

Beyond the bale



WOOLMARK

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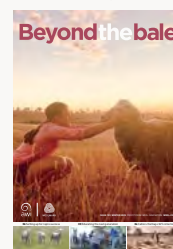
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Front cover photo: Woolgrowers' daughter Erin Rutledge of Woodstock, NSW, shot this photo of her sister Kaitlyn at sunset on the family property with a ewe that is rearing her third set of twins.

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AWI is the R&D and marketing organisation for the Australian wool industry.

AWI working for woolgrowers



AWI CEO John Roberts provides readers with an overview of how AWI is undertaking R&D and marketing to address some of the key issues faced by Australian woolgrowers.

On-farm investments help increase productivity

Many of AWI's on-farm projects result in outputs that woolgrowers can adopt straight away on their farms to increase their productivity, in areas such as reproductive performance, genetic gain, better sheep health, and a more resilient feedbase. Improving the performance of their wool-growing enterprise is more likely to increase woolgrowers' profits than moving to a different enterprise. Although there are certain issues that growers cannot control – be it the weather or international tariffs, for example – it's important that growers focus on addressing what they can control and improve. AWI is providing research outcomes and tools to help them.

AWI also invests in on-farm projects that are aimed at delivering benefits to woolgrowers in the future. Examples include our training of the next generation of wool industry professionals, R&D into sheep genomics, and initiatives in our Woolmark+ roadmap designed to help growers and supply chain partners accelerate nature positive outcomes for the industry.

Off-farm investments help build the demand for wool

Despite the tough global economic climate, our marketing and off-farm innovation activities are helping support the demand for Australian wool across the world.

For example, during this past autumn/winter season in the Northern Hemisphere we have undertaken joint marketing collaborations with some of the largest e-commerce platforms in China, Japan, South Korea and India involving a total of more than 5,500 brands. These activities have increased consumer awareness of the

benefits of wool and, importantly, driven large-scale purchases of wool products, which benefits Australian woolgrowers in the longer term.

Many of our global supply chain partners are investing heavily in wool. The scale of investment by Chinese wool processors in particular is staggering and the country remains a very valued partner to the Australian wool industry. But there are investments by the supply chain and new opportunities all across the world, not only in established processing markets but also emerging markets like Vietnam, Latin America and Portugal.

We are having some success in defending our traditional markets, such as the suiting and uniforms sector, and continue to highlight wool in the high value, premium apparel market. We are also establishing wool even further as a high-performance fibre in the sports and outdoor markets; wool has already made great advances in this area but there is still more opportunity to expand.

A united global wool industry at the IWTO Congress

I have recently returned from this year's International Wool Textile Organisation (IWTO) Congress in France which was attended by nearly 300 of some of the most influential players within the global wool and textile industries. The three-day event explored topics including sustainable and profitable wool production, emerging market trends, wool's expanding applications in performance textiles, and building demand for wool at retail.

The global wool sector faces similar opportunities and challenges as the Australian wool industry. By continuing to work closely with the IWTO, we can provide a greater platform for our fibre

within the textile trade and amongst policymakers, as we have done on the issue of environmental labelling in the European Union.

AWI's new Strategic Plan 2025–26 to 2027–28

AWI will soon publish its Strategic Plan covering the next three financial years beginning on 1 July 2025. The Plan has been developed in consultation with woolgrowers and wool industry bodies and reflects the key R&D and marketing priorities that they have told us are important to them.

Further details about AWI's planned investments during the next twelve months are contained in AWI's 2025–26 Annual Operating Plan which will also be released this month.

A resilient industry

Significant areas of the country have been and continue to be affected by extreme weather conditions. I hope that those affected woolgrowers recover quickly when conditions improve and that production volumes across the country begin to recover.

Wool prices have been improving, albeit slowly and from a modest level. All wool types and descriptions have increased in value since the start of the 2024/25 season, which is good news, and I hope this continues at an increased pace.

The fundamental benefits of wool and long-term consumer trends play in wool's favour. I assure you that AWI will continue to work hard on behalf of all Australian producers that grow this great fibre.

John Roberts
Chief Executive Officer
Australian Wool Innovation

Long-term profitability provided by wool sheep

Although many woolgrowers are experiencing low margins in the current economic climate, wool sheep remain a good choice for long-term farm profitability and risk management. They are the true dual purpose animal, offering production options and a reliable source of income.

Droughts and floods, global economic challenges, high input costs, fluctuating commodity prices – these are putting pressure on all types of farming enterprises.

Despite these challenges facing agriculture, Australian woolgrowers continue to show their customary resilience and take a longer-term outlook that will enable them to reap the benefits of their wool-growing enterprises when conditions change and returns improve.

The report into livestock enterprise profitability *Why stay in wool sheep?*, which was released last year by John Francis of agricultural consultancy company Agrista, provides a useful reminder of wool's profitability.

The key points in the report are:

- Over the five years 2018–19 to 2022–23, wool sheep enterprises provided similar or better profits than alternative livestock enterprises (beef breeding herds, dual purpose sheep flocks, prime lamb flocks) – see Figure 1.
- A focus on improving the performance of a livestock enterprise is more likely

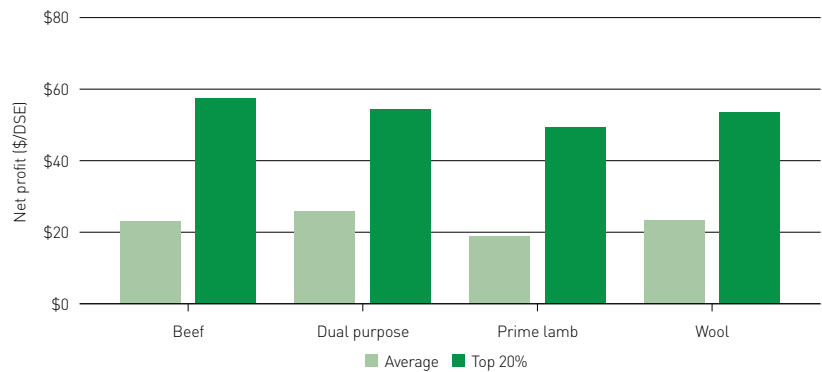


Figure 1: Five-year average profits for four different enterprise types

to increase profits than moving to a different enterprise; top-performing producers (in the top 20%) consistently achieve double or even triple the profit per DSE compared to average producers across various enterprises – see Figure 1. Furthermore, changing enterprises incurs significant up-front capital costs for, for example, new infrastructure, plant or genetics.

- Measuring the financial and production performance of an enterprise is an

important way to identify ways to achieve the greatest rewards from the lowest cost; in particular, it is vital to examine the feed supply curve and align it to livestock energy demands over the year.

- Potential opportunities to deliver higher production at low marginal cost include simplifying the operations of the enterprise, improving infrastructure to deliver higher levels of labour efficiency, and investing in genetics.

Mitigating risk

Sheep classer Michael Elmes of Smartstock Sheep Services at Narrandera in NSW operates one of Australia's largest sheep classing businesses, advising businesses from leading studs to large commercial operators.

He says he has seen an extraordinary increase in his clients lifting sheep numbers in an effort to stabilise costs and income on farm, as clients reduce the amount of land devoted solely to cropping.

There are multiple elements at play, he said, the first being risk management, with clients chasing better cash flow across the year rather than waiting for one big pay cheque.

According to sheep classer Michael Elmes, increasing numbers of farmers are seeking to mitigate risk on farm by defying industry trends and lifting Merino numbers on their mixed farming operations, with the aim to balance the books and generate cash flow more evenly across the year.

