knowledge that I've learnt from my parents on to my three children and all three have shown interest in coming back to the farm at some point, which is fantastic."



Taylor's Run is managed as an integrated agroforestry system. Since the late 1970s, the Taylors have planted more than 250,000 trees on the property, increasing tree cover from less than 5% to more than 20%. There are more than 300 tree species on the property, although radiata pine is the predominant species with more than 60 hectares across the whole farm managed for commercial harvesting each year.

"We're aiming for roughly 30% distributed tree cover as the research has shown this is the point where you start to get efficient natural regeneration, sufficient shelter and a lot of your ecosystem functions start to become self-supporting," Michael said.

"As shelter increases, we're seeing increased biodiversity, including more than 122 different species of birds recorded on the property."

The Taylor family produces its wool in an environmentally sustainable manner, encouraging healthy soils and pastures. The sheep graze rotationally, but Michael allows flexibility depending on circumstances. At lambing, the scanned ewes are split into smaller mobs in well rested lambing paddocks which has helped maintain high lambing rates. Using regular worm egg counts and grazing management, treating for worms has been reduced to just a couple of key times annually. The reduced use of pesticides has not only saved a lot of money but the positive effects on soil biology and health have been well documented.

"We aim to maintain 100% ground cover for 100% of the year, to best utilise all intensities of rainfall at any time of the year," Michael said.

"We've been through three droughts since I've been back on the property including one that was unprecedented, and according to all the climate predictions they're going to be worse. So we're constantly looking for species that might be more resilient and are going to continue to provide the different strata through our landscape from ground cover to shrubs to small trees to large long-lived trees.

"As well as providing shelter and shade to the livestock and wildlife, our trees also reduce the loss of soil moisture when it's windy. We aim to spread shelter evenly across the property, so it is a patchwork of forest and reserves and pastured areas."

## Natural Capital Accounting

The Taylors last year took part in an AWI-funded Natural Capital Accounting project carried out by a specialist project team from Vanguard Business Services (see page 31). Natural Capital Accounting considers the different ways in which farmers support their land and the contributions the land makes to the financial performance of

the business.

As part of the project, an assessment of the natural capital of Taylor's Run was undertaken based on field work by a trained ecologist, FarmMap4D satellite data, management information provided by the Taylors and financial statements provided by the farm accountant.

A specialist in Natural Capital Accounting then provided the Taylors with a full 'natural capital report' that will allow the Taylors to monitor the condition of their



land base alongside their financial reports, giving a more rounded view of profit.

Overall, the report showed that the Taylors' property was in good health – see box below.

"With our land making up more than 80% of the value of the business, natural capital accounting is very useful as it enables us to clearly see the value of the ecosystem services and the biodiversity on the property, including our pasture health, tree growth across the property and our net carbon sequestration," Michael said.

"Going forward, I think it's a pretty exciting story for us to be able to show that we've been producing wool year in, year out for more than 180 years and that we're now improving our ecosystems and sequestering more carbon than we're emitting.

"And running a family property is not just about financial profit. Having a pleasant healthy landscape for the family to live in is very important for our wellbeing too. During the 2019 drought as dust and smoke were passing by our property, being able to go into one of our forested areas and lie down in green grass was extremely valuable to our wellbeing."

**More information**  
[www.taylorstrun.com](http://www.taylorstrun.com)

**TOP:** Taylor's Run is a family owned and run property that has been in the Taylor family since 1839. Pictured are Michael and Milly with their three children, Remy, Lydia and Nina, and his parents Jon and Vicki. **BOTTOM:** Michael Taylor with Nina examining the health of the soil.

## TAYLORS RUN'S NATURAL CAPITAL

The natural capital report for Taylor's Run included the following highlights:

- Using standard industry classifications, 94% of Taylor's Run can be classified as being in 'very good' condition for livestock grazing, with 6% classified as being in 'good' condition. This provides a strong basis for the wool production business.
- Over the last 13 years, groundcover remained above 80% and peaked at 98%, which is very good considering that industry targets suggest a minimum of 70% ground cover is required to minimise water run-off and erosion, and high levels of ground cover assist in effective water and mineral cycles.
- Taylor's Run produces negligible air pollution, water pollution or waste.
- Taylor's Run's net carbon sequestration is 212 tonnes of CO<sub>2</sub> equivalent per year, meaning more CO<sub>2</sub> is being captured and stored than is being emitted. Furthermore, these carbon sequestration figures are conservative because, while they include the above and below ground biomass of the trees as well as coarse woody debris, the calculations do not account for the possibility that regeneratively managed soils may be sequestering significant amounts of soil carbon.
- Taylor's Run generates approximately 28.7kg of greenhouse gases per kg of greasy wool, which is just 58% of the amount estimated by Kering for greenhouse gas emissions from regenerated landscapes, and only 31% of emissions from conventional landscapes.
- A conservative estimate of the natural value affected by Taylor's Run's commercial business operation suggests that it has impacted the ecosystem services by just 33-46% and that this is not a permanent loss, compared to 80% estimated by Kering for land use impact from conventional wool production.

# Lifetime Ewe Management

## Setting your ewes up for success

More than 4,000 Australian producers have taken part in the AWI-supported Lifetime Ewe Management course, representing 30% of the national flock. On average, producers increase stocking rate by 9.3%, marking percentage by 7%, weaning percentage by 8% and reduce ewe mortality by 25%.

The Lifetime Ewe Management (LTEM) course, supported by AWI, aims to increase producers' understanding of the influence of ewe nutrition and management on overall reproduction rates and lamb and ewe survival.

LTEM groups meet six times during a period of 12 months. The course is very hands-on, being based in the sheep yards, shearing sheds and paddocks of participating woolgrowers, which enables participants to share and learn from one another.

Being involved in a LTEM course gives you the skills and support to make feeding and managing your ewes easier. Your trainer, an experienced sheep consultant, will work with you to:

- Learn how to condition score
- Prepare ewes for joining
- Manage singles and twin-bearing ewes at different stages of their reproductive cycle
- Assess pasture and calculate supplementary feeding rates



- Set up lambing paddocks
- Form weaning strategies to maximise weaner survival
- Set targets for condition score, conception, lamb survival, ewe mortality, lamb growth rate and feed on offer.

LTEM was developed using research outcomes of the AWI-funded Lifetime Wool project ([lifetimewool.com.au](http://lifetimewool.com.au)), which ran from 2001 to 2008, and involved growers and researchers in WA, Vic, NSW, and SA.

A recent independent assessment of all the Australian sheep industry's sheep reproduction extension activities concluded that the LTEM program was the one that has

had the most influence on sheep reproduction efficiency. The study estimated the benefit/cost ratio of the program was 8.5. **B**

### More information

If you are interested in joining an LTEM group in your area, contact RIST's LTEM Program Manager, Bec Malseed on 0407 730 943 or visit [www.rist.edu.au/lifetime-ewe-management](http://www.rist.edu.au/lifetime-ewe-management)



## Sheep Crutching



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## Sheep Handling



The DrenchMaster makes jobs like drenching, vaccinating, capsuling, mouthing and backlining much quicker and less demanding on the body.

# Sheep production videos to help implement best practice

The AWI Change Makers series of online short videos continues to communicate the latest research findings and tools to woolgrowers. Tune in to hear leading livestock consultant, Nathan Scott, demonstrate a range of practical ways you can influence sheep reproduction in your flock.



In the AWI Change Makers online video series, leading livestock consultant **Nathan Scott** presents the latest R&D outcomes in a simple and accessible format.

## EPISODE 1: LAMBING MOB SIZE

It is important for woolgrowers to consider their lambing mob size because it can have a significant impact on lambing rates, particularly in twin mobs. Watch the 3½ minute video to hear Nathan outline why mob size matters and practical management tips. For further information on how to estimate your optimum mob size, head to [www.wool.com/mobsize](http://www.wool.com/mobsize).

## EPISODE 2: WEANING TO MANAGE

Weaning is important for the ewe and the lamb; learn how to manage ewe condition and lamb growth rates for their next steps. Watch the 4½ minute video to hear Nathan outline why timely weaning is important and what you can do. For further information and to access AWI's standard reference weight (SRW) calculator and weaner management checklist, head to [www.wool.com/weaning](http://www.wool.com/weaning).

## EPISODE 5: JOINING TIME AND LENGTH

Time of joining will set out your whole reproductive schedule and determine when your ewes' nutritional demands will peak. Watch the 5½ minute video to hear Nathan as he outlines the considerations and impacts of joining time and length, with practical management tips for you when deciding what will work for your operation. For further information, head to [www.wool.com/lambing](http://www.wool.com/lambing) or for courses to understand the ewe management impacts of joining time and length go to [www.wool.com/LTEM](http://www.wool.com/LTEM).

Three more episodes in the series will be released during the coming months. B

**More information**  
View the videos at [www.wool.com/awichangemakers](http://www.wool.com/awichangemakers) or on the AWI Grower App.

## EPISODE 3: RAM PERFORMANCE MANAGEMENT

Rams are high performance animals that work hard over the joining period. They contribute half of the genetics of their progeny and are the primary drivers of genetic improvement in a flock, so need to be given every opportunity to pass on their genes. Watch the 6 minute video to hear Nathan outline why it's so important to manage your rams to be in peak physical condition and sperm production, and practical management tips to help you achieve your joining goals. For further information and tips for ram preparation and management, head to [www.wool.com/rams](http://www.wool.com/rams).

## EPISODE 6: LAMBING PADDOCK PLANNING

Lambing paddock selections should be carefully planned to give you the best possible lamb survival results. Watch the 5 minute video to see Nathan outline the considerations and impacts of lambing paddock choices, with practical management tips for deciding what will work for your operation. For further information, go to [www.wool.com/lambing](http://www.wool.com/lambing) or [www.feedonofferlibrary.com](http://www.feedonofferlibrary.com) for further information to assess your Feed on Offer.

## EPISODE 4: EWE CONDITION SCORING

Condition score can tell you so much about your sheep and their performance, and is simply done by hand, measuring the fat and muscle cover over and around the short ribs. Watch the 4½ minute video to hear Nathan outline the benefits of recording and managing ewe condition scores to target, practical management tips and expected productivity gains. For further information and to download a condition scoring card, or find more about the Lifetime Ewe Management course (see opposite page) and app, head to [www.wool.com/LTEM](http://www.wool.com/LTEM).

## EPISODE 7: SCANNING TO MANAGE

The requirements of single and twin bearing ewes vary greatly, and pregnancy scanning is your most valuable tool to allow for differential management. Watch the 5 minute video to see Nathan Scott as he outlines the considerations and benefits it provides, with practical management tips for deciding what will work for your operation. Head to [www.wool.com/nutrition](http://www.wool.com/nutrition) for further information on pregnancy scanning.



## MLP fast facts

The AWI-funded MLP project is a \$13 million (\$8 million from AWI plus \$5 million from project partners), 10-year venture between AWI, the Australian Merino Sire Evaluation Association (AMSEA), nominating stud Merino breeders and site partners.

- **Balmoral, Vic**  
Partner: Tuloona Pastoral  
Committee: Balmoral Breeders Association
- **Pingelly, WA**  
Partner: Murdoch University / UWA  
Committee: Federation of Performance Sheep Breeders (WA Branch)
- **MerinoLink, Temora, NSW**  
Partner: Moses & Son  
Committee: MerinoLink Inc.
- **Macquarie, Trangie, NSW**  
Partner: NSW DPI  
Committee: Macquarie Sire Evaluation Association
- **New England, NSW**  
Partner: CSIRO  
Committee: New England Merino Sire Evaluation Association

The MLP project is tracking the lifetime performance of 5,700 ewes as they proceed through four to five joinings and annual shearings.

A full suite of assessments will be undertaken including visual trait scoring, classer gradings, objective assessments of a range of key traits and index evaluations.

A unique and extensive dataset will result and be used to enhance existing Merino breeding and selection strategies, for both ram sellers and buyers, to deliver greater lifetime productivity and woolgrower returns.

**To stay up to date with the latest MLP findings, visit [www.wool.com/MLP](http://www.wool.com/MLP). Subscribe to MLP updates via [www.merinosuperiorsires.com.au/contact-us](http://www.merinosuperiorsires.com.au/contact-us)**

# MLP data-to-date

## Selecting on reproduction results and economic analysis

Pingelly's MLP ewes just prior to lambing, June 2021. PHOTO: Richard McKenna.

**As the MLP project continues in its collection of lifetime data, reproduction results to date provide a preliminary indication of the impact of various ewe culling strategies on flock reproduction rate. At the completion of the project, the full MLP reproduction records will be utilised in a comprehensive economic analysis to compare alternative breeding and selection strategies and the impacts on whole flock productivity and profitability.**



Ewes and lambs at MerinoLink, July 2021. PHOTO: Marty Moses



Balmoral's MLP ewes lining up for pregnancy scanning, July 2021. Visible dark rib line is vegetable oil residue from EMD/FAT scanning. PHOTO: Tom Silcock

To date, data has been collected across three MLP sites for the ewes through their maiden, second and third reproduction cycles. For this data-to-date snapshot, the 2016 drop ewes at the older MerinoLink, Balmoral and Pingelly sites are presented along with potential flock reproduction outcomes calculated by selecting ewes based on their reproduction performance alone. The MLP project retains all ewes, enabling the impact of applying different selection approaches and the resulting effect on flock reproduction rates to be explored.