"If you are 100% cropping, there are five factors that you have no control over: fuel, chemical and fertiliser prices, machinery costs and finance," he said. "Then at the end of the year, you rely on the gods to get a crop off and then some market stability and weather to give you a good price for all your effort."

For example, Michael said, the same quality wheat made \$130 per tonne more in 2023 than it made in 2024, which has a major effect on the bottom line.

The experienced Merino advisor says he has seen an increase in demand for high quality Merino ewes to go into self-replacing flocks, as clients further reduced the amount of land they only cropped.

"The best operations are the ones with a self-replacing flock and using a terminal sire over the surplus ewes," he said.

"80% of the profit and income comes from 20% of the industry and those that are doing it well are in that bracket, the rest make up the 80% of producers only generating 20% of the income.

"When you have the ability to get a wool cheque, produce young and old surplus stock and wethers that are all saleable out of the Merino flock, join the cast for age and culls to a terminal sire and generate a first cross lamb at \$200, then you have a very profitable enterprise and that's why savvy farmers are increasing numbers rather than reducing.

Wool enterprise strengths

Agrista's analysis points out several strengths of wool enterprises over other livestock enterprises:

- **Diversity of income** – Wool enterprises have multiple income streams including wool, sheep meat and lamb. This diversity in income enables woolgrowers to adapt their enterprise based on market signals, resource suitability or management preference.
- **Income generation during drought** – Wool sheep have low maintenance energy requirements and produce a fleece of reasonable value even in a drought, meaning that the reduction in income due to drought is lower when compared to livestock enterprises dependent on meat production.
- **Maternal flexibility** – The Merino ewe has the flexibility to be joined to a Merino to produce high value wool progeny, or to a maternal sire or terminal sire, or managed as a dry sheep with lower energy requirements and higher wool production relative to a lactating ewe.
- **The value of wethers and dry ewes** – Wethers are a feed efficient animal because there is no reproductive demand for energy. These animals are well-suited to land classes with lower energy feed and environments with little seasonal rainfall pattern.

Download the 12-page *Why stay in wool sheep?* report at wool.com/stayinwool. View a recording of John Francis talking through the report in a webinar available at youtube.com/AWIWoolProduction

“Even with a low wool market of recent times, the prices earned for surplus sheep, wether lambs and crossbred lambs to slaughter, the whole package still allows a handy profit, whether it be a good or bad year season-wise.”

Michael is adamant that a sheep flock run on cropping country pays the interest and running costs and it is something to bank on every year.

“Running an enterprise like this and balancing with a cropping enterprise, you have the ability to sell stock at multiple times of the year, to increase your cash flow, reduce weed management on your farm, and the livestock enterprise helps fund the cropping costs at the end of the year,” he said.

“In a year when you have a great crop, you reap the rewards of that year, but in an average or bad year, you have livestock to cover your costs and generate turnover throughout the year, reducing the need for a massive overdraft.”

Making money out of wool sheep

Merino-based systems remain a good long-term option, according to the three industry experts on a recent AWI Extension WA ‘Making money out of wool sheep’ webinar.

During the recent AWI Extension WA webinar, three top industry experts shared their perspectives and practical tips on being proactive in overcoming market challenges and make more money from wool sheep.

Important role for Merinos continues

Michael Young of Farm Optimisation Group at Kojonup, WA, provided an economic perspective on sheep farming in WA, particularly in the context of industry challenges such as the phase out of live sheep exports and fluctuating wool prices.

Despite these headwinds, Michael asserted that sheep farming, especially within mixed farming systems, is likely to remain profitable and potentially even more so. Importantly, Merinos still play an important role and are a good long-term option.

For woolgrowers considering a potential shift towards more meat-focused genetics, Michael presented an economic comparison of prime lamb, self-replacing Merino (mated to terminal sires), specialised crossbred lamb production (buying in replacement ewes), and composite flocks. His modelling, based on average prices, indicated that Merino-based systems, particularly the specialist Merino terminal sire flock, remained the most profitable, although the latter carries the risk of ewe purchase price variability. Notably, even with a 20% lower wool price than the average used in the analysis, the Merino prime lamb option still outperformed the composite flock.

Avoid chasing the market

Michael also pointed out that all commodities (e.g. wool, lamb, wheat) can be volatile, so it's very hard for a producer to predict when each market is going to be up or down. Because farm systems are also quite inflexible, he recommends producers set their strategy based on average prices so that they avoid chasing the market. Otherwise, he said producers try to adjust their management every time the market changes and end up buying at the high and selling at the lows.

Michael also highlighted advancements in technology and research, such as in-paddock weighing, improved grazing strategies (crop grazing, fodder crops), improved genetics, and improved farm

modelling to identify optimal nutritional targets, which are aiding producers in achieving optimal management targets.

Michael concluded with an optimistic outlook for mixed farming systems with wool still playing a vital role, emphasising the importance of management adaptation for those previously reliant on the live export market and recognising the continued value that wool offers.

Merino's good carcase traits alongside wool production

Geoff Bilney of Glenpadden Farms runs a mixed sheep and cropping enterprise with a lamb finishing feedlot at Kojonup, WA. On the webinar, Geoff debunked the notion that Merino lambs are unsuitable for meat production, showcasing photos demonstrating that their carcase conformation can be comparable to crossbred lambs once they reach the desired weight in a feedlot system.

Geoff also emphasised the added value of wool and skin from Merino lambs, which can offset costs compared to crossbred lambs that often have no fleece value in a feedlot scenario.

Geoff highlighted that woolgrowers can be more optimistic about the future given the increasing processing capacity in WA and the fact that Merino genetics perform well in this market.

Moving beyond data collection

On the webinar, John Francis of Agrista referred to the analysis and the key strengths of wool enterprises in his *Why stay in wool sheep?* report – see the article on the opposite page.

In the presentation, John emphasised the critical importance of producers moving beyond mere data collection to derive actionable insights that drive informed decision-making. He highlighted that while many woolgrowers record data such as flock history, livestock numbers, pregnancy scanning results and financial transactions, the real power lies in processing this data into meaningful information. This involves compiling, standardising, and organising data to provide context for interpretation.

A recording of the webinar is available at awiextensionwa.com/resources/Making-more-money-out-of-wool-sheep

Setting up for reproductive success

Are you looking for a refresher on the best ways to improve the reproductive performance of your flock? AWI has launched a new half-day workshop that is a one-stop-shop for the latest research, benchmarks, targets and tools for all things repro.



The new AWI Repro Masterclass™ provides an overview of the key management practices that should be carried out in the lead up to joining and throughout pregnancy to help ensure optimal reproductive performance.

Lifting the lifetime reproductive performance of a sheep flock is a key way woolgrowers can increase the productivity and profitability of their business.

Key opportunities exist within all the major reproduction checkpoints along the year, such as joining, pregnancy scanning, lambing, lamb marking and weaning.

AWI's new workshop, AWI Repro Masterclass™, focuses on improving reproductive performance and important management practices throughout the annual ewe reproductive cycle.

The workshop is suitable either for woolgrowers who've been in the industry for a long time and would like a refresher and update on repro research and on-farm targets, and also for youngsters interested in learning about this key profit driver in wool enterprises.

The first of these half-day workshops were delivered in Tasmania in February and NSW in March. Attendees dived into the latest research, benchmarks, targets, and tools, covering key timing and actions for reproduction success.

As well as learning about the importance of balancing enterprise priorities, the workshop covers the fundamentals of ram health and performance, conception rates, managing weaners to first joining, making the most of pregnancy scanning, joining ewe lambs, managing twin- and triplet-bearing ewes, optimising lamb survival, year-on-year improvement, and more.