At MerinoLink, 308 ewes have been joined as maidens and then again at two subsequent joinings. They averaged 106 lambs for every 100 ewes joined across these three years, or 106% lambs weaned/ewes joined (LW/EJ). Balmoral joined 724 ewes and Pingelly 357 ewes as maidens, and then again for two subsequent joinings, with Balmoral averaging 94% LW/EJ and Pingelly 114% LW/EJ.

Using the reproduction data available on these ewes, the following

selection options were applied to determine the impact of the culling on the flock reproduction rate, or LW/EJ:

1. Remove scanned dry maidens (Dry Maiden)
2. Remove lambed and lost as maidens (L&L Maiden)
3. Remove scanned dry at first two joinings (Double Dry)
4. Remove lambed and lost at first two joinings (Double L&L)
5. Removing ewes that failing to rear a lamb for first two joinings (Failed Twice)

For these three drops (see Table 1 below), the calculated impact of applying the selection strategies is generally small to nil.

The calculated outcomes presented here are based on just three lambings for three of ten MLP drops and have not been analysed for statistical differences.

These early indications will be worked through for all ten MLP drops from the five sites during the project's full economic

analysis. Whole of project analyses and modelling is set to commence in late 2021 and will consider the full range of industry factors influencing selection and culling decisions such as market conditions, the availability of replacement ewes, the influence of age and pregnancy status on key production traits, and stocking rates. This economic analysis work will look to optimise whole flock productivity and profitability, answering industry questions for both ram sellers and buyers. **B**

**More information**

For more details about the MLP analysis visit [www.wool.com/MLP](http://www.wool.com/MLP).

**2021 FIELD DAYS**  
 MerinoLink - 12 October 2021  
 Pingelly - 22 October 2021  
 For more information visit [www.wool.com/MLP](http://www.wool.com/MLP)

**Table 1. Ewe retention and removal options with the calculated impact on flock reproduction rates, or lambs weaned per 100 ewes joined (LW/EJ) across three of the MLP sites based on the first three years of reproduction results.**

Selection approach*	MerinoLink (308 maiden ewes joined)		Balmoral (724 maiden ewes joined)		Pingelly (357 maiden ewes joined)	
	Number of ewes removed	Flock lambs weaned/ewes joined (%)	Number of ewes removed	Flock lambs weaned/ewes joined (%)	Number of ewes removed	Flock lambs weaned/ewes joined (%)
No culling		106		94		114
Dry Maiden	53	111	99	95	21	115
L&L Maiden	20	105	110	94	35	114
Double Dry	25	107	17	95	5	114
Double L&L	2	106	27	94	3	114
Failed Twice	33	107	68	95	12	114

\*Ewe mortalities and welfare culls have been excluded from the calculations.

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# Genetics update

## New Merino genetics R&D

The AWI Board has approved a new \$1 million, four-and-a-half-year project with the Animal Genetics and Breeding Unit (AGBU) to fund Merino Lifetime Productivity project analysis and Merino genetic benchmarking R&D.

### Merino Lifetime Productivity R&D

The Merino Lifetime Productivity (MLP) Analysis and Reporting Plan Version 2 has been established in consultation with industry and is available on the AWI website at [wool.com/mlp](http://wool.com/mlp).

The MLP project is creating a very extensive dataset which will be used to address many future issues; however the initial focus will be assessing sire differences in lifetime productivity and profitability.

- How well do the current indexes reflect profitability?
- How important is it to add mature ewe weight, survival and resilience/robustness traits to the indexes?

- At what age(s) can accurate assessments of lifetime productivity be made?
- How important is it for ram breeders to collect repeat adult fleece, carcass, health and reproduction data? Can short cuts be made to reduce data collection costs?
- Can we improve the very early in life predictions of lifetime productivity, with and without DNA genotypes?
- What is the right balance (cost and accuracy) of visual assessments and objective assessments for both accuracy and cost effectiveness?
- What impact did the different site environments/ewe bases have on the expression of traits?
- Inclusion of welfare, resilience and feed efficiency outcomes into indexes.
- Creation of visual trait, faecal consistency and urine stain ASBVs.
- Lower average worm burden protocols for ASBVs.
- DNA Flock profiling and impact on wether trials.
- Genomics of dark fibre and flystrike.
- Investigate the collection of genomic reference flock data using R&D and MERINOSELECT member flocks.

The prioritisation of this work will be done in consultation and collaboration with MLA and Sheep Genetics, OVIS owners and AGBU.

AGBU have commenced advertising for a new full time postdoctoral position to increase the AGBU staff numbers to conduct the above work.

### Merino Genetic Benchmarking R&D

The focus of this work will be on R&D involving MERINOSELECT, sire evaluation, wether trials and flystrike genomics:

- Adoption of the outcomes of the MLP project.

## Footrot ASBVs

New Zealand has been running a Central Testing Program for Footrot (see [www.perfectsheep.co.nz/central-progeny-test](http://www.perfectsheep.co.nz/central-progeny-test)) for nearly a decade, and ASBVs for footrot for the tested sires are published on the MERINOSELECT website. (Contact Sheep Genetics at [info@sheepgenetics.org.au](mailto:info@sheepgenetics.org.au).)

There is interest to determine if this New Zealand data is relevant to Australian conditions. The 2016 wether progeny of the Pingelly MLP sires were assessed last spring in south-western Victoria, with the work funded by Murdoch University and Animal Health Australia (AHA). Three of the MLP sires already had progeny tested in New Zealand and they provide a valuable link to the New Zealand data. This spring, the wether progeny of the sires used for the Pingelly 2017 drop will be assessed and further validated. Several high profile MLP sires used in 2016 sires have performed well for footrot resistance.

For further information contact [Geoff.Lindon@wool.com](mailto:Geoff.Lindon@wool.com)

Table 2: Annual genetic trend of key MERINOSELECT ASBVs and record numbers for three breech traits

Year of birth	YGFW ASBV	ACFW ASBV	YFD ASBV	ASL ASBV	ASS ASBV	ACUV ASBV	ADCV ASBV
2005	1.8	3.4	-1.2	0.3	0.1	0.1	-0.3
2006	2.5	3.9	-1.2	0.8	0.2	0.0	-0.3
2007	3.3	4.4	-1.2	1.1	0.2	0.1	-0.3
2008	4.1	5.0	-1.2	1.6	0.4	-0.2	-0.4
2009	4.3	5.1	-1.2	1.8	0.6	-0.3	-0.4
2010	5.2	6.3	-1.1	2.7	0.3	-1.4	-0.4
2011	5.3	6.4	-1.1	3.2	0.4	-1.8	-0.4
2012	5.8	7.2	-1.1	3.5	0.5	-1.9	-0.4
2013	7.0	8.2	-1.1	3.7	0.6	-2.1	-0.4
2014	7.7	9.0	-1.1	4.2	0.6	-2.4	-0.4
2015	9.0	10.1	-1.0	4.5	0.7	-2.8	-0.5
2016	9.6	10.7	-1.0	4.6	0.7	-3.0	-0.5
2017	11.0	12.0	-1.0	5.1	0.5	-3.5	-0.4
2018	11.7	12.6	-1.0	5.3	0.6	-3.7	-0.5
2019	13.3	14.1	-0.9	5.7	0.6	-4.2	-0.4
2020	15.0	15.5	-0.9	7.0	0.7	-5.1	-0.5

Source Sheep Genetics June 2021.  
Note, there are still outstanding records for the 2020 drop.



# MERINOSELECT genetic trends

Table 2 below shows the recent Merino Breed MERINOSELECT genetic trends for a range of key traits. It shows that fleece weight, staple length, staple strength, fibre diameter variability, muscle, worm resistance, number of lambs weaned, wrinkle and MP+ index are all improving.

The table also shows a large increase in the number of records being collected for the three breech traits: wrinkle, cover and dag. The large increase in breech trait recording will assist the industry find rams and ewes that are trait leaders for fleece weight, index as well as the breech traits. The increasing number of records is hiding the advances being made by individual breeders and also the breech trait variation that exists in the Merino (see Table 1).

There are considerable differences between the three main types of Merino for the breech trait ASBVs. For the 2019 drop animals, the average wrinkle ASBV for medium wool type Merinos is -0.44, for fine wool type Merinos is -0.10 and for superfine type Merinos is +0.17. The Merino breed average for 2019 is -0.19.

**From a national trial across 200 sites, mulesing reduced wrinkle by 1.0 score and dags by 0.4 score, the higher the natural starting score the larger the reduction. There are two current sires that are -1.0 for wrinkle and -0.4 for dag, both are strong wool sires (+0.0 YFD). There are nine current sires that are trait leaders for Wrinkle, Dag and MP+ Index; they are also high micron sires averaging -0.2 YFD.**

In country that promotes the expression of wrinkle (high wrinkle country), target ASBVs for Breech Wrinkle are -0.8 to -1.0, in moderate wrinkle country -0.7 and in low wrinkle country around -0.3.

**For some woolgrowers, breeding can largely replace mulesing; for others, a much greater reliance on other tools will be required to do so.**

More information [www.wool.com/genetic-evaluation](http://www.wool.com/genetic-evaluation)

Table1: Merino percentiles for 2020 drop year

PERCENTILE RANGE	BREECH WRINKLE	BREECH COVER	LATE DAG	YEARLING FIBRE DIAMETER
TOP 1%	-1.3	-0.8	-0.5	-3.2
TOP 10%	-0.9	-0.5	-0.3	-2.2
TOP 20%	-0.7	-0.3	-0.2	-1.7
AVERAGE	-0.2	-0.1	-0.1	-1.0
TOP 70%	0.1	0.1	0.1	-0.5
TOP 90%	0.5	0.2	0.2	0.2

Source MERINOSELECT website July 2021

YWT ASBV	AWT ASBV	YFAT ASBV	YEMD ASBV	YWEC ASBV	NLW ASBV	EBWR ASBV	EBWR Records	EBCOV ASBV	EBCOV Records	LDAG ASBV	LDAG Records	MPP Index
1.2	0.7	0.0	0.3	-1.3	-1.7%	-0.14	1,110	-0.07	1,036	-0.05	2,347	121.7
1.6	1.1	0.1	0.3	-7.0	-1.4%	-0.13	2,654	-0.05	3,223	-0.04	2,731	123.0
1.7	1.2	0.1	0.3	-6.8	-1.0%	-0.08	3,398	-0.06	3,715	-0.03	6,214	124.8
2.0	1.4	0.1	0.3	-6.0	-0.8%	-0.07	13,687	-0.04	16,621	-0.03	6,075	126.5
2.3	1.7	0.1	0.4	-7.2	-0.2%	-0.12	19,813	-0.06	15,147	-0.04	6,390	127.4
2.6	2.0	0.1	0.4	-8.1	-0.7%	-0.11	19,284	-0.06	15,270	-0.05	5,164	128.6
2.8	2.1	0.1	0.4	-7.9	-0.5%	-0.15	24,059	-0.08	18,611	-0.04	6,511	128.6
3.0	2.3	0.1	0.4	-8.2	-0.4%	-0.13	26,219	-0.07	20,884	-0.02	7,914	130.5
3.1	2.4	0.1	0.4	-9.2	-0.6%	-0.12	19,845	-0.07	18,310	-0.05	10,806	132.1
3.3	2.6	0.1	0.4	-10.2	-0.2%	-0.14	20,465	-0.10	15,314	-0.03	10,491	133.8
3.7	3.0	0.1	0.4	-12.2	-0.1%	-0.11	19,203	-0.10	15,753	-0.04	11,420	136.2
4.0	3.2	0.1	0.4	-12.1	-0.2%	-0.14	23,229	-0.09	21,502	-0.04	10,300	137.6
4.4	3.6	0.1	0.4	-10.4	0.2%	-0.16	28,708	-0.11	24,550	-0.06	11,359	140.4
4.6	3.8	0.1	0.4	-11.7	1.1%	-0.17	28,141	-0.09	23,323	-0.06	10,277	142.6
5.0	4.1	0.1	0.4	-10.5	1.8%	-0.19	41,059	-0.10	30,161	-0.06	20,926	146.3
5.7	4.7	0.2	0.6	-11.1	3.6%	-0.26	52,789	-0.12	36,897	-0.07	7,606	150.4

YGFW Yearling Greasy Fleece Weight ACFW Adult Clean Fleece Weight YFD Yearling Fibre Diameter ASL Adult Staple Length ASS Adult Staple Strength AUCV Adult Curvature ADCV Adult Fibre Diameter CV YWT Yearling Body Weight AWT Adult Body Weight YFAT Yearling Fat YEMD Yearling Eye Muscle Depth YWEC Yearling Worm Egg Count NLW Number of Lambs Weaned EBWR Early Breech Wrinkle EBCOV Early Breech Cover LDAG Late Dag MPP Merino Production Plus

# Breeding for natural flystrike resistant Merinos - publications

[www.wool.com/flystrikelatest/#breeding](http://www.wool.com/flystrikelatest/#breeding)

AWI makes available publications about breeding for flystrike resistant Merinos on its website at [www.wool.com/flystrikelatest/#breeding](http://www.wool.com/flystrikelatest/#breeding)

Here is a selection of the available publications:



## PLANNING FOR A NON-MULESED MERINO ENTERPRISE

(March 2018)

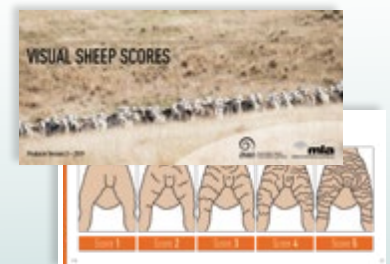
This 16-page report outlines the key learnings from a number of wool-growing enterprises, from a diverse range of environments and Merino types, that have moved to a non-mulesed enterprise.