At the workshops, AWI National Extension Manager, Emily King, set the scene with an opening presentation on balancing priorities to breed the most



Three AWI Repro Masterclass workshops were held in NSW in March. Pictured is AWI National Extension Manager Emily King at the workshop held in Young.

profitable sheep for a given environment, and emphasised the importance – and profitability outcomes – of lifting the reproductive efficiency of Merino ewes.

“Increasing the productivity of a flock will increase net profit, however more importantly, variability within enterprise can exceed the variability between enterprises by a magnitude of nearly four times,” Emily said.

“To improve financial performance over the medium- or long-term, the primary focus should be on enhancing the results of the existing enterprise rather than moving between enterprises.”

Key speaker, sheep industry consultant Dr Jason Trompf, then shared with woolgrowers what sets apart the top performers.

“Higher stocking rates, higher lambing percentages, and improved profits from surplus sheep and livestock trading are the key drivers for these leading producers,” Jason said.

Other typical strategies for top-performing sheep enterprises focus

on managing seasonal variation, including:

- Later time of lambing – time to manage grazing and manipulate paddocks pre-lambing
- Higher reproduction rates – more surplus sheep to sell and quicker recovery from dry years
- Feed reserves on hand – sufficient feed on hand to feed through a failed season
- Higher proportion of farm cropped – higher summer carrying capacity and greater ability to defer grazing over the break
- Genotype fitness/robustness – easy care and easier to maintain liveweight
- Time of shearing – have plan to flex time of shearing on sale sheep to enable them to be sold early
- Sell surplus sheep early – sell the surplus sheep before they reduce summer feed reserves.

“The three ‘must dos’ to drive flock performance are scanning for multiples, condition scoring, and allocating feed based on reproductive status,” Jason added.

Key on-farm actions for growers

AWI Extension TAS Project Manager, James Tyson, provides readers with the key on-farm actions highlighted at the workshop:

Ewe nutrition is the cornerstone of reproductive performance: Ewe nutrition plays a critical role in driving both ewe performance and the lifetime performance of their progeny. Sub-optimal management at any stage of the reproductive cycle, which starts at

joining and proceeds through lambing, weaning, and pre-joining, has a negative impact on production. Ewes in optimum condition throughout pregnancy produce lambs with higher wool production and finer wool throughout their lives. Maintaining appropriate condition scores through strategic feed management and supplementation is vital.

Strategic condition scoring: Condition scoring is the key management tool for assessing your ewes' body reserves and making informed feeding decisions. Achieving condition score (CS) targets is linked to improved ewe reproduction, increased progeny fleece weight and lower fibre diameter, higher lamb survival, and more effective use of feed resources. Aim for CS 3 at pre-joining, at pregnancy scanning, pre-lambing for single-bearing ewes, and ewes at weaning, with higher targets for twin- and triplet-bearing ewes (CS 3.3 and CS 3.5, respectively) pre-lambing.

Optimise pre-joining preparation for conception: Ewes in better condition at joining generally conceive more lambs, with a target of CS 3 for Merinos. The recommended optimal joining length is 35 days (5 weeks) to cover two ovulation cycles, minimising the variation in lamb age and weaning weight. Additionally, maiden ewes should be at 80% of standard reference weight (SRW) at their first joining for reproductive success. Effective ram management, including pre-joining checks and maintaining rams at CS 3.5, is also crucial for optimal conception rates.

Leverage pregnancy scanning: Pregnancy scanning at day 80–90 after the rams went into the paddock is strongly recommended for its accuracy in determining pregnancy status and litter size. This allows for differential management of ewes based on their pregnancy status and the number of lambs they are carrying, leading to improved lamb and ewe survival, reduced risk of dystocia and pregnancy toxaemia, and better allocation of lambing paddocks to prioritise feed. Benefit-cost analysis has shown a significant financial return per scanned ewe when scanning for multiples and managing according to their pregnancy status.

Best-practice lambing management: Ewe nutrition during pregnancy and at lambing significantly impacts ewe and lamb survival. Meeting condition score targets at lambing based on litter size lifts birthweight and drives lamb survival. Feed on offer (FOO) targets of 1,100 kg DM/ha green feed for single-bearing ewes, and 1,500 kg DM/ha for twin-bearing ewes, will optimise survival. The lambing environment, including shelter to mitigate wind chill and appropriate stocking rates, are also key factors positively influencing lamb survival.

Effective weaning: Timely weaning (no later than 14 weeks from the start of lambing) is crucial for both weaner health and ewe recovery for the following joining. Weaning weight is a key driver of weaner survival, with target weaning weight (TWW) of 45% of the adult ewe flock SRW being best practice. Imprint feeding (introducing young sheep to supplementary feed alongside their mothers before weaning) is recommended to teach weaners that supplementary feed is safe to eat and ensure adequate feed intake post-weaning.

Monitoring and benchmarking performance: Undertaking an annual ewe performance stocktake is useful for determining the percentage of ewes that successfully reared a lamb and identifying areas for improvement. Lamb marking is then an opportunity to collect data on lamb and ewe survival, lamb marking percentage, percentage of ewes failed to rear a lamb, and paddock performance. Utilising enterprise benchmarks can further assist woolgrowers in assessing their performance against industry standards.



Dr Jason Trompf delivering the first AWI Repro Masterclass to a strong turnout of more than 40 attendees at Campbell Town in Tasmania in February.

How do woolgrowers rate the workshop?

AWI Extension Tasmania Project Manager, James Tyson, says the workshop at Campbell Town was extremely well received by woolgrowers, with almost 90% of attendees learning something new that they planned to implement in their business.

“Evaluation from the workshop indicated many will be making changes around having clearer breeding objectives, managing ewe condition score for joining, managing twins and triplets separately, adjusting mob sizes, and pregnancy scanning for multiples,” James said.

“Of those that planned to make changes, nearly three-quarters said they were highly likely to make the change, which is very encouraging.”

“This new workshop is a fantastic opportunity for woolgrowers to learn more about optimising the reproductive performance of their flock, and also acts as a pointer towards related AWI flagship workshops such as Picking Performer Ewes™, RAMPing Up Repro™, Winning With Weaners™, and the nationally-accredited Lifetime Ewe Management™ course.”

Evaluation data from the recent AWI Repro Masterclasses:

- How satisfied were you with AWI Repro Masterclass? **8.83/10**
- How valuable was the workshop in helping you manage your sheep business? **8.66/10**
- How likely would you be to recommend the workshop to others? **9.19/10**
- Did you learn something new at the workshop? Yes: **90.4%**. No, but it reinforced what I am already doing: **9.6%**. No: **0%**

Is there an AWI Repro Masterclass workshop near me?

The AWI Repro Masterclass is available to woolgrowers through the AWI Extension Network in each state.

To find out when there is an AWI Repro Masterclass near you, or to register your interest in having an event in your region, we encourage you to contact the AWI Extension Network in your state and sign up to their free newsletter. The contact details of the AWI Extension Networks are available at wool.com/networks or call AWI on 02 8295 3100.

The AWI Repro Masterclass costs \$50 and includes morning tea, lunch and resources. It runs from 9:00 am to 1:00 pm. Lunch is served from 1:00 pm and gives you the chance to catch up with other woolgrowers and the speakers, or simply grab and go.

Further information about the workshop, including links to 17 resources used or referred to in the workshop, is available on the AWI website at wool.com/repromasterclass

MORE INFORMATION
wool.com/repromasterclass

Udder assessments help identify your passengers

An udder assessment of your breeding ewes at lamb marking helps you to identify which ewes to keep and which should be removed, improving your flock's reproductive performance, writes Amy Lockwood of AWI Extension WA.