## BREEDING AND SELECTION - INDUSTRY TRENDS

(May 2020)

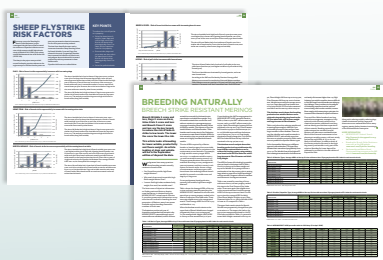
This RD&E Technical Update, by AWI's Geoff Lindon, on sheep breeding and selection for flystrike resistance reports on changing genetic trends as indicated by MERINOSELECT ASBVs since 2000.



## VISUAL SHEEP SCORES - PRODUCER VERSION

(Updated 2019)

This 74-page pocket guide for commercial and stud breeders provides a standardised framework for assessing and scoring visual sheep traits, including breech and wrinkle traits.



## SHEEP FLYSTRIKE RISK FACTORS

(March 2020)

## BREEDING NATURALLY BREECH RESISTANT MERINOS

PART 1 - June 2020

PART 2 - September 2020

Each is a 2-page article from *Beyond the Bale*.

Plus an update in the June 2021 edition.



## RATE OF GENETIC GAIN IN REDUCING BREECH FLYSTRIKE

(May 2020)

This RD&E Technical Update, by the University of Adelaide's Forbes Brien, discusses the relative gains between flystrike incidence and fleece weight, fibre diameter and reproductive rate and their implications for Merino breeding programs.



## GENETICALLY REDUCING BREECH FLYSTRIKE: HOW FAST AND WHAT ARE THE CONSEQUENCES?

(June 2019)

## LOW WRINKLE-HIGH FLEECE WEIGHT

PRODUCTIVE SIRES EASIER TO FIND

(June 2019)

Each is a 2-page summary article from *Beyond the Bale*.



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# It's Fly Time! webinar is back

Winter rains across many of Australia's sheep regions herald a potentially bad flystrike season. In response, AWI held a repeat of its popular It's Fly Time! webinar in early September, providing flystrike advice to woolgrowers managing under high-risk fly conditions. A recording of the webinar and related resources are available to view for all woolgrowers across the country.



If you missed AWI's It's Fly Time! webinar, it's being held again later in the year, or you can watch a free recording on the AWI website now.

Following a wet winter, many parts of Australia have entered a high-risk flystrike period, with some woolgrowers already reporting cases of flystrike in their flocks. To provide woolgrowers with timely advice, AWI recently held a repeat of the successful It's Fly Time! webinar, first held in January this year.

Aggregating information on flystrike from a range of sources, the It's Fly Time! package is designed to deliver tactical information to woolgrowers in preparation for, and responding to, a high-risk flystrike period. It provides woolgrowers with tips for preventing flystrike, information on prioritising sheep for monitoring and treatment, and options for treating sheep when flystrike does occur.

If you missed the webinar, a repeat performance is planned for later in the year and a recording of the original webinar is available to view at [www.wool.com/flystrikeresources](http://www.wool.com/flystrikeresources), split into three sections: Prevention, Monitoring, Treatment, along with the following additional supporting resources:

- The webinar's 77 slides and notes (available in PowerPoint or PDF)
- Factsheets including 'Recognising and monitoring flystrike' (3-pages) and 'Preventing and treating flystrike' (5-pages).
- Three 'quick tip' videos (under four minutes each) focussed on prevention, monitoring and treatment of flystrike.

Woolgrowers without access to the website can be sent hard copies by contacting the AWI Helpline on 1800 070 099.

"The flystrike prevention, monitoring and treatment activities highlighted in the It's Fly Time! webinar all play key roles in woolgrowers' integrated flystrike management plans," said AWI's General Manager of Research Dr Jane Littlejohn. "The webinar provides a timely and practical guide to flystrike management in preparation for what looks like another bad fly season this year."

## SimpliFly workshop in development

AWI is also repackaging available information on best practice flystrike management into a one-day workshop, known as SimpliFly, to help woolgrowers review their own holistic integrated flystrike management plan specific to their property.

Woolgrower feedback from planned pilot workshops will contribute to the final workshop resources, although unfortunately, the COVID-19 outbreak has meant that they have had to be delayed into next year. Once the resources are complete, train the trainer sessions will be held for advisors nationwide before the workshops are then made available to woolgrowers.

The one-day workshop involves an interactive program where participants will explore the many short- and long-term flystrike management tools and strategies available to them to help combat flystrike. They will also work through practical activities that enable them to combine these strategies and tools on their own property according to a customised annual flystrike

management plan that best suits their specific circumstances.

Dr Littlejohn says the workshops have been developed to give woolgrowers easy access to the information and support they need to effectively manage flystrike on their property.

"Being proactive and planning how to combat flystrike on an annual basis will help woolgrowers stay ahead of fly waves, delivering a better animal health and welfare outcome and saving them time, money and production losses," she said.

It is intended that the workshops will be run by the AWI grower extension networks and made available for accredited advisors to deliver. **B**

## More information

For resources on flystrike prevention, monitoring and treatment, head to [www.wool.com/flystrikeresources](http://www.wool.com/flystrikeresources) or scan the QR code (right) with the QR code reader on your smartphone.



For more detailed information on flystrike management, including information on chemical resistance management strategies and access to interactive decision support tools, visit FlyBoss at [www.flyboss.com.au](http://www.flyboss.com.au).

For information on AWI's flystrike research, development and extension program, visit [www.wool.com/flystrike](http://www.wool.com/flystrike).

## Key flystrike management messages

It's important to have a broad flystrike management plan which incorporates the following three aspects, but preventing flystrike is key.

### 1. PREVENTION OF FLYSTRIKE

An integrated preventative flystrike program includes breeding for flystrike resistance, the use of crutching or shearing, dag control, appropriate tail length, selection of less flystrike-prone

paddocks, applying appropriate chemical treatments and killing maggots and removing sources of protein.

### 2. MONITORING TO DETECT FLYSTRIKE

Monitor all mobs of sheep for signs of flystrike during high-risk periods, but especially weaners. Monitoring involves a combination of checks including looking for flystrike in sheep, checking populations of flies and checking weather conditions.

### 3. TREATMENT OPTIONS WHEN FLYSTRIKE OCCURS

Make sure you use a combination of treatment activities and that you don't rely on one single activity alone. It's important to make sure all flystruck sheep are effectively treated, all maggots are killed and sources of protein are removed to aid the sheep's recovery and to prevent additional strikes.

# Flystrike management - publications

[www.wool.com/flystrikelatest](http://www.wool.com/flystrikelatest)



**AWI makes available publications about flystrike management and prevention on its website at [www.wool.com/flystrikelatest](http://www.wool.com/flystrikelatest)**

Here is a selection of the available publications:



## RESISTANCE MANAGEMENT STRATEGY FOR THE AUSTRALIAN SHEEP BLOWFLY

(April 2019)

This 4-page document outlines the strategy you can adopt to prudently manage flystrike insecticides, ensuring you maintain protection for your flock whilst preventing or slowing the development of resistance within your local fly populations.



## MANAGING BREECH FLYSTRIKE

(February 2019)

This 44-page manual is designed to help woolgrowers further reduce their flock's flystrike risk. It includes coverage of management options, breech modification, scouring and worm control, breeding for breech strike resistance and moving to a non mulesed enterprise.



## DEALING WITH DAGS MANUAL AND FACTSHEET

(August 2019)

This 44-page manual for advisors, and 2-page summary factsheet for woolgrowers, review the causes, diagnosis, management and treatment of dags and provides a guide to manage and prevent scouring and dag formation.



## ANAESTHETICS AND ANALGESICS AT LAMB MARKING

(August 2021)

2-page fact sheet.

## ANAESTHETICS AND ANALGESICS

(December 2019)

4-page summary article from *Beyond the Bale*.



## AWI'S BREECH FLYSTRIKE R&D TECHNICAL UPDATES

(May 2020)

Project summaries from AWI's Flystrike R&D Technical Updates events: 2020, 2018, 2016, 2014, 2012 and 2010.



## LAMB MARKING TRAINING GUIDE

(June 2020)

This 80-page training guide will help you plan, prepare and conduct best welfare practice lamb marking procedures.

# Riding the 'perfect' Australian wave

**Flies thrive in warm, wet conditions. So, with higher-than-average rainfall forecast for much of eastern Australia this spring, there is potentially a greater than usual flystrike risk. Now is the time to implement your annual flystrike management plan – and if you haven't got one, it is best to develop one quickly because a wave of blowflies could soon be on its way.**

risk, whereas short tails can contribute to animal welfare issues including rectal prolapses and cancers. The recommendation is to dock the tail immediately below the third palpable joint, or ensure the healed tail just covers the vulva in ewes.

### 3. Select rams with low breech wrinkle, breech cover and dag

Selection for lower wrinkle, dag and cover in both rams and ewes will reduce the risk of breech strike, and is a practical step that you can take this year when choosing rams to purchase.

For more information, see the Breeding and Selection section on FlyBoss ([www.flyboss.com.au](http://www.flyboss.com.au)).

### 4. Managing dags and stain

Dags are a major risk factor for breech flystrike, especially in winter rainfall dominant areas. Practical steps you can take this spring include well timed crutching to avoid dags, crutching sheep with dags, managing worm burdens by completing a *WormTest* (also known as a Worm Egg Count Test) and, if required, a strategic drench, and optimising nutrition to reduce scouring.

For more information on *WormTests* visit WormBoss ([www.wormboss.com.au](http://www.wormboss.com.au)).

### 5. Preventative chemicals

Before choosing what product to use and when to use it, it is important to determine when your high-risk flystrike periods are, how the timing of shearing and crutching reduces the risk and length of your risk periods, when you may need to sell or shear sheep (withhold periods) and what application method suits your system best. The FlyBoss website has an interactive decision-support tool into which you can input your geographical location, shearing and crutching dates and product choices, to visually model your flock's flystrike risk. The tool is available via the homepage of FlyBoss ([www.flyboss.com.au](http://www.flyboss.com.au)).

AWI has produced a webinar and associated fact sheets which provide flystrike advice to woolgrowers managing their flock under high-risk fly conditions (see page 42).

As the days heat up and the spring storms roll in, blowfly (*Lucilia cuprina*) larvae are beginning to emerge from the ground. Temperatures of more than 17°C increase fly activity following winter hibernation. Low to moderate wind speeds and a moist fleece create optimal blowfly wave conditions. As the blowfly lifecycle is 2.5–3 weeks in warm weather, woolgrowers can expect to see blowfly populations boom three weeks after a significant spring or summer storm.

Early prevention of flystrike is key to minimising welfare and economic threats, so it's now time to start your annual flystrike management plan.

Key components of your plan should consider:

### 1. Time of crutching, shearing and lambing

The time of lambing is arguably one of the most significant husbandry decisions any woolgrower will make. Depending on the system, there will be different risk factors including:

- Autumn lambers will need care over the joining period and weaned lambs will need care into their first spring. In this system, woolgrowers also need to consider the rams – if you are shearing rams pre-joining, do this at least six weeks prior to ensure semen quality is not affected by handling.
- Spring lambers will need care over the lambing period and lambs may need care into the autumn.

It is advisable to discuss labour availability with your shearing contractor if you are considering changing your time of shearing or crutching, or increasing the frequency of shearing.

### 2. Breech modification and tail docking length

Many woolgrowers are now looking at what is required to reduce their reliance on mulesing and options for the provision of analgesia and local anaesthesia in the interim. Considerations for reducing your reliance on mulesing include your flystrike risk intensity and period, the susceptibility of your current flock, what breeding objectives your flock needs to achieve to suitably reduce the risk, and chemical and physical management tools that can be implemented to reduce risk during peak blowfly seasons.

For more information on how to reduce reliance on mulesing, visit the FlyBoss website [www.flyboss.com.au](http://www.flyboss.com.au). It is highly recommended to work with your local veterinarian to help you plan your flystrike control strategy.

Analgesia and local anaesthetics are now widely used for mulesing and, in Victoria, a legislative requirement.

The main types used for castration, tail docking and/or the mulesing procedure are local anaesthetic (Tri-Solfen® and NumOcaïne®) and analgesic non-steroidal-anti-inflammatories (NSAID) (meloxicam products, such as Metacam® and Buccalgesic®). Local anaesthesia generally has a more rapid onset, but the length of duration or action is less than a NSAID. In trials it has been established that using both a local anaesthetic and a NSAID increases the amount and duration of relief from pain. It is recommended to discuss your flock's analgesia options with your local veterinarian at least two to four weeks prior to your planned lamb marking.

Care in the tail docking length is important. Long tails can contribute to stain around the breech and subsequent flystrike

The It's Fly Time! webinar recording is available to view online for all woolgrowers across the country. The webinar provides tips for preventing flystrike, information on prioritising sheep for monitoring and treatment, and options for treating sheep

when flystrike does occur. See the AWI website at [www.wool.com/flystrikeresources](http://www.wool.com/flystrikeresources) to access the resources.



**More information**  
[www.flyboss.com.au](http://www.flyboss.com.au)

## wormboss

### How hot is your summer drench?

A summer drench is an effective tool to help reduce worm numbers in many flocks across the country, but a summer drench is not always recommended if you have summer dominant rainfall or if you are from a pastoral zone.

For current recommendations for your area visit the ParaBoss website at [www.paraboss.com.au/news/outlooks.php](http://www.paraboss.com.au/news/outlooks.php)

**More information**  
[www.wormboss.com.au](http://www.wormboss.com.au)

## liceboss

### Lice and purchasing in restockers

With spring restocker sales upon us, it is always a good idea to check for signs of lice in the sheep you are looking to purchase. This can be difficult if they have been recently shorn, so a few things you can do to help reduce the risk of introducing lice to your flock are:

- Ask for a National Sheep Health Declaration (NSHD) and look specifically at question 5 (is the flock free from lice) and Section C (external parasite treatment history).
- Keep purchased-in mobs away from your other mobs for at least 6-7 months as it can take up to six months to identify a lice infestation.

When sheep are yarded, inspect sheep for signs of lice. Part the wool ten times down each side and focus on areas around the neck, shoulders and flank. Lice don't like light so may move down the wool fibre closer to the skin.

**More information**  
For more information on preventing and detecting lice, visit LiceBoss at [www.liceboss.com.au](http://www.liceboss.com.au).

## paraboss

### Best practice advice for managing sheep parasites

Collectively, the three Boss websites – WormBoss, FlyBoss and LiceBoss – promote **best practice for the management of sheep parasites** at the farm level, developed by a community of veterinary experts and parasitologists from across Australia and supported by the sheep industry.

The collective ParaBoss tools are accompanied by a free, **twice-monthly newsletter** which discusses the current state of sheep parasites nationally, explores issues most pressing on-farm, and provides an update on timely and effective management strategies. Sign up to receive newsletters and tap into the expertise of the ParaBoss network at [www.paraboss.com.au/subscriptions](http://www.paraboss.com.au/subscriptions).

Also, **join ParaBoss on Facebook** at [www.facebook.com/paraboss.com.au](http://www.facebook.com/paraboss.com.au) to see regular posts on flystrike, lice and worm control.

ParaBoss is funded by AWI and MLA and coordinated by the University of New England with industry oversight.



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# Pneumonia in lambs

## Breathing easy brings benefits

Pneumonia, the infection and inflammation of the lungs, can result in lower growth and productivity of lambs, as well as trimming from carcasses at the abattoir. However, a simple new test kit to determine if a flock is infected with *Mycoplasma* is now available to producers, which can help them with flock management.

Research has shown pleurisy/pneumonia is common in all breeds of sheep in Australia and may result in around one kilogram being trimmed from lamb carcasses at the abattoir.

Sheep veterinarian Dr Joan Lloyd, who has extensively researched the incidence of sheep pneumonia, said *Mycoplasma ovipneumoniae* bacteria was first isolated from two large sheep flocks in southern Queensland in the 1960s.

"The sheep flocks had shown poor growth rates and reduced exercise tolerance for some years," Dr Lloyd said.

"In that early research, the researchers concluded that: 'The probability is that lambs in Australia may be infected shortly after birth with a *Mycoplasma* and develop a proliferative interstitial pneumonia, but that

obvious clinical signs of pneumonia are not detected for some months.'"

Dr Lloyd said this early conclusion remains a good explanation of what happens and that pneumonia often becomes evident after critical moments in a lamb's life, such as marking, weaning, first shearing, or entry into a feedlot.

"It is more prevalent during hot, dry and windy weather," she said. "Raised dust is a significant risk factor, as is smoke.

"When stress from adverse weather conditions, mixing groups of lambs and sheep, overcrowding and transport occur on top of an existing *Mycoplasma ovipneumoniae* or viral infection, the sheep's immune system is suppressed," Dr Lloyd said.

"When this happens, other bacteria that normally live inside the nose and throat of sheep without causing harm, colonise the trachea and bronchi, where they grow and secrete toxins. These toxins cause inflammation and tissue destruction, and acute bronchopneumonia develops.

"We call this ORC – ovine respiratory complex."

### Lost productivity

Sheep presenting at abattoirs may need to be significantly trimmed to remove lung tissue affected by disease, a condition called pleurisy. In one survey Dr Lloyd conducted, half of 227 consignments had at least one carcass affected by pleurisy.

"On average, pleurisy affected 2.2% of carcasses within affected lines," Dr Lloyd said. "Trimming for pleurisy resulted in rib removal in two-thirds of 101 carcasses examined, with an average trim weight of 1.0 kg."

Other research has shown that even in the absence of obvious respiratory disease, *Mycoplasma ovipneumoniae* may reduce the growth and productivity of lambs.

"Flocks that test positive to *Mycoplasma ovipneumoniae* had

significantly lower lambing rates and lower rates of lamb survival to weaning," Dr Lloyd said.

"It has been estimated that *Mycoplasma ovipneumoniae* presence was associated with a 4.3% reduction in annual lamb production.

"At harvest, lambs from ewes that were not infected were found to have higher yield and quality carcass grades, and fat score and dressing percentage."

### Testing available

Dr Lloyd has developed a test kit, available at [www.joanlloydconsulting.com](http://www.joanlloydconsulting.com), that producers can use to determine if their flocks are infected with *Mycoplasma*. The kits contain nasal swabs that are used to collect a sample from the nostrils of your sheep.

"The swabs are easy to use and don't require any prior experience in order to use effectively," she said. "As they are fast drying, the collected sample is conserved and provides a high-quality sample for the lab to test.

"Once collected, samples can be placed in the prepaid mailing satchel in the kit, then mailed back to us. As they can be transported and stored without refrigeration, it is simple, cost-effective, and fast.

"In the lab, DNA is then extracted from the swabs and tested for *Mycoplasma ovipneumoniae*. Your results are available within 24-48 hours of sample receipt at the lab, and you will be notified when ready."

If tests reveal that the flock is free of *Mycoplasma ovipneumoniae*, the aim is to stay that way. Dr Lloyd said this is best achieved by practicing high levels of farm biosecurity.

"Quarantine and test all new arrivals," she said. "It is also important to reduce fence-line contact with other sheep and goats, as they may be carriers."



**The Sheep Pneumonia Sample Collection Kit**, available to purchase from [www.joanlloydconsulting.com](http://www.joanlloydconsulting.com), can be used to find out if *Mycoplasma ovipneumoniae* is present in a flock.



If tests reveal that the flock is infected with *Mycoplasma ovipneumoniae*, that means your lambs and sheep are at increased risk of clinical pneumonia.

Dr Lloyd said an important management option is to reduce or separate other stressors that increase the risk of pneumonia.

"Culling chronically infected ewes is often necessary to significantly reduce the disease incidence in the flock," Dr Lloyd said.

"With chronic infection, the lungs are severely compromised and the infection is deeply embedded within the tissues. In this situation, it can be virtually impossible to treat with antibiotics as they will not penetrate into the infected tissue."

## Reducing stress

Jenny Bradley runs a mixed sheep enterprise near Gilgandra, NSW, with a Merino-based commercial flock and a Border Leicester stud breeding flock rams. When she lost lambs last spring and summer, autopsies conducted by a local vet identified pneumonia, which was particularly bad in the region last year.

"I listened to Joan Lloyd's podcast and things started to align," Ms Bradley said. "The key messages from Joan were most flocks have pneumonia and it is expressed when the flock is put under stress.

"I have to change my management strategies so I'm not stressing the sheep, particularly the younger animals."

Ms Bradley identified the most stressful times for her sheep as being around shearing and trucking, or weaning and shearing, in a tight time frame.

"Now, I shear and rest for two or three days, and then bring them in again to truck them. I'm a bit pedantic about sheep welfare.

"Our yards are all watered so there is no dust associated with yarding or drafting.

All operations are very measured and calculated to reduce stress on the animals."

Ms Bradley also ruled out all other potential causes of chronic wasting and ill thrift in the flock, and has learnt to look for signs that may indicate pneumonia.

"If there's an animal that's at the tail end of the flock and it's coughing, that sounds alarm bells," she said.

"I've slowly culled the non-performers, those type of sheep that show ill-thrift. To eradicate pneumonia completely would be an enormous cost, so we're working with management strategies.

"It's knowing what you've got. Now I know, I can keep an eye on it."

## Treatment and management

Dr Lloyd recommends producers speak to their veterinarians to discuss treatment options for animals that develop clinical pneumonia, and also to develop strategies to reduce the prevalence of infection over time.

"There is published information from research overseas, which discusses the importance of treating lambs for the health of the whole flock," she said. Treatment of lambs early in life, for example at marking and/or weaning is likely to be more successful than treating older animals because the infections are not as chronic.

"After weaning, treated lambs should be kept separate from older animals," she said. "At the same time, culling ewes and rams based on respiratory signs can start. After a couple of years of this, once there are enough treated ewe replacements available, all untreated ewes and rams can be culled."

Dr Lloyd said some producers have reported significant losses in young stud rams, with animals dying over summer.



**Jenny Bradley** runs a mixed sheep enterprise near Gilgandra in NSW and has management strategies to minimise pneumonia in her flock.

"Large numbers of animals dying is a significant welfare issue," she said. "In this situation, the animals should receive antibiotic/anti-inflammatory treatments, although it may be too late to cure all of them."

### More information

- View a recording of an April 2021 webinar on lamb pneumonia, featuring Dr Lloyd, on the Sheep Connect NSW website at [www.sheepconnectnsw.com.au/events/891](http://www.sheepconnectnsw.com.au/events/891)
- For more information and to order a Sheep Pneumonia Sample Collection Kit, visit [www.joanlloydconsulting.com](http://www.joanlloydconsulting.com)

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# Using technology to help prevent shearing injuries

**Shearers stretching between runs.** AWI is funding the research and development of a wearable sensing unit that will alert shearers to when they are potentially at risk of a back injury, so they can take precautionary action such as stretching.

**Pioneering high-tech research to help prevent shearers' back injuries continues, thanks to funding from AWI and a Federal Government grant. The research, undertaken by the University of Melbourne, aims to develop a simple wearable sensing unit able to be easily worn by shearers that will alert them when they are becoming vulnerable to back injuries.**

Attracting and retaining shearers is one of the biggest challenges facing woolgrowers and the industry. A major factor is that shearing can be a 'back-breaking' profession, with injuries to shearers being six times the all-industry average in Australia. Back injuries are the most significant shearing injury due to their long rehabilitation time and associated lost productivity.

A new nine-month project, which began in June and is co-funded by AWI and an Innovation Connections grant from the Federal Government, builds on previous work to understand the cause of shearing injuries, which was funded by AWI and undertaken by the University of Melbourne's robotics team.

## Previous research identified the predictors of back injuries

The previous research indicates that back injuries during shearing are generally caused by fatigue, the cumulative loading on muscles over time, rather than high individual forces. Additionally, the most common time of injury for shearers is during the last two hours of a day's work, indicating a high correlation between injuries and the level of fatigue.

The research was undertaken on ten shearers of varying experience across three states in authentic shearing conditions and across full workdays to reflect realistic workloads.

Although the previous study successfully identified the particular muscle activities and postures that are most useful in predicting the development of back injuries, it used 'research grade' sensors on the shearers to monitor and collect data. The complexity and cost of these sensors make them impractical for continuous monitoring of a shearer's musculoskeletal system.

## Developing a practical wearable sensing unit

The new project is therefore focussed on developing a simple and easy to use sensor system, with only four (key) sensors, that is portable and easily worn by the shearers in real working conditions, rather than a complicated full-body system that requires expertise and a long set-up/calibration process.

The sensing unit worn by the shearers will alert them via a smartphone app when they are becoming vulnerable to potential injuries and can propose optimal resting cycles. The hardware and software will be tested for ease of use and robustness in the harsh conditions inside shearing sheds, such as in the presence of dust and sweat.

The simplified unit will be validated across a pool of shearers under different working conditions. It will also help the researchers to collect more data under different circumstances to improve the prediction algorithms, test some strategies such as stretches/exercises and inform the design of assistive technology that

would support the shearers in performing their tasks.

Given that shearers are paid by the number of sheep shorn per day, the researchers are aware that any proposed new safety solutions should minimise any disruption to the shearer's mobility and shearing speed. Furthermore, the fact that shearers travel to many different properties for work and utilise woolgrowers' infrastructure needs to be considered in the development of potential injury-mitigation solutions.

## Reducing shearer injuries will help alleviate shortages

"The high injury risk of shearing makes it challenging to recruit new workers and it also limits the longevity of the current workforce. This reduces the availability of sufficient shearers, which has been identified by woolgrowers as a major risk for the industry," said AWI Program Manager for Agri-Technology, Carolina Diaz.

"AWI-funded research has already added a significant body of data and knowledge to help us better understand how back-related shearing injuries arise. Having identified the variables most effective as predictors of injury risk, the new project will develop a simple wearable unit that incorporates sensors in only the most optimum locations, which will help the unit be practical, cost-effective and suitable for shearers to wear.

"By alerting shearers when they are becoming at risk of a back injury, the shearer can take precautionary action such as changes in their warm-up and stretching exercises, and changes in the rest-work cycle.

"Ultimately, the project aims to reduce the amount and severity of shearers' back injuries, which will benefit the wool-growing industry as well as shearers."



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Shearer **Josh Sneath** with the prototype of the unit, showing how the sheep has been delivered directly to him, ready to start shearing. The empty unit is automatically returning to its position behind the board, for the next sheep.



**Glenn Haynes** and **Josh Sneath** observing a sheep in the race section, from which the sheep is delivered to the board.

# Modular sheep delivery unit to eliminate catch and drag

As part of a new AWI project, a mechanical system is under development that delivers the sheep to the shearer, thereby eliminating the catch and drag from the pen. This minimises the chance of injury to the shearer and the sheep whilst also maximising productivity with significantly reduced handling times.