Lifetime reproductive performance is a key driver of the profitability of Merino enterprises. Reproductive efficiency, selection pressure and consistency of production within a flock can be increased by identifying breeding ewes with poor performance to remove from the replacement breeding flock, i.e. the 'passengers' or bottom 25% of ewes. It's also important to identify those with superior performance to retain in the breeding flock, i.e. the 'performers' or top 25% of ewes.

Assessing udders as 'wet' or 'dry' at lamb marking is one of several tools used to identify passengers and performers. A 'wet' udder assessment means that the ewe has reared at least one lamb. 'Dry' ewes are those that have lambed and failed to rear a lamb, also known as 'lambled and lost'. If you don't pregnancy scan, dry ewes could also be ewes that failed to conceive.

Ewes are considered performers if they are assessed as 'wet' each year, successfully rearing a lamb at their first two lambing opportunities. In contrast, passengers fail to rear a lamb at their first two lambing opportunities. Research has shown that culling passenger ewes that have consecutively failed to rear a lamb (twice lambed and lost) has a similar impact on lifting the reproductive performance of the flock as culling ewes that consecutively fail to conceive (i.e. 'twice-dry' ewes). The main benefit of culling these ewes is a decrease in the number of dry ewes in the flock, leading to increased reproductive rates.

Udder assessment is best done at lamb marking and is recommended for both flocks that do and do not pregnancy scan. Udders can be assessed at weaning but you may incorrectly assess ewes as 'dry' if they have naturally weaned their lambs before you conduct weaning (for example, ewes that conceived early in the joining period and have 14-week-old lambs at foot). Assessing udders at lamb marking is the most reliable way of identifying ewes that have conceived and reared lambs if you do not pregnancy scan your ewes.

What to look for

Wet	Dry
Full, warm udder (N.B. some ewes may only be lactating on one side of the udder)	Small, floppy/soft, cool udder with some development
White, opaque milk stripped from teat	Fluid may be difficult to strip from the teats. The fluid is different to milk and may range from watery to thick, be clear or various colours different to the colour of milk, and may have white flecks.
Clean teat/s	Dirty/greasy teats
Birth stain on breech	Birth stain on breech

Dry ewes that were not pregnant or have failed to lamb will have the smallest udders, no stain on the breech, and they are often fatter. Maiden ewes that are dry will have no udder development, whereas older ewes that have previously lambed will have some udder development.

Keep an eye out for udder abnormalities

Damaged or abnormal udders reduce milk supply to the lamb/s, significantly compromising lamb performance and survival. Identify any udder abnormalities when assessing ewes as wet or dry. Ewes with mastitis or unsound udders should be culled.

Udder abnormalities include:

- Mastitis
 - One or both sides of the udder are hard and often lumpy
 - Milk stripped from the teat may be watery and have clots, blood or pus
 - If the ewe has 'black mastitis', the udder will look black/purple and feel colder than normal due to the death of the tissue. These ewes will require treatment with antibiotics.
- Missing teats
- Teats damaged from shearing cuts
- 'Blown' or 'bottle' teats that are much too large and prevent the lamb from drinking
- Blind teats
- Abnormal udder development
- Cheesy gland.

MORE INFORMATION

AWI Picking Performer Ewes™ workshop at wool.com/workshops
NSW DPIRD factsheet 'Sheep udder assessment at lamb marking'

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Keeping on top of sheep diseases in your local area



An annual sheep industry project that last year monitored nearly 12 million Australian sheep found only a low incidence of disease across the country. However, continued vigilance by sheep and wool producers will help ensure that this situation continues.

The National Sheep Health Monitoring Project (NSHMP) commenced in 2007 to monitor lines of sheep in abattoirs for animal health conditions that might reduce productivity in the sheep value chain or impact market access.

The results of the NSHMP allow producers to identify the animal health conditions most relevant to their local area, thereby enabling producers to adapt their management practices to address them. The NSHMP 2023–24 Annual Report provides an analysis of the data from the project for 14 monitored conditions and displays the percentage of sheep affected in each local government area. Producers can also access data specific to their own lines of sheep via Meat & Livestock Australia's myFeedback.

Sheep monitored during the project in the 2023–24 year were sourced from all Australian states. Monitoring occurred in 10 abattoirs. Meat inspectors inspected nearly 12 million sheep including lambs (an increase of more than two million

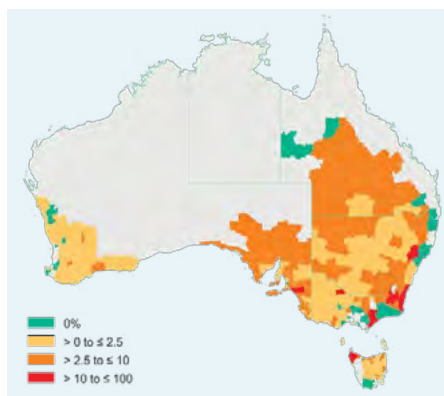


Figure 1: Percentage of sheep affected by bladder worm in each Local Government Area in 2023–24.

Note: Similar maps for the other 13 health conditions are provided in the NSHMP Annual Report.

animals compared to the previous year) in 52,530 lines from 11,524 Property Identification Codes (PICs).

The analysis shows that there is a very low incidence of disease in inspected sheep – see Table 1.

For each of the 14 health conditions, the NSHMP Annual Report provides details of:

- the number of sheep in Australia inspected and affected during the past three years
- the percentage of PICs inspected in each state that had at least one affected animal
- the percentage of animals inspected in each state that were affected
- a map showing the percentage of sheep affected in each local government area – see the example above, for bladder worm.

There was monitoring for five other conditions but their prevalence was so low (<0.1%)

The NSHMP 2023–24 Annual Report, which was released in February, displays for each local government area the percentage of sheep affected by 14 monitored conditions.

that detailed analysis wasn't included in the Annual Report.

The NSHMP is run by Animal Health Australia (AHA) with the support of sheep industry organisations Sheep Producers Australia and WoolProducers Australia.

AWI Program Manager, Animal Wellbeing and Industry Resilience, Carolina Diaz, who is a member of the NSHMP Steering Committee, says the project has generated comprehensive data that provides a good indication of the animal health status of the Australian flock.

"The report is useful for producers, animal health advisors and state departments of agriculture to track if there are any adverse health conditions emerging in their region so that they can fine tune their animal health programs and address the issues swiftly," Carolina said.

"Governments, industry groups and processors also use this information to provide solid evidence to demonstrate that Australian sheep and wool producers are committed to exceptionally high standards of animal health and welfare."

Bladder worm continues to be the top condition nationally with 2.6% of inspected animals affected, and was most common in South Australia, where 3.9% of inspected sheep had the condition. Although still at low levels, the other health conditions that recorded the most levels of incidence were pleurisy, nephritis and sheep measles.

"The incidence of cheesy gland has decreased from 2022–23. But woolgrowers in particular should look out for the disease in their sheep because it is associated with a decrease in wool production, wool contamination, and chronic infection causes ill thrift, emaciation and can affect reproductive performance," Carolina added.

MORE INFORMATION

animalhealthaustralia.com.au/nshmp-annual-reports

Table 1: National percentage of sheep affected by each condition in 2023–24

Condition	2022–23 % sheep affected	2023–24 % sheep affected
Bladder worm	2.9	2.6
Pleurisy	1.8	1.8
Nephritis	1.3	1.4
Sheep measles	1.4	1.4
Lungworm	0.9	1.2
Vaccination lesions	1.2	1.1
Grass seed	1.1	1.0
Liver fluke	0.9	1.0
Cheesy gland	1.0	0.8
Arthritis	0.8	0.7
Pneumonia	0.5	0.6
Bruising	0.4	0.4
Knotty gut	0.3	0.4
Sarcocystosis	0.2	0.2



Keeping up to scratch with vaccinations

Young lambs are very susceptible to infections and benefit from vaccination.