- Question:** Which process impacts the efficiency of wool harvesting the most?  
**Answer:** The catch and drag.
- Question:** During which process do most shearing injuries occur?  
**Answer:** The catch and drag.

"These negative impacts of the catch and drag are the motivation behind a new AWI project that is developing an alternative system in which sheep are delivered from a race directly to the shearer," said AWI CEO Stuart McCullough.

"Significantly, the new system will not only eliminate the time and energy that shearers spend having to walk to the pen, catch a sheep and drag it back to the shearing stand, but it also minimises the chance of injury to the shearer from the dragging and twisting movements."

Overall, the AWI-funded project aims to produce a design for the workplace that:

- improves **efficiency** for workers, and the flow of livestock
- provides **safety** for workers
- enables **quality wool** preparation

- provides minimal risk to the **welfare** of livestock
- minimises the **cost** of equipment and ease of uptake
- is **compatible** with existing equipment, harvesting systems and skill sets.

The project is the brainchild of AWI's Stephen Feighan and SCAA Training's Glenn Haynes and is progressing well under the guidance of a number highly experienced AWI Shearer Trainers – Shannon Warnest, Paul Oster and Wayne Hosie – all of whom are renowned shearers and have considerable hands-on experience in sheds and on other shearing race delivery systems across the world. They know the practicalities of what works and what doesn't.

The design focuses on a 'modular' concept in which portable singular shearing stands can be joined together to make a multi-stand shearing platform, which can be stored away after use. Added design elements will allow for straight board or U-shape configuration.

Former world champion shearer Shannon Warnest, who initially came up



When ready for a sheep to be delivered, the shearer presses a button for the section containing a sheep to slide out towards him.



The pneumatically powered race section moving onto the board towards the shearer.



The section then gently tilts the sheep onto the board, into a position suitable for the shearer to hold it.

with the tilting delivery unit concept, said: "Everyone involved in this project is rapt with the progress. We've also made sure to get feedback from a number of other practical, experienced shearers and some growers who are looking to upgrade their sheds.

"We've had a few people shaking their head when they first see it – but not for long."

Stuart added: "This is an additional harvesting option, especially suitable for woolgrowers that might have been planning to renovate an old shearing shed or build a new a multi-purpose shed.

"Building a brand-new shed is a big undertaking, in terms of cost, time and energy, especially when it's often only used for a few weeks of the year. A portable, modular system could be cheaper and easier – and by eliminating the catch and drag from the pen it also provides a more efficient and safe environment for the shearer.

"It's vital for the future of wool-growing industry that harvesting workplaces have a modern environment, such as this, to attract workers into the industry and retain the current workforce."

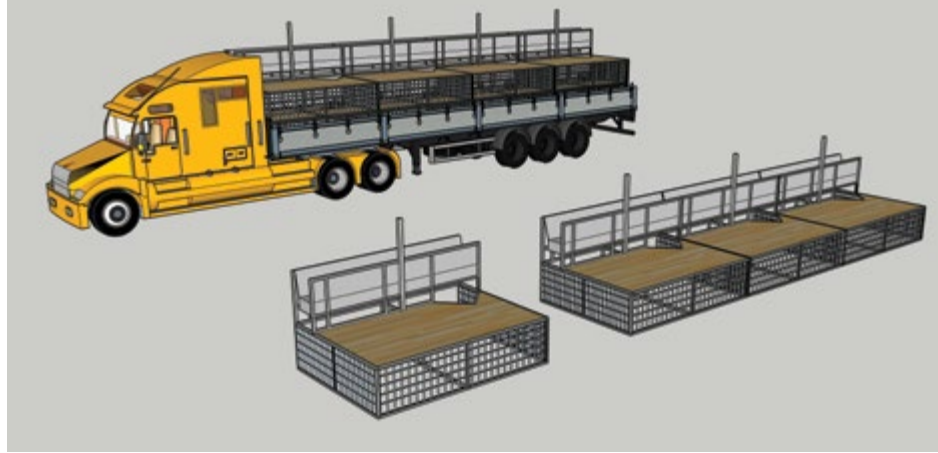
## The delivery system

The design incorporates a pneumatically powered race section on which the sheep is delivered to the shearer, removing the catch and drag from a pen.

Each modular unit will hold three sheep in a race at the back of the unit. A dummy pen is fitted onto the end of the race to assist with the flow of the sheep.

When the shearer is ready for a sheep to be delivered, he/she presses a button and the section containing a sheep clamps the sheep securely and slides out onto the board towards the shearer. The section then tilts the sheep into a position suitable for the shearer to then hold the animal.

The sheep is then mechanically released and slides the short distance to the



The new system is based on a **modular design** in which single units can be connected to other units at shearing time and moved away afterwards

shearing platform, at an angle suitable for the shearer to start shearing straight away. Unlike upright shearing units, the shearer does not have to learn any new shearing technique or blow patterns with this system.

Once shorn, an angled shoot allows for simple release of the shorn sheep underneath the race – again without significant dragging or twisting.

By minimising the catch and drag, it is estimated that the system could save the typical shearer approximately 10 to 20 seconds per sheep, which on average could add up to about three-quarters of an hour each day.

## A portable, modular system

Each modular one-stand unit will be able to be connected to other one-stand units to make a multi-stand shearing platform, the size of which depends on the number of shearing stands required. Initial cost modelling shows the individual units to be available to growers for approximately \$18,000, which would be a very attractive option when fitting out a shearing shed. This

has the potential to be reduced further with broader uptake from manufacturers.

Being easily portable, the modular units can be transported to other sheds, be that on the same or other properties. They could be used in any multi-purpose machinery shed and can be relocated with a forklift when not in use.

The potential benefits for woolgrowers and the industry include:

- increased attraction and retention of shearers to the industry
- decrease in shearer injuries
- cost effective option when upgrading infrastructure
- provides an avenue for multi-purpose sheds.

Further development and testing of the unit(s) is continuing and AWI will make available the design and specifications, so interested woolgrowers or manufacturers can adopt and potentially further enhance the concept. This approach is similar to AWI's Arrow Park Shed Design project, which has now been replicated about 50 times by growers and builders across the country since 2019. B



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# AWI-funded in-shed wool harvesting courses

**AWI funds training for shearers and wool handlers to attract and retain new entrants into the wool harvesting industry, build the capacity and longevity of existing staff, and increase returns to woolgrowers through improved clip preparation practices.**

**A**dequate numbers of highly skilled professional staff to harvest and handle a high-quality Australian wool clip in a timely manner are key to the profitability of the Australian wool industry.

AWI therefore funds hands-on practical training for shearers and wool handlers in the shed, aimed at increasing their productivity, skills development and professionalism. Training covers a wide range of experience, from learner to professional shearers and novice to professional wool handlers.

In the 2020/21 financial year, 1,614 days training were delivered (with more than 4,143 attendances by shearers and wool handlers) through AWI-funded programs across Australia.

Due to the current shortage of and demand for shearers, there is a concerted effort to run extra novice and improver schools and workshops, funded by AWI and several state governments.

Best practice in shearing sheds results in a high-quality wool clip and the health and wellbeing of both professionals and sheep.

AWI thanks all the woolgrowers who provide their facilities and sheep, and all the other organisations and individuals that lend their time and resources to help run this training. **B**

## More information

To arrange training in your state, phone AWI on 1800 SHEARS or email [swt@wool.com](mailto:swt@wool.com).



The new six-stand **Jamestown** Shearer Training Centre, South Australia: AWI funded an improver/advanced 'Shear n Gear' workshop on the day before a five-day training course in June, co-funded with SCAA Shearer Woolhandler Training with assistance from the Jamestown Show Sheep & Wool Committee.

## Training is providing results but more is needed

A recent survey of (mainly) shearing contractors across Australia has revealed that more than 70% of all training in shearing sheds across the country was undertaken by AWI-funded trainers. The results also indicate that training is well appreciated.

- 94% said the training was delivered in a timely manner.
- 71% rated the quality of the training 5/5, while a further 20% rated it 4/5.
- 63% were "very satisfied" with the training, while a further 27% were "satisfied".

However, the survey indicated that there is still a need for more training, with 71% intending to have some training in

the next 12 months. Furthermore, a lack of training opportunities (ie not enough schools) is viewed by respondents as the second largest barrier to attracting and keeping new workers in the wool harvesting industry.

**The working conditions in sheds was seen as the primary barrier, especially in NSW.** Seen as less of a barrier were the cost to contractors of employing a novice shearer and the lack of recognised qualifications after completing training.

The national survey was run during April by AWI and the WA Shearing Industry Association (WASIA); there were 139 respondents, across all states.

## Best practice preparation for shearing

**P**reparing your flock properly will help ensure a successful harvesting of your sheep's wool. AWI has prepared some advice for woolgrowers to consider **prior** to shearing. Some of the key points include:

1. **Shear at the 'optimum' time of the year.** Things to consider include the physiological state of the sheep, likely available feed and body condition, optimal tensile strength and position of break, seasonal conditions, weather and available shelter.

2. **Always curfew sheep prior to shearing.** 'Full' sheep are harder to handle and keep comfortable during shearing.
3. **Sheep shorn annually should always be crutched prior to shearing.**
4. **Sheep shorn more frequently (6 or 8 months) will often have little or no requirement for crutching,** at least on a whole flock or mob basis. However, be prepared to crutch, bung-hole or part shear individual animals if they require it.
5. **Handle sheep to minimise stress.**

6. **Prepare as much as possible to prevent shearing cuts** and also prepare for their treatment.

7. **Consider your wool harvesting staff.** Things to consider include shed safety, quality facilities, an efficient working environment and good communication. **B**

## More information

To view the full advice, visit the AWI website at [www.wool.com/shearingprep](http://www.wool.com/shearingprep)

# Vigilance needed to 'Keep the Clip Clean'

Woolgrowers can help preserve Australia's reputation for producing a quality clip by being vigilant about preventing contamination. Contamination can be a major issue for wool processors and can attract discounts if it is identified prior to the clip's sale.



A shirt found in a processed batch (left) in China and the effect on the wool top (right).

The Australian wool clip is recognised worldwide for its high quality. However, to maintain this good reputation, it is important that Australian woolgrowers continue to be committed to preventing any contamination to their clip during the wool harvesting operation. Woolgrowers should discuss strategies to prevent contamination with the wool classer and the contractor before shearing.

AWEX CEO Mark Grave says the confidence of wool processors in Australian wool is paramount to the industry.

"A best practice approach to wool production exists in most Australian wool-growing properties and with wool preparation professionals, but contamination is a topic that the industry can never be complacent about," Mark said.

"Everybody involved in wool production and shearing should be aware of the impact and cost that contamination has on wool processors and the reputation of Australian wool, so they must be vigilant and focus on the quality of wool and wool preparation."

## Non-wool contaminants

Hard contaminants can cause major machinery breakdowns. The most common hard contaminants found in pressed bales of wool are combs and cutters, screwdrivers, bale fasteners, bale hooks, small tools and drink cans. Hard contamination is the easiest type to detect and care must be taken to ensure they do not end up in the bale.

The major soft non-wool contaminants

include dog hair, clothing, towels, grease rags, general rubbish and vegetable matter. Any polypropylene products – baling twine, old wool packs and fertiliser bags – are a particular problem.

When wool is processed, any non-wool fibres will break up into many single fibres that spread throughout the processing batch. These fibres can only be removed by hand picking in the fabric stage at great cost to the manufacturer. The entire wool batch being processed – up to 10,000 kg – can be affected by one small piece of baling twine.

## Wool contaminants

Wool contaminants include urine/dung and other stains. Stain is discolouration that has combined with the structure of the wool fibre. It is permanent and cannot be removed by scouring. The intensity of the stain determines the dye colour needed to over-dye the stain, limiting its end use and reducing the value of the greasy wool. The risk of contamination from urine stain can be greatly reduced by crutching sheep, ideally within three months of shearing.

Dark and medullated fibres in wool also affect processing performance and the quality of the final product. Only small amounts of dark and medullated fibres are needed to contaminate wool. Just one staple of dark wool in one bale of white wool is sufficient to prevent that wool being used for light-coloured cloth or yarn. Medullated fibres are hollow and do not take up dye, are very coarse and appear as white fibres in dyed garments.

## TIPS TO ELIMINATE CONTAMINATION IN THE SHED

- Store tools, clothing, towels and shearing gear and bale branding supplies away from wool handling areas.
- Remove all poly products found.
- Never use fertiliser bags as bulk class bale dividers.
- Keep the wool press area, wool room, shearing board and sheep pens clean.
- Don't eat in the wool handling areas.
- Use rubbish bins.
- Don't let dogs camp in the wool areas.
- Any dark breeds or shedding breeds must be kept completely separate from Merinos and be shorn after all the Merinos are shorn.

# Hands-on & practical stockmanship training



The 16 young participants in the 2021 program at **Burrabogie**, pictured with (from the left) Hay Inc past chairman, **Chris Bowman**, who is a Merino sheep classer and Hay Inc volunteer trainer; AWI sheep industry specialist, **Stuart Hodgson**; and Hay Inc program manager, **Sandra Ireson**. PHOTO: Mads Porter Photography

2022 Rural Education Program applications now open

[www.hayinc.com.au](http://www.hayinc.com.au)



The 16 young participants learning how to manage working dogs during training at **Shear Outback** in Hay, with trainers **Edward McFarland** and **Geoff McDougall**.

**With the support of AWI, the Hay Inc Rural Education Program in the Hay district of NSW continues to help young people gain hands-on agricultural skills, training and experience.**

The 16 young participants in the 2021 Hay Inc Rural Education Program came to together in June for their third and final training week, which was followed by their graduation at the Hay Merino Sheep Show.

The Hay Inc Rural Education Program was launched in 2014 with support from AWI in response to concerns about the decline in the traditional jackaroo/jillaroo system in the western Riverina district of NSW and the associated lack of stockmanship and other essential rural skills being handed down to the younger generation.

"Through the Hay Inc program, young people are now being given the opportunity to learn the practical agricultural skills needed for them to get jobs on rural properties. It focuses on wool and livestock production and takes place in a practical setting in partnership with local woolgrowers," said program manager Sandra Ireson.

"The program is delivered by trainers who have many years of experience on extensive rural properties, covering topics based around the production calendar for sheep, wool production and cattle."

**Applications for the 2022 training program are now open.** Employers can send their employees on the program or other interested young people can apply directly. Applicants can be from anywhere and do not have to be from the Hay district.

## Practical and hands-on training

The Hay Inc program is a three-week course, in three blocks of five days' training, usually spread over a nine-month period. Topics covered include sheep handling and yard work, shearing and wool shed management, sheep health and nutrition, Merino sheep

classing, working dog training, livestock water maintenance, fence construction and maintenance, and small engine and motorbike maintenance.

AWI has supported the Hay Inc program each year since its inception and will be supporting the 2022 program. The application form for those aged 18 to 25 years is available on the Hay Inc website.

"Our funding in programs like this aims to help improve the engagement of young people interested in the wool industry, thereby developing and retaining the skills the wool industry needs to be innovative in response to new challenges," said AWI CEO Stuart McCullough.

## How to replicate the training program in your community

A 20-page manual that shows how the Hay community came together to establish the Hay Inc Rural Education Program was developed and issued in 2019 by Sandra Ireson. It provides a model that can be adapted and implemented in other rural communities across Australia.

The manual is available on the Hay Inc website [www.hayinc.com.au](http://www.hayinc.com.au) (click the Engage Ag logo in the top-right of the home-page screen) or contact Sandra Ireson directly at [engageagi@gmail.com](mailto:engageagi@gmail.com) or on 0439 938 119. **B**

More information  
[www.hayinc.com.au](http://www.hayinc.com.au)

**HAYINC.**  
RURAL EDUCATION



Chris Bowman and Stuart Hodgson teaching Merino sheep classing.

# Hay Inc graduate is proof of the program's worth

**Rose Nevinson completed the Hay Inc training program in 2017 and was so impressed with it that she has since gone on and joined its committee.**

Rose Nevinson grew up on a Merino sheep station in between Hay and Deniliquin where her family has been for 125 years. She graduated from the Hay Inc Rural Education Program in 2017 while she was working at 'Warwillah Station' where she also completed her Certificate IV in Agriculture.

Since 2019 she has been working as a wool buyer for Seig Sheep & Wool which is a locally owned and operated woolstore in Deniliquin. However, she now also has a flock of Merino sheep of her own and breeds her own rams.

"I started in 2014 with 31 Merino ewes, and now I have 100 Merino sheep," the 23-year-old said.

"I am hoping this year to finally become a stud. I've been breeding my own rams which I will be looking to sell in the future. It's something I have been working up to for a number of years; it's a passion project really."

Rose says the practical approach to learning from experienced local trainers is a strength of the Hay Inc training program.

"In my first year out of school I was working on a couple of different stations around home (at Booroorban); I had also done a few courses at ag college. But the Hay Inc instructors are so knowledgeable – having been on the farm and in the industry so long



Rose Nevinson, who completed the Hay Inc program in 2017, presenting wool handling to the 2021 program participants, at Paraway Pastoral's 'Steam Plains' property. PHOTO: Melanie Williams, Tocal College

themselves – and I knew I could learn even more from them. Hay Inc is great in that it's not like going to school; it's hands-on learning," she said.

Rose joined the Hay Inc committee two years ago, and as Hay Inc is always looking at ways to improve the program, she suggested that wool handling should be in the program.

"When I went through Hay Inc we did the shearing and crutching school, and it's still part of the program today, but it was not until I started working a Seig Sheep & Wool in Deniliquin that I realised just how important it is to know about wool handling too," she said.

"It is important to know about clip preparation, because by doing so you are able to achieve higher premiums for the woolgrowers' product. It's about knowing how to skirt your fleece, and keep everything from bellies, pieces, crutchings etc separate, and realising that vegetable matter and yield play a big part in affecting value.

"Most jack and jillaroos would be mustering or doing yard work, but learning how to prepare a clip will prepare the participants for anything and will enable them to help whoever they are working for to improve value."

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# Horizon Scholarship

**Caitlin Morgan from the Mornington Peninsula of Victoria is the 2021 recipient of a Horizon Scholarship sponsored by AWI, in recognition of her leadership potential and commitment to Australian agriculture.**

The Horizon Scholarship is an initiative of AgriFutures Australia and aims to support the next generation of agricultural leaders.

Under the scholarship, AWI is supporting Caitlin throughout her Bachelor of Agriculture course at the University of Melbourne by providing her with a financial bursary and professional support in the form of mentoring, professional development workshops and two weeks of industry placement.

Caitlin aims to complete further studies in Veterinary Medicine.

"Throughout my childhood I was fortunate to spend a lot of time on my grandparents' farm in South Gippsland where my passion for agriculture began. This was further nurtured through my involvement and subsequent management of the successful Corriedale Sheep Stud



**Caitlin Morgan** is studying for a Bachelor of Agriculture at the University of Melbourne.

at Flinders Christian Community College. It was there that I quickly discovered my passion for the sheep and wool industry and for animal health," Caitlin said.

Caitlin has also been successful in junior judging and showmanship competitions at state and national levels, and she was part of the Flinders Christian Community College winning team in AWI's 2019 National Merino Challenge. **B**

#### More information

[www.agrifutures.com.au/horizon-scholarship](http://www.agrifutures.com.au/horizon-scholarship)

## Science and Innovation Awards

Applications for the 2022 Science and Innovation Awards for Young People in Agriculture close on 1 October. Each year the Department of Agriculture with its Award partners, including AWI, presents this competitive grants program for innovative research projects that will benefit Australia's agricultural industries.

The awards are open to young people aged 18 to 35 who are working or studying in rural industries.

#### More information

[www.wool.com/scienceawards](http://www.wool.com/scienceawards)

## Young Farming Champions for wool

AWI continue its longstanding partnership with Action for Agriculture (A4A) that identifies and trains emerging young leaders within the wool industry to be confident communicators and trusted voices in the community. Young people, aged between 20 and 30, are invited to apply for the Cultivate - Growing Young Leaders program. Graduates of the program join the Young Farming Champions alumni. Expressions of interest should be submitted by 30 September.

#### More information

[www.wool.com/yfc](http://www.wool.com/yfc)

**Applications are now open to young woolgrowers from across the country to join AWI's 2022 Breeding Leadership course in Clare, South Australia, aimed at helping foster the next generation of leaders within the wool industry.**

If you are passionate about your industry and want to develop your skills to make a difference in the future, AWI's Breeding Leadership professional development course is for you!

Breeding Leadership is designed for anyone 25 to 35 years old currently working in agriculture with a focus on the wool industry. Held every two years, the course is next being held from Monday 21st to Friday 25th February 2022 in Clare, South Australia.

It is an excellent opportunity to network with more than 20 like-minded people from across Australia. Participants will get the opportunity to learn from skilled deliverers and be trained in areas such as people management, corporate governance, strategic planning and time management. The week's events involve a mix of both classroom and field-work and, as well as excursions to stud and commercial operations, there will be an exposure to a variety of non-woolgrowing enterprises.



Participants at the 2020 Breeding Leadership course, pictured here with the **Meyer family** at **Mulloorie Merino Stud** in South Australia.

At the end of the course, participants will have developed foundation leadership skills that will enable them to become enthusiastic, influential, dynamic and dedicated leaders within the wool industry and their local community.

More than 175 young Australians have attended the course to date, with many previous participants now holding leadership positions within business and industry.

Breeding Leadership was established in 2002 by the South Australian Stud Merino Breeders Association and became a national

program through the Australian Association of Stud Merino Breeders in 2004. Since 2012 AWI has funded the course.

Participants are required to pay a course fee of \$440 (GST inclusive) which contributes to the cost of the program.

Applications close on Thursday 30 September. **B**

#### More information

The application form is available at [www.wool.com/breedingleadership](http://www.wool.com/breedingleadership)





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# Market Intelligence

The 2020/21 wool selling season featured a marked and positive turnaround in fortunes for woolgrowers. Both dominant factors of potential profit – price and production – saw exceptional increases. The volume and value of auction sales were well above the previous year.

Wool exports to China are returning to pre-COVID levels, and exports to the sub-continent and European destinations are also recovering. On top of these extremely positive factors, the Australian dollar also played its part and added additional worth to the value of raw wool exports.

## Australian wool production levels recovering

Wool production in the 2020/21 season was 7.6% higher than the previous year, reaching 318.2 million kgs (mkg).

General improvements in climatic conditions were a major factor in boosting on-farm production (see Figure 1), alongside one of the largest sheep movements seen from Western Australia to the eastern states. This retention option, rather than slaughter or ship, has helped stabilise the immediate and future national wool production and wool sheep population, with the vast majority of the stock shipped across being Merino ewes of breeding age or younger lambs.

NSW continues to produce more wool than any other Australian state, with more than 114mkg being tested for the 2020/21 season. This represents 36% of the national production. All states apart from WA had increases in volumes, with the largest percentage gain of +18.2% being recorded in Tasmania. Put in a global perspective, each of the top four wool producing states of Australia *individually* produce more wool than the entire production of our major Merino wool producing competitor (excluding China), South Africa, which produces 45mkg of all wool annually.

Favourable conditions developed mid-2020 in many wool-growing regions across the eastern and central states and drove a subsequent increase in cut per head. The average wool cut per head had been forecast by the Australian Wool Production Forecasting Committee to increase by 7.2% nationally to 4.43 kg greasy for the 2020/21 season, and that turned out to be met or exceeded which contributed largely to the production gains.

WA had a later break in the drought and reports are that the remaining sheep there are in good condition and are now expected to remain that way through winter. Costs on the open market for replacement ewes is largely considered excessive to profitability at current levels and many woolgrowers are choosing to breed replacements over time, so a restocking of that state's sheep population is expected to take time.

The 2020/21 season's increase in production (based on tested wool) has stopped the steep decline in production that was caused almost solely by drought since 2017/18; 65mkg had been lost in just two seasons. Prior to that downfall, production had been relatively

FIGURE 1: AUSTRALIAN WOOL PRODUCTION BY STATE IN THE 2020/21 SEASON

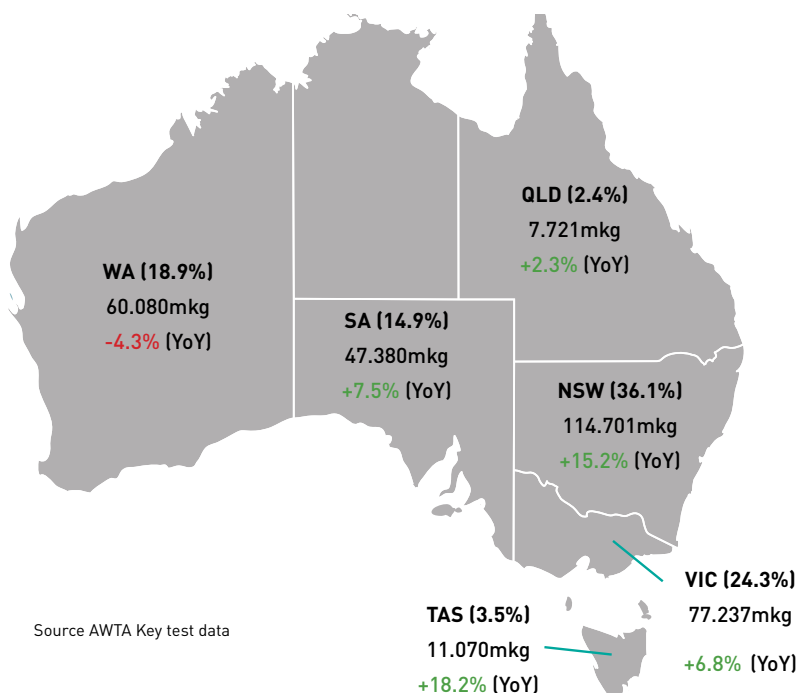
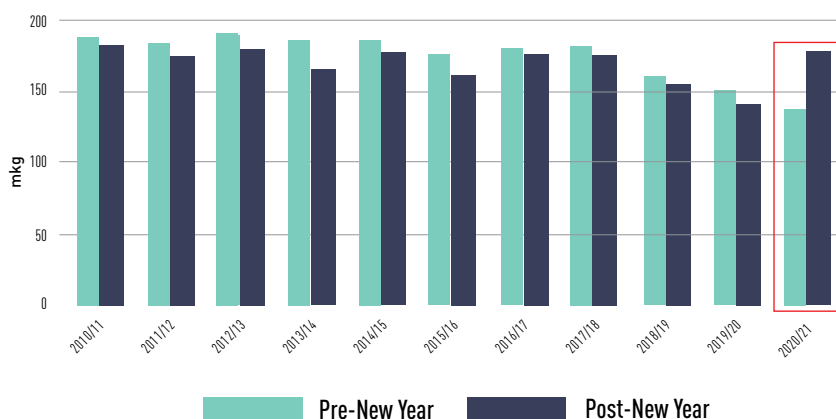


FIGURE 2: AUSTRALIAN WOOL TESTED PRE- AND POST-NEW YEAR



stable for eight years and a growth rate of 6% was recorded in the two seasons prior to the elongated drought.