Vaccinations are often a relatively cheap way of preventing disease in your flock. But what things should you consider when deciding which vaccines to use on your property? Here we provide an extract from a recent webinar in which Kojonup-based veterinarian Dr Michylla Seal provided some handy advice.

The AWI|TLC Partner Program recently held a webinar with veterinarian Dr Michylla Seal of Genstock who provided a summary of what to consider about vaccinating sheep.

“There’s much about our animals’ health that we can’t control, but preventing disease through vaccination is something that we can control. So be proactive. The benefits of using preventative medicine can far outweigh the costs of being reactive and having to deal with disease in your sheep when it strikes,” Dr Seal said.

“However, there is no one vaccination program that suits all sheep and wool producers. Whether and when to vaccinate depends on your sheep enterprise’s circumstances.”

Dr Seal says the decision as to whether to vaccinate is based on factors including:

- **Prevalence of the disease in your area** – what is the likelihood of the disease occurring?
- **Cost and impact of the disease** – will an outbreak of disease have a large or minor cost and impact on your business?
- **Class of animal** – does disease pose a risk to a particular class of sheep? Is that class going to be retained on your farm, traded, or sent to slaughter?
- **Cost and efficacy of the vaccine** – do the benefits of a particular vaccination outweigh the costs in terms of money, time, and welfare?
- **Your attitude to risk** – how much of a risk do you want to take?

“The other thing to be aware of with vaccination is that achieving success is not just due to the vaccine, it’s also about whether the sheep is in a good enough condition and health at

vaccination time to have the ability to get the most out of the vaccine and form a good immune response,” Dr Seal said.

“Vaccination gives the majority of the animals good, adequate protection, but there will be a small proportion of animals that have a poor response. Although it might be due to a human misapplication of the vaccine, most of the time will be because those animals are

nutritionally challenged and in poor condition.

“So if you get an incidence of disease after vaccination, it’s not because the vaccine is no good, it could well be because a proportion of the animals were doing it tough, such as during a poor season. Don’t stop vaccinating because of that; you should be making sure that you are giving them as much protection as you can.

“Never hesitate to reach out to a veterinarian to ask for help if you’ve got any concerns.”

Below is an extract of what Dr Seal said in the webinar about the various vaccines.

Clostridial vaccine

Clostridial diseases (pulpy kidney, tetanus, black leg, black disease and malignant oedema) and cheesy gland are all preventable by vaccination. Pulpy kidney is a disease that is especially important to watch out for. It’s seen usually when there has been a change in feed, such as after a break in the season or when sheep are moved into containment or a feedlot. Cheesy gland can cause a lot of losses in terms of carcase trimming and contamination; and it can also cause a loss of about 4–7% in clean fleece weight in the first year of infection.

Recommendation:

For maximum protection of young lambs from clostridial diseases, vaccinate ewes three to six weeks before lambing. We want the ewes’ antibody level high enough so she’s transferring across in her colostrum, that first line of milk, sufficient maternal antibodies to protect that new lamb up until its own first vaccination at marking.

The vaccination of the lamb at marking is a priming dose that provides only short term protection. It's important that a second dose is given at weaning to get the lambs' immune response really up and going and provide longevity in protection. Then we need give them an annual booster.

Cheesy gland vaccine is incorporated in the clostridial vaccine, either as 3-in-1 (pulpy kidney, tetanus, cheesy gland) or 6-in-1 (pulpy kidney, tetanus, black disease, black leg, malignant oedema, cheesy gland). The immunity to pulpy kidney appears to last for a much shorter period, and boosters should be timed to occur prior to a high challenge (grazing high quality feeds in rapidly growing lambs, lucerne or grain feeding).

I tend to recommend a 6-in-1 for rams. I wouldn't want someone buying a ram and then it dying. Most seedstock producers are using a 6-in-1 in their rams. But every property is different, so what you choose depends on your own circumstances.

Ovine Johne's Disease (OJD) vaccine

The development of OJD in an animal is slow and insidious. From the time an animal contracts OJD to the time that we see signs, it can be three to five years. It usually presents as ill thrift. There isn't always scouring but occasionally there is. The animal just starts losing weight and then dies within about three months.

The disease is in most sheep areas of Australia but there are different environments where it survives better; for instance it's not going to survive long in 40 degree heat. An animal with OJD starts spreading the disease in its faeces by about two years of age, so you could have a clinically normal animal contaminating your environment.

Recommendation:

The vaccine (Gudair®) costs more per head than other vaccinations but it provides lifetime protection.

In endemic areas, I'd recommend vaccinating all replacement animals being kept over two years of age. But it's a waste of money to vaccinate an animal that's not being kept over two years of age unless they are being sold to someone that's going to use them as breeders or wethers that are going to be kept for wool. It's also a waste of money and time vaccinating any that are going to slaughter. So just vaccinate your keepers.

I recommend my studs to vaccinate for OJD because it enables market access for their rams.

The best time to vaccinate is at lamb marking because OJD is spread by the faecal-oral route. As soon as lambs start to graze, they're at risk of picking it up.

Be very careful when vaccinating. I've known numerous people self-inject and need multiple surgeries. So use the Sekurus vaccination gun. The first time you use it, you'll find it has a different action to what you're used to with other vaccinations. But once you get a feel for it, it works really well at protecting you.

Campylobacter vaccine

Campylobacter doesn't become a problem unless ewes are exposed for the first time when they're pregnant. That's where we get the abortion. Usually if they're not pregnant, the ewe gets a bit unwell and then gets over it.

Recommendation:

I tend to recommend with this vaccine (Campyvax®) to give two shots in the first year of life and you'll then tend to find they're protected really well.

If your ewes are contained during pregnancy or you're in cooler and moist climates, vaccination would be something that I'd be thinking about.

We can actually test animals to see if the disease is on a property. But having it on a property and it causing disease depends on the lambing time. If you're an early lamber, you might not have an issue.

Erysipelas vaccine

Lambs usually pick up arthritis soon after birth. Ewes hold the bacteria in their throat so when they are cleaning their lambs, that is when it is spread a lot. But it can also be spread at marking.

Recommendation:

When considering the arthritis vaccine, it's really important to consider what level the arthritis is on your farm – it is very variable and every farm is different. You've got to consider the cost versus its benefit, which largely depends on the incidence of the disease on your farm.

Some people get a very low incidence by just doing a vaccination at marking. But if they have a higher rate, they might need to include it in the pre-lambing vaccination to boost the antibodies in the ewes' colostrum and thereby reduce incidence in the lambs. Vaccination of lambs at weaning will provide long-term protection if needed.

Vaccination is a lot easier to justify when there is a really good reproduction rate and there are a lot of lambs.

Also, I tend to find if we vaccinate for Erysipelas, we also tend to minimise the other bacteria that cause arthritis as well. We're not exactly sure how, but that's what I tend to see.

Scabby mouth vaccine

Scabby mouth is most common in lambs in their first year of life. All it takes is a little cut to give the virus an opportunity – oral abrasions from grazing stubbles or pellets can predispose animals to infection. In mild cases the virus just runs its course, but severe lesions that have secondary bacterial infections can render affected lambs unable to feed. Sheep can also get infected on the nose and feet, and ewes can get it on their teats which can affect their rearing of the lamb.

Recommendation:

The scabby mouth vaccine (Scabigard®) is a live vaccine that is needed only once. I only recommend a booster in high risk environments.

When vaccinating a lamb, you should just scratch the bare skin when they are in the lamb marking cradle. You don't want to draw blood because it will wash the vaccine away.