The second half of the 2020/21 season witnessed a trend-breaking production scenario in which the first half volume of the season's wool tested by AWTA was outstripped significantly by the last six months. See Figure 2.

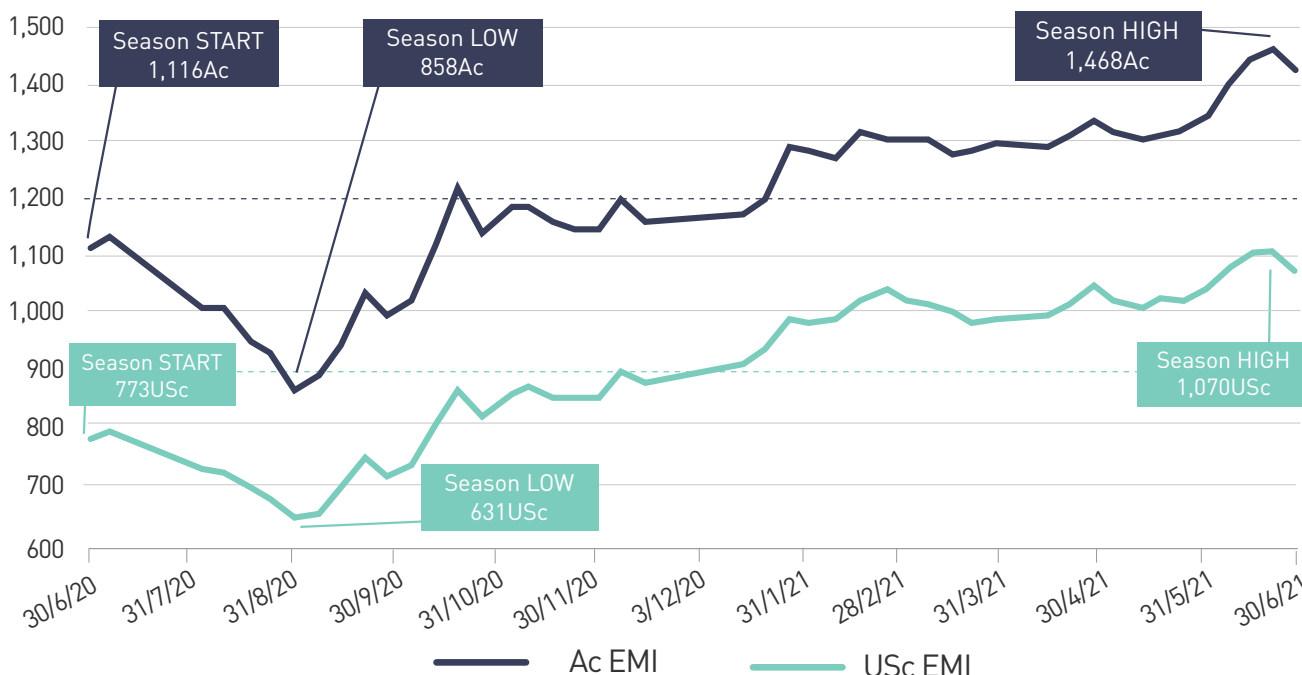
Many factors were in play to potentially distort the trends, including the impacts of COVID last year on the test house, shearing

operations/timings and warehouse access. Also, on-farm storage of bales built up due to the low prices of 2020 at the time. More recently, on-farm wool stock disposal has accelerated as growers choose to eliminate the threat and reality of mice chewing out the nylon wool packs of stored bales and move insurance risk to store instead of farm.

Prior to this season, the past 10 full seasons had seen the first half of the season averaging 51.42% of each season's total volume, with no season producing a second half

# report

FIGURE 3: EMI DURING THE 2020/21 SEASON



exceeding the first half. In contrast, the 2020/21 season had just 43.62% of the total tested in the first half of the year, a figure very much an outlier in the data set. In fact, the last six months of the 2020/21 season has seen the greatest amount of wool tested in the second half of a season since 2010/11 (a year that had more than 372mkg tested).

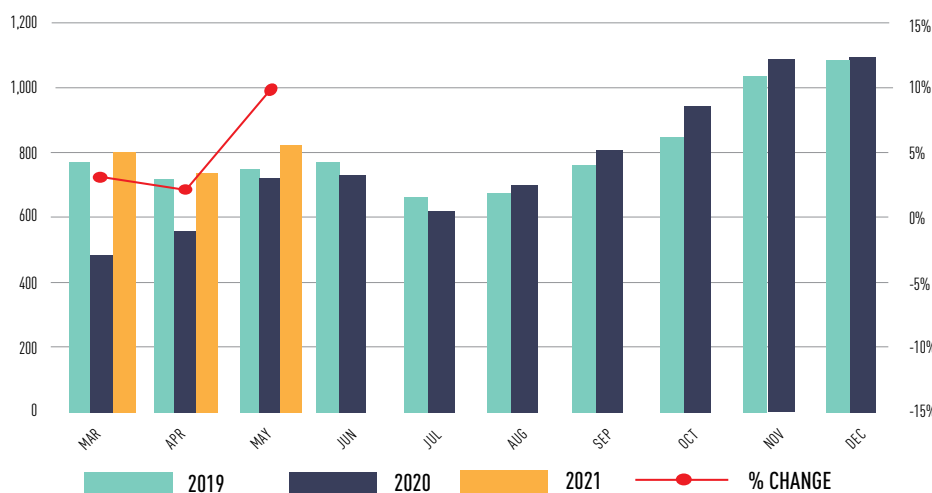
## Wool prices and value increase

At the commencement of the 2020/21 season, the AUD EMI was at 1116ac and very much in a weakening trend following the COVID-induced downturn of global economies. The AUD EMI continued its fall through August 2020 until eventually bottoming out at 858ac in the first week of September 2020. In contrast, the market then added 65.9% or 565ac in just nine months. Across the whole season, the AUD EMI gained 307ac or 27.5%, to close out at 1423ac (see Figure 3 above).

The 2020/21 season started with the USD EMI at 773usc at a forex rate of .6863 against the AUD. By season end, the USD EMI had vastly outperformed the gains made in AUD, increasing by 297usc or 38.4%. Like the AUD EMI, the USD EMI hit the season low in the first week of September 2020, falling to 631usc. From the low, the market recovered stronger than AUD values, to add 69.6% or 439usc in just nine months.

The number of bales sold at auction during the 2020/21 season was 1,558,820 bales, which is 352,523 bales or 29.2% more than the 2019/20 season total of 1,206,297 bales.

FIGURE 4: CHINA DOMESTIC RETAIL SALES OF GARMENTS (MILLION YUAN)



Note. No figures are released for January or February.

Sold weight equated to approximately 280.1mkg greasy which represents around 179 mkg clean based on the seasonal data of 179.1kg/bale and 63.9% dry yield. Using the assumption that around 10% of additional wool is privately transacted, that would make the season's total sold weight 308.1mkg greasy or 196.9mkg clean.

Based on total transacted volume of 196.9mkg clean and a seasonal average of 1199ac, the seasonal raw wool value was approximately **A\$2.36 billion**. AWEX reported an annual value sold at auction of **A\$2.25 billion**.

## China retail sales climb

Data from China's Nation Bureau of Statistics shows that retail sales of garments in 2020 were only down for a few months at the start of the pandemic (March and April). Monthly retail sales of garments have recovered quickly since August 2020, up every month since (year-on-year) – see Figure 4 above.

# Average monthly EMI comparison

The chart opposite provides a snapshot of how the AWEX monthly Eastern Market Indicator (EMI) and a range of microns have performed for the past three months (May 2021 – July 2021) in Australian dollar terms compared with the previous five years May 2016 to April 2021 (circles) and the decade previous to that, May 2006 – April 2016 (squares).

Although the coronavirus pandemic continues to impact the global economy, during these past three months there has been a definite improvement in the EMI, and especially the finer microns, building on the gains of the previous three-month period.

For the past three months, the monthly EMI averaged at \$13.84 which is an 83c rise from the average monthly EMI for the previous three months, and is tracking at the 29th percentile against the previous five-year monthly EMI. This means that in the previous five years the monthly EMI has recorded a lower price than the current \$13.84 (May 2021 – July 2021) for 29% of the time.

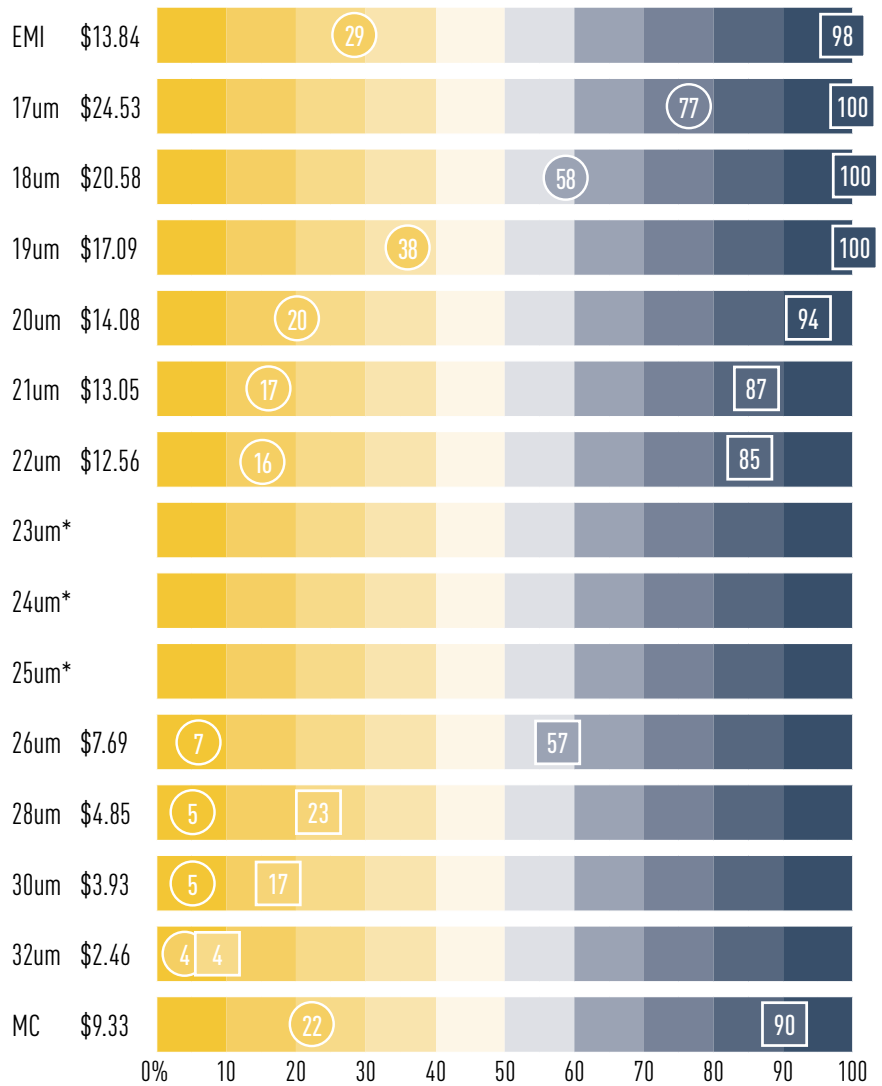
While the EMI is tracking at the 29th percentile over the previous five years, it is tracking at the 98th percentile when compared to the decade May 2006 – April 2016. This means the current EMI of \$13.84 (May 2021 – July 2021) is higher now than it was for 98% of that decade.

18 micron averaged at a monthly value of \$20.58 (58th percentile for the previous five years and 100th percentile for the decade before that), 21 micron averaged at \$13.05 (17th percentile for the previous five years but 87th percentile for the decade before that), and 28 micron averaged at \$4.85 (5th percentile for the previous five years and 23rd percentile for the decade before that).

For the past three months, Merino Cardings averaged at \$9.33, operating at the 22nd percentile for the previous five years and at the 90th percentile for the decade before that.

B

**AVERAGE MONTHLY EMI FOR MAY 2021 – JULY 2021 COMPARED WITH**  
 ● PPREVIOUS 5 YEARS MAY 2016 – APRIL 2021  
 ■ THE DECADE MAY 2006 – APRIL 2016



\*insufficient data

## Market intelligence at wool.com

An important part of AWI's Wool.com website is market intelligence information for woolgrowers.

As well as the Weekly Price Reports and Monthly Market Intelligence Reports, there is a graphical display of:

- Eastern Market Indicator – you can select to display AUD, USD, CNY or EUR.
- Offering – displays bales offered and bales sold.

- Currency movements – you can select to display AUD/USD, AUD/CNY or AUD/EUR.
- Forecast of bales sold – displays previous season, current season, current week and forecast.

For the first three categories above, you can select to display data from 3 months to 3 years ago.

AWI also continues to send wool prices

and market intelligence direct to about 5,000 woolgrowers' mobile phones. If you would like to subscribe to the free SMS service, visit [www.wool.com/sms](http://www.wool.com/sms) where you will be asked to input your name and the mobile phone number to receive the SMS. You can unsubscribe from the service at any time.