You should do the vaccination on an area of the animal where it can't put its mouth and get infected. The best place is underneath the arm. Don't vaccinate in the back leg because a suckling lamb or the vaccinated animal can be exposed on the mouth and might get infected.

When an animal loses a scab (either from the scratch line or from an infected area), it introduces the virus to the environment. Out in the open, the virus dies off pretty quick, but it can persist for long periods around sheds and in feeders.

Vaccinated animals or animals that have had scabby mouth can still become reinfected but it is often milder, of shorter duration, and might go unnoticed.

Humans have to be very careful when using the vaccine and dealing with infected animals because it is a live vaccine and humans can get a bad infection.

Always read and follow label instructions

When using veterinary chemicals, it is crucial to always read the label and always follow the instructions exactly, without exception. Label recommendations describe the safest, most effective, and best way known to use the product.

MORE INFORMATION

View a recording of the webinar at thelivestockcollective.com.au/our-projects/awi-tlc-partner-program

Non-chemical flystrike control R&D update

AWI is investing in a range of biological control methods for targeting the Australian sheep blowfly. These aim to minimise the risk of flystrike while also having low residue and reduced environmental impacts.

Chemical resistance in sheep blowflies is compromising the effectiveness of current sheep flystrike control options, and there is potential for their access to be further restricted due to workplace health and safety, and residue and environmental concerns.

In response, AWI and its research partners are investing in a range of innovative technologies and natural formulations to provide new approaches to target the sheep blowfly. The investments not only aim to minimise the risk of flystrike in sheep but also have a minimal environmental impact.

The projects are part of the 'New pest and disease management solutions' initiative of Woolmark+, the roadmap designed to help woolgrowers and supply chain partners work together to accelerate the wool industry's transition towards a nature positive future. **Below is an update on three of these AWI-funded projects.**

Sterilised blowflies to render the flystrike problem impotent

Millions of sterile male blowflies are being released on Kangaroo Island in South Australia to see whether they will suppress the blowfly reproduction rate and population, and therefore the incidence of flystrike.



Researchers and funders examining irradiated blowfly pupae at the facility for the mass rearing of sterile blowfly males on Kangaroo Island. PHOTO: Richard Glatz

The release of masses of sterile male insects into the wild to mate with the females and thus reduce the next generation's population is a method of biological insect control that has been successfully used worldwide for decades for numerous pest insects.

The Australian sheep blowfly *Lucilia cuprina* is thought to be a good target for this sterile insect technique (SIT). Sterilisation is induced through irradiation on the reproductive cells of the insects, and not through genetic modification.

The release of sterile male blowflies on Kangaroo Island (4,500 km² area, 600,000 sheep) is under way in a project led by South Australian Research and Development Institute (SARDI), with the current (second) phase of the project funded by SARDI, AWI, Meat & Livestock Australia, Animal Health Australia, Livestock SA and the University of Adelaide.

As well as aiming to successfully suppress blowflies on Kangaroo Island, another key goal of the project is to acquire the knowledge and skills for SIT to be applied in mainland Australia.

"It is hypothesised that if producers could work together to strategically release sterile male blowflies within defined regions at targeted times, it might reduce fly pressure and thus reduce woolgrowers' need for other fly management tools such as mulesing or chemicals," said AWI Program Manager, Animal Wellbeing and Industry Resilience, Carolina Diaz.

"However, it is important that the sterile male blowfly density is sufficient to dominate the already present wild, non-sterile male population, so there is less competition for the sterile blowflies to mate. Even if initially successful, there is always the risk that wild populations could be reintroduced through uncontrollable biosecurity gaps."

The relative isolation of Kangaroo Island means that it is a good testing ground for the technology.

The pupae of about 12 million blowflies were released during a 12-week period starting in September last year on the Dudley Peninsula (650 km²) on the eastern end of Kangaroo Island.

Early results indicate that sterile flies have become well-established within the release areas, with a good survival rate.

Three years of large-scale releases across the rest of Kangaroo Island are planned over consecutive spring and summer periods, with the aim to eradicate blowflies on the Island by the end of 2027. This will require the rearing and release of up to 50 million sterile blowflies per week.

Tiny tea tree oil nanoparticles to battle blowflies

A project co-funded by AWI aims to use nanotechnology to develop a tea tree oil biopesticide that provides prolonged, safe and residue-free flystrike protection for sheep.



A tea tree oil formulation being tested against sheep blowfly by scientists in the lab.

When biopesticides are applied as a blowfly repellent using current delivery methods, the biopesticides unfortunately have shorter protection periods and lack potency compared to the available chemical options. This means that, to date, biopesticides have not been a practical option for woolgrowers.

However, nanotechnology might provide a solution. Nanotechnology is essentially the study of very small things – nanoparticles less than a thousandth of a millimetre in size. Building on previous AWI investment in nanotechnology for flystrike control, researchers are developing a promising new method of delivering biopesticides that provide extended protection and are softer on the environment.

“Led by the Queensland Government’s Department of Primary Industries, this project is aiming to design and test natural and environmentally friendly tea tree oil nano-formulations to give prolonged periods of protection against flystrike, with minimal residues and off-target effects,” said AWI’s Carolina Diaz.

“The project is currently in the laboratory phase and results look promising. Although it seems that the protection period might still not be as long as that achieved by traditional flystrike prevention chemicals such as Dicyclanil, the protection period provided by the tea tree formulation could be long enough to be effective for use at lamb marking, for example.

“The research is still in its lab stage. If the researchers can demonstrate sufficient effectiveness of the formulation against sheep blowfly in the lab, the project will then progress to animal trials.”

The research is co-funded by AWI, Beef + Lamb New Zealand and AgriFutures (representing the tea tree oil industry). The Queensland Government’s Department of Primary Industries and the University of Queensland are providing in-kind contributions. In-kind contributions of technical expertise and tea tree oil for the trials is also being provided by Main Camp, the largest tea tree oil producer in Australia.

Research sets a trap for the sheep blowfly

A project co-funded by AWI aims to develop a more effective and potent way of trapping sheep blowflies so that blowfly populations can be suppressed in wool-growing areas of Australia, thereby reducing the incidence of flystrike.



Researchers are partnering with woolgrowers across three consecutive flystrike seasons to find an effective trapping solution.

The trapping solution would be an additional flystrike prevention option, with long-term effectiveness, minimal labour for woolgrowers, and the best outcomes for sheep. The project, which began in December 2023, will tackle the limitations of current trapping options, which include their inability to target specific fly species and a negligible suppression of female numbers.

The project is being carried out by Deakin University, with a grant from the Australian Government’s Australian Research Council and funding from AWI.

“The project’s preventive approach to flystrike is a highly promising

initiative that has the potential to make a significant contribution towards developing a tool to combat the viability of the Australian sheep blowfly,” said AWI’s Carolina Diaz.

“It aims to provide an effective, eco-friendly, low-maintenance approach to flystrike, providing national benefit through improved animal welfare, reduced costs and labour for woolgrowers, and alignment with sustainable practices and market demand.”

The researchers are currently utilising chemical and molecular approaches to identify the key factors, like fleece rot, that attract female flies to vulnerable sheep, beyond traditional predictors such as dag and wrinkle scores.

The project has successfully engaged 13 farmers from five states, highlighting a diverse range of locations. Skin swabs have been collected from sheep to study their skin microbiome, and fleece samples have been taken to analyse volatile chemical profiles and improve chemical analysis methods. Additionally, flies have been trapped on these properties to examine the diversity of local populations and their digestive tract microbiomes.

Ultimately the aim is to develop a novel lure technology (fly traps) able to be commercialised and used on-farm, at scale across Australia.

The lure will be tested on multiple properties and in numerous states, taking into account geographic and climate variation across Australia, to determine the effect of the lure on wild fly populations and flystrike rates.

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AWI genomic investments

Genomics is playing an increasing role in new Merino R&D, investigating direct breech and body strike, genetic grouping strategies, impact of varying ages of maturity, conformation breeding values, footrot, methane, resilience, feed intake and feed efficiency.

AWI's genomics investment began in 2004 with mapping the blowfly genome – targeting specific genes for chemical control and understanding resistance mechanisms. Soon after, AWI expanded R&D to include Merino genomics with MLA and the Sheep CRC, leading to major advances in the collection, analysis and practical application of the technology for sheep breeding.

The outcomes of investment in sheep breeding genomic projects are now being rapidly commercialised. AWI projects to date have focused on Merino pedigree, lifetime wool productivity, lifetime reproduction and flystrike. The Merino genomic projects have included the early Sheep Genomics Flock, Sheep CRC (SCRC1), MERINOSELECT, Merino Lifetime Productivity (MLP) project and Australian Merino Sire Evaluation Association (AMSEA).

Since 2022, the phenotypic (measured) and genomic (DNA) data from the MLP project has been accessible to woolgrowers through MERINOSELECT. The use of genomic and phenotype data in MERINOSELECT analysis has enhanced the accuracy of early mid parent ASBVs before the first direct assessment of each trait – see Figure 1. In doing so, it has decreased the volatility of early life ASBVs and improved sire progeny testing based on young data. The increased accuracy minimises risk and mistakes, with the small annual advantages accumulating progressively and creating greater genetic gain over time.

The large number of well-phenotyped Merinos with genotypes has also meant that the benefits of genomics is being extended to breeders beyond those involved in MERINOSELECT.

MLA released Flock Profile in 2020 and has slowly added more traits to the report since then. Commercial breeders, whose ram source is well-linked to the Merino reference population, can take

There has been rapid industry adoption of genomics in Merino breeding.

Genomics is particularly beneficial during the early, pre-measurement stage for resolving pedigree challenges, varying influence between parental genetics (contribution is not always 50:50 for each trait), and for traits that are difficult, expensive or measured late in life (such as worm egg count, lifetime reproduction, and lifetime fleece productivity). Approximately 50% of recent ram breeder animals in MERINOSELECT have a 60K genomic test, with more than 600,000 genotyped animals contributing to the Merino genomic reference population.

DNA samples from 20 random young ewes and receive benchmark information across a range of traits for their commercial flock. MLA also plans to release genotype assessments for individual Merinos by late 2025, making genomic technology accessible to the 50% of ram breeders not in MERINOSELECT.

The commercialisation of genomic technology relies on an ongoing reference population of current, well-phenotyped and -genotyped animals. This population provides the benchmark against which new young 'discovery' animals can be compared. The 'Genomic Reference Population' is broadly based and includes

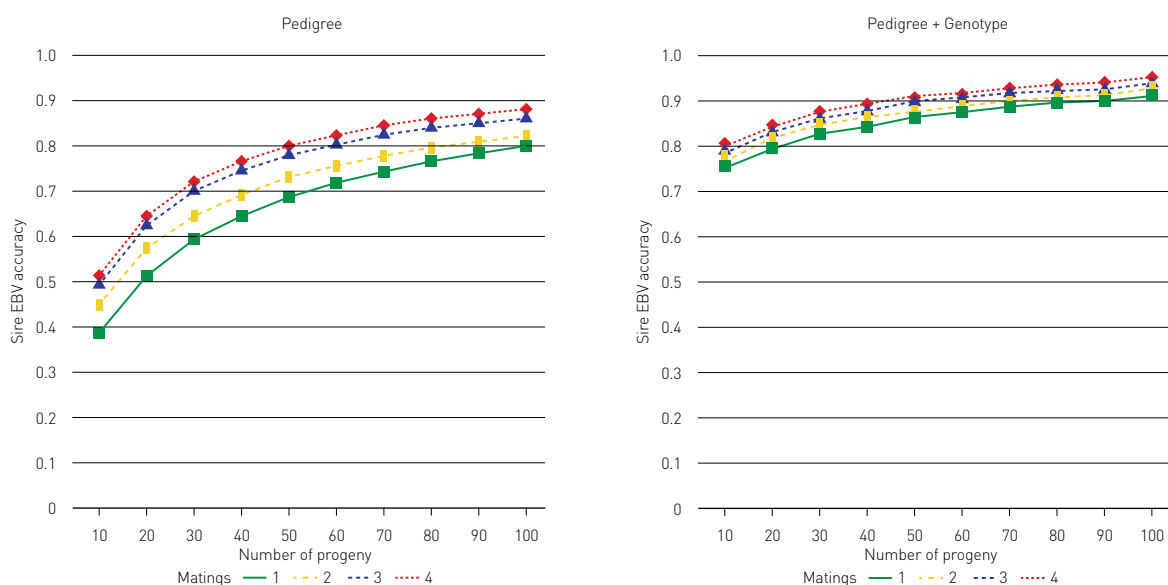


Figure 1. Graphs showing the increased sire EBV accuracy from using pedigree and genomics for the Merino Weaning Rate trait at various ewe progeny numbers and matings. Source: Animal Genetics Breeding Unit (AGBU)

both commercial and research animals that contribute genotype and trait data – forming the foundation for accurate genomic breeding values (ASBVs/gBV's).

Feeding into this population are Genomics Reference Flocks – dedicated, structured R&D resource flocks established specifically to collect data on hard-to-measure traits such as meat quality, flystrike, and reproduction. These flocks capture high-value data that is difficult or costly to obtain from industry flocks. While they are expensive to run, the growing accessibility and commercial relevance of genomic tools is improving the prospects for wider funding and ongoing support.

Post-MLP, AMSEA continues to play a vital role in building the Merino reference population. Through its large-scale sire evaluations, AMSEA provides critical linkage to the genomic reference population for ram breeders and continues to collect whole-drop, two-year-old wool data on 5,000 progeny from 100 sires annually.

Looking ahead, AWI R&D is investing in the development of next-generation traits such as direct breech and body strike resistance, methane emission, feed intake, feed efficiency,



resilience, and survival. Many of these traits are difficult and expensive to measure – but genomics is expected to be a key tool in making their evaluation more efficient and accessible across the industry.

MORE INFORMATION

AWI Program Manager, Sheep Genetics & Animal Welfare Advocacy, Geoff Lindon, geoff.lindon@wool.com

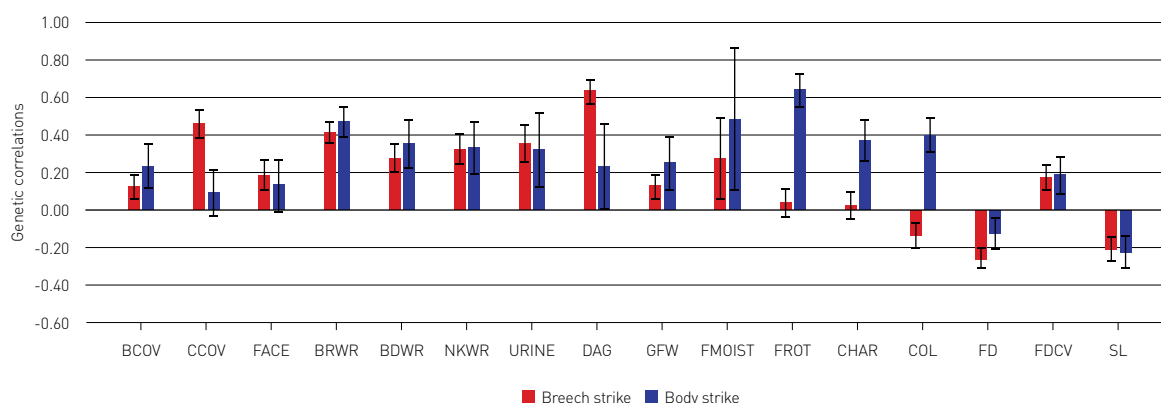


Figure 2. Graph showing preliminary analysis of genetic correlations of Merino flocks involved in an AWI pilot project genotyping and phenotyping animals with breech and body strike and an unstruck pair in the same management group. Analysis by AGBU.