B

**More information**  
[www.wool.com/marketintel](http://www.wool.com/marketintel)

# SustainaWOOL members can highlight their accreditation on WoolQ



WoolQ contains a directory of woolgrowers, classes, brokers and buyers – and now the SustainaWOOL™ Integrity Scheme. SustainaWOOL encourages its woolgrower members to join the SustainaWOOL Group on WoolQ, which will help showcase their unique product to a global audience.

One of the key features of WoolQ is an Australian wool industry directory that enables woolgrowers and buyers to search for and connect with each other as potential business partners.

The WoolQ industry directory has a new partnership with the SustainaWOOL™ Integrity Scheme, which is now an established Group on the directory. This means that woolgrowers with SustainaWOOL accreditation can join the Group and thereby fully promote their accreditation on their own WoolQ business profiles, potentially generating more interest in the marketplace for their wool and providing more marketing options.

Buyers like the WoolQ industry directory because they don't have to spend hours searching Google for different grower websites. They have instant access to sophisticated search functionality to find exactly the woolgrowers that suit the type of wool and quality scheme they are looking for.

The SustainaWOOL™ Integrity Scheme is the largest sustainability scheme in the wool industry. The scheme provides benchmarks for minimum sustainability standards within a farm's wool production system, thereby providing integrity and traceability along the pipeline to consumers.

**The SustainaWOOL™ Integrity Scheme, Australia's largest wool sustainability accreditation scheme, now has an established Group on the WoolQ industry directory, enabling SustainaWOOL's woolgrower members to fully promote their SustainaWOOL accreditation on WoolQ to an active global audience.**

It currently has nearly 1,200 woolgrower members, plus 32 post-farm industry partners including some of the world's top spinners and weavers. More than one out of every ten bales of wool offered at auction in the 2020/21 selling season was grown by members of SustainaWOOL, and members received on average 1.5 - 2.0% higher prices and a 2% lower passed-in rate for their SW-coded fleece wool lots compared to equivalent lots from non-members.

"We believe SustainaWOOL's commitment to the highest standards of sustainability, traceability and wool quality complement the ability of WoolQ to profile businesses and connect industry partners," said AWI Chief Operations Officer, John Roberts.

"By linking these qualities of SustainaWOOL and WoolQ, we see a real opportunity for the hard work of woolgrowers to be rewarded through meeting the needs of our end consumers, who are forever seeking more trust in product authenticity."

SustainaWOOL Program Manager, Dr Paul Swan, added: "This simple but positive development enables us to support SustainaWOOL members who use the WoolQ platform, but also supports us in our central challenge – to tell the sustainability story of Australia's woolgrowers."

WoolQ has more than 3,500 users registered and well over 1,000 wool industry businesses fully profiled. The platform is the ideal place for woolgrowers to showcase their provenance story because it provides an immediate connection to buyers. In their business profile, all woolgrowers can provide a rich description, logo, images and video to bring their wool-growing brand to life and deliver a really compelling story, as well as detail their wool broker. In addition, SustainaWOOL members can now fully showcase their membership of the integrity scheme.

## How to create a business profile on WoolQ

To create a business profile on WoolQ, you must register as a user at [www.woolq.com](http://www.woolq.com). Registering takes just 30 seconds to complete.

You can then set up a profile for your business by clicking the avatar in the top-right of the screen and then selecting

'Business Profile'. Although you can use WoolQ on computer, tablet or smartphone device, it is best to create a business profile using a desktop computer or laptop, and you will need an internet connection for the process.

Then simply follow the prompts on your dashboard to complete each part of the profile. Some parts of the profile are optional to complete, so you can tailor it to what suits your business circumstances.

## How SustainaWOOL members can fully promote their accreditation on WoolQ

You must have a business profile on WoolQ (see above). When logged on to WoolQ, enter the industry directory, by clicking on 'Industry Network' in the menu bar and then 'Directory'. Search for SustainaWOOL Integrity Scheme and, once found, open the entry and click on the 'Join Group' red button, which sends a joining request to SustainaWOOL.

Once SustainaWOOL has verified at its end that you are a SustainaWOOL member, you will be made a member of the SustainaWOOL Group on WoolQ. Your business will automatically be listed on the SustainaWOOL profile under partners, and SustainaWOOL will be listed on your business profile, for all to see.

All members of SustainaWOOL are encouraged to join the SustainaWOOL Group on WoolQ. You will be kept up to date on initiatives as WoolQ and SustainaWOOL explore further opportunities for collaboration up the wool supply chain. **E**

### More information:

- For information about the SustainaWOOL™ Integrity Scheme: [www.sustainawool.com.au](http://www.sustainawool.com.au).
- For information about how to build a WoolQ business profile: after registering/logging on at [www.woolq.com](http://www.woolq.com), head to the Education section.

SustainaWOOL™  
INTEGRITY SCHEME

WOOL 



WIN!!!

If you email or tag a photo that gets published in Readers' Photos, you'll receive from us a paperback copy of the Kondinin Group's 'The Story of Wool'.

# Readers' Photos!

Have you got any interesting photos that you'd like to share with other readers of *Beyond the Bale*?

If so, please email the image and a brief description to the editor of *Beyond the Bale* Richard Smith at [richard.smith@wool.com](mailto:richard.smith@wool.com) or you can tag us #beyondthebale on Instagram.



## WHAT ARE YOU LOOKING AT?

The superfine Merino rams on **Matt and Vanessa Dunbabin's** 'Bangor' property at **Dunalley** in **Tasmania** were shorn in early June. Getting the fleece off these big boys is no easy task, but shearer **Nathaniel** got the job done. This photo tagged #beyondthebale on Instagram by @bangorshed was beautifully captured by Lucy Bradshaw of @theseaisformephography.



## RAM WHISPERER

This is a wonderful shot of two-year-old **Dulcie** bonding with a ram on the property of her grandparents **Greg and Kaye Potter** of Fairview Polwarths at Barongarook near **Colac** in western **Victoria**. Thanks for tagging #beyondthebale on Instagram, @fairviewpolwarths.



## AN OUTBACK LATE AFTERNOON

**Lisa Alexander** from **Blackall** in **Queensland** calls a 23,000-acre sheep and cattle property home. Lisa captures some truly fantastic images from around the property, this one a drone shot of the yards, with some dust at sunset. Thanks for tagging #beyondthebale on Instagram, @lisa\_alexander\_photography.



## GETTING ACROSS WHILE THEY CAN

In the March edition, we printed a photo of a warm smoky evening in January at **Gringegalgona Merinos** (@gringegalgona) at **Vasey** in the Western District of **Victoria**. Six months on, and this photo from July shows that conditions have turned around; with most gully dams full, the creeks are filling and turning into rivers.



**MAKING THEIR MARK**

The **Holland family** have farmed at **Brim East** in north-western **Victoria** for almost 100 years spanning three generations. **Graeme** and his wife **Sarah-Jayne** along with their three children **Ella** (15), **Lucy** (13), and **Oliver** (11), are always keen participants when it comes time to mark the lambs and season 2021 was no exception. Their farm currently runs 700 Merino ewes that yearly on average cut 5-6kg of between 19 to 22-micron wool. The photo was shot by Belinda Miller Photography of Warracknabeal.



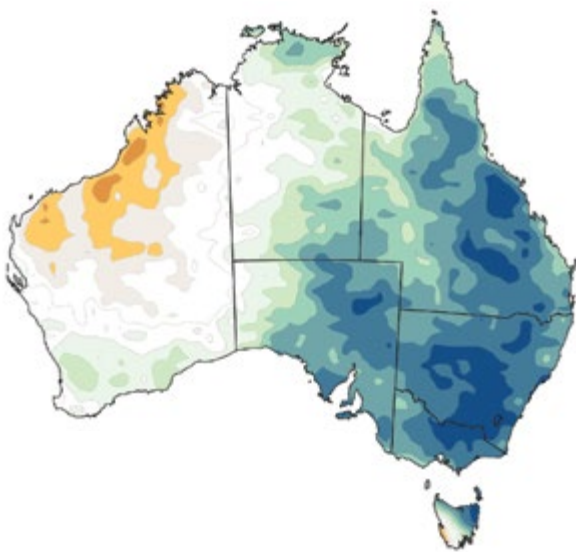
**A VIVID SUNSET**

A spectacular sky photographed in July at **Burnt Yards** on the Central Tablelands in **NSW**. Thanks for tagging #beyondthebale on Instagram, **Deb Paine** (@debp1232).

# Seasonal conditions forecast

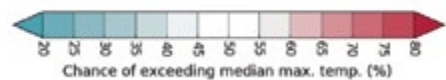
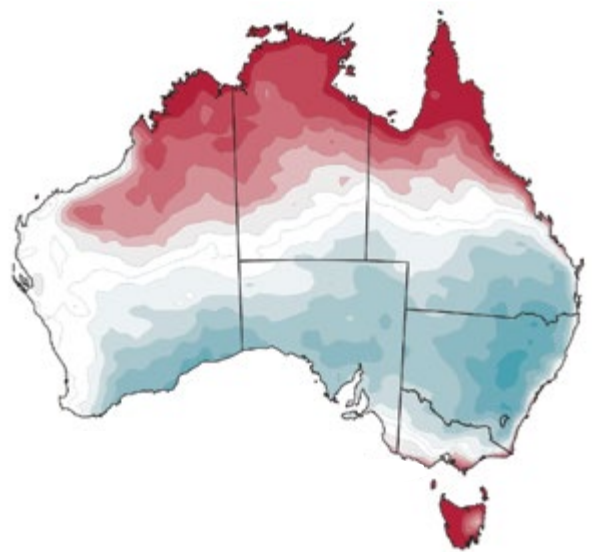
**Chance of above median rainfall**

October to December 2021

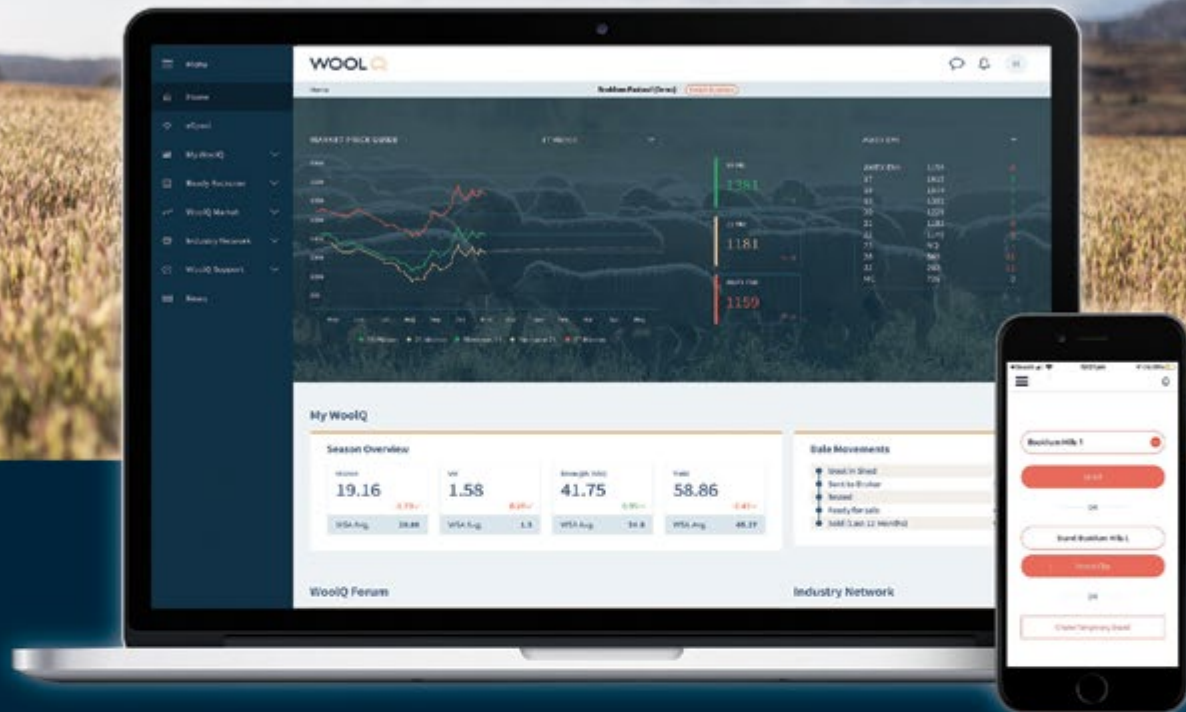


**Chance of above median maximum temperature**

October to December 2021



# WOOLQ



## WHAT IS WOOLQ?

WoolQ is a platform to store data, review wool production, value wool and provide selling choices to woolgrowers, their agents and other industry professionals in a single platform. The key tools of the platform are:

### WoolQ Network

**A wool industry directory.** Allowing woolgrowers to promote their businesses, develop partnerships and learn of new trends and developments.

### WoolQ Ready Reckoner

**Value your clip.** Using the latest market results' real-time pricing to give woolgrowers and brokers an indicative price of wool ahead of sale.

### My WoolQ & WoolQ eSpeci

**A repository for all clip production information.** Allowing woolgrowers to collect and store clip data including sales and test results from multiple brands.

### WoolQ Market

**Built to complement open-cry auction, it delivers an online alternative venue for the selling of wool.** Sell through auction or the set price bulletin board.

**Register** at [www.woolq.com](http://www.woolq.com)

We can help you set up your WoolQ account. Call us on 1800 070 099 or email [info@woolq.com](mailto:info@woolq.com).