[BCOV – Breech Cover; CCOV – Crutch Cover; FACE – Face Cover; BRWR – Breech Wrinkle; BDWR – Body Wrinkle; NKWR – Neck Wrinkle; URINE – Urine Stain; DAG – Dag; GFW – Hogget Greasy Fleece Weight; FMOIST – Faecal Moisture; FROT – Fleece Rot; CHAR – Wool Character; COL – Wool Colour; FD – Fibre Diameter; FDCV – Fibre Diameter Coefficient of Variation; SL – Staple Length]



Woolgrowers – get involved

- Ram breeders interested in getting involved in a project to generate breech and body strike Project Breeding Values (PBV), then Research Breeding Values (RBV), then Australian Sheep Breeding Value (ASBV) genomic breeding values should contact Ben Swain: ben.swain@bcsagribusiness.com.au
- Ram breeders interested in getting involved in a project on the Genetics of Feet Health (Footrot and Structure) should contact Amy Lockwood: amy@nextgenagri.com
- Commercial woolgrowers interested in Flock Profile should visit sheepgenetics.org.au/resources/genomics

Selection for more methane efficient sheep

Australia's 'Selection for more methane efficient sheep' project aims to reduce greenhouse gas emissions through the development of methane breeding values. This article reports the project's progress, strategies, and the role of the MLP sites.



MLP quick 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: Tulooona 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 Limited
- **Macquarie, Trangie, NSW**
Partner: NSW DPIRD
Committee: Macquarie Sire Evaluation Association
- **New England, NSW**
Partner: CSIRO
Committee: New England Merino Sire Evaluation Association

The MLP project has tracked the lifetime performance of 5,700 ewes as they proceeded through four to five joinings and annual shearings.

A full suite of assessments has been taken on the ewes including visual trait scoring, classer gradings, objective assessments of a range of key traits, and index evaluations, along with a DNA genotype at the start and end of their lives.

A unique and extensive dataset has been created to enhance existing Merino breeding and selection strategies, for both ram sellers and buyers, to deliver greater lifetime productivity and woolgrower returns now and into the future.

To stay up to date with the latest MLP findings, visit wool.com/MLP. Subscribe to MLP updates via merinosuperiorsires.com.au/contact-us

Supported by Meat & Livestock Australia Donor Company (MDC), NSW Department of Primary Industries and Regional Development, University of New England, and Animal Breeding and Genetic Unit, the project focuses on assessing methane, defining the trait, conducting breeding value analysis, and exploring its impact on sheep indexes. This initiative involves collaboration among research institutions, industry partners, and sheep breeders, including data from four MLP sites.

The MLP sites have been important to the success of the methane efficiency project by offering a highly recorded and industry-linked resource. Across the whole project, approximately 14,000 sheep have been measured for methane production, with 15% of these measurements coming from the MLP project and the remainder from previous research projects, along with reference and industry flocks.

Methane production is measured using portable accumulation chambers, into which each animal is placed for 40 minutes. The methane emission rate is determined during this period.



Macquarie MLP ewes in portable accumulation chambers to assess their methane emission rate.

Project results

Figure 1 shows the distribution of raw methane production rates (ml/min) in sheep across the four MLP sites involved in the project: Chiswick (New England), Pingelly, Temora (MerinoLink), and Trangie (Macquarie).

The red dashed line in each panel shows the mean methane rate for each site. Chiswick and Pingelly had higher mean methane rates, while Temora and Trangie had lower means. Pingelly and Chiswick potentially had wider distributions suggesting higher variability in methane emissions among the animals at the sites. Temora and Trangie had distributions concentrated at lower methane rates, especially Temora where most animals have rates well below 10 ml/min.

Variations in methane production rates across different sites are primarily influenced by the local type and availability of feed leading up to measurement, as well as feeding behaviours and management practices. Sites with lower feed availability have lower and less variable methane emissions. The project has established that these differences must be considered when interpreting methane data for genetic selection. The project plans to investigate the consistent ranking of assessments across different seasons and environments.

Figure 2 presents the aggregated MLP sire results facilitated via the use of link sires, which highlights the variability in methane breeding values among MLP sires. This wide range suggests that selective breeding for lower methane production is possible. By choosing sires with lower (more negative) breeding values, producers can make genetic progress towards more methane-efficient sheep. Such selective breeding is crucial for achieving the project's goal of reducing methane emissions either per head or per unit of product.

Analysis of the collected data has confirmed that methane production in sheep is moderately heritable, with a heritability estimate of approximately 0.19. This heritability suggests that genetic selection can be an effective tool for reducing methane emissions in sheep populations. Further analysis will examine correlations between methane levels, productivity, and profitability for all sheep types.

Selection strategies and industry implications

The project has explored several methane trait definitions and selection strategies for reducing methane emissions:

- **Profitability with carbon price:** Selecting for economic returns while factoring in methane costs.
- **Methane per head:** Directly reducing emissions per animal.
- **Methane intensity:** Reducing methane per kilogram of lamb and wool produced.
- **Methane yield:** Reducing methane per kilogram of feed intake (popular in New Zealand).

Early modelling shows that selecting for profitability increases methane emissions by 0.7% annually but improves methane efficiency by 2.6%. However, this approach does not reduce overall methane emissions unless there is a decrease in total stock numbers. On the other hand, selecting for low methane output per head reduces kilograms of lamb significantly, requiring a high carbon price to be economically viable.

Breeding for lower methane is a long-term commitment, so breeders need stable, science-based policies in place to ensure their efforts align with domestic and international goals. Policy clarity reduces risk, while policymakers must also understand the science to set effective, consistent targets.

Future modelling efforts will assess the effects of these selection strategies on wool production and quality. Additional research is required to better understand the genetic correlations between wool traits and methane production, to ensure breeding programs optimise profitability of both meat and wool outcomes.

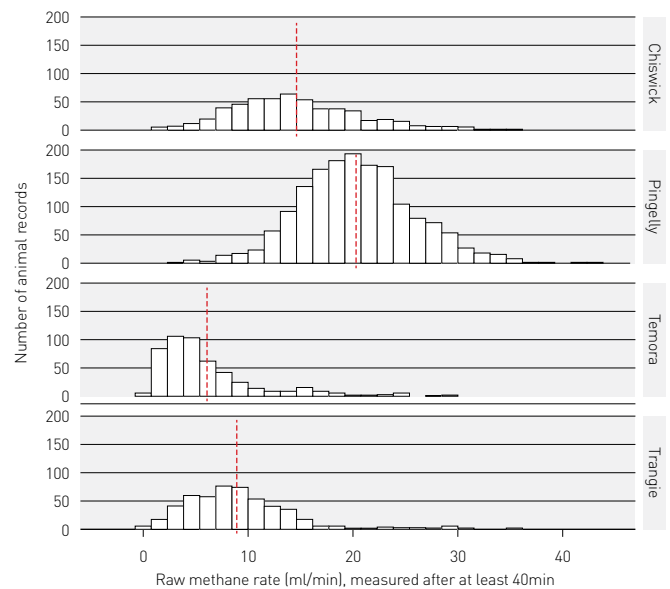


Figure 1. Raw methane rate (ml/min, measured after at least 40 minutes) at four MLP sites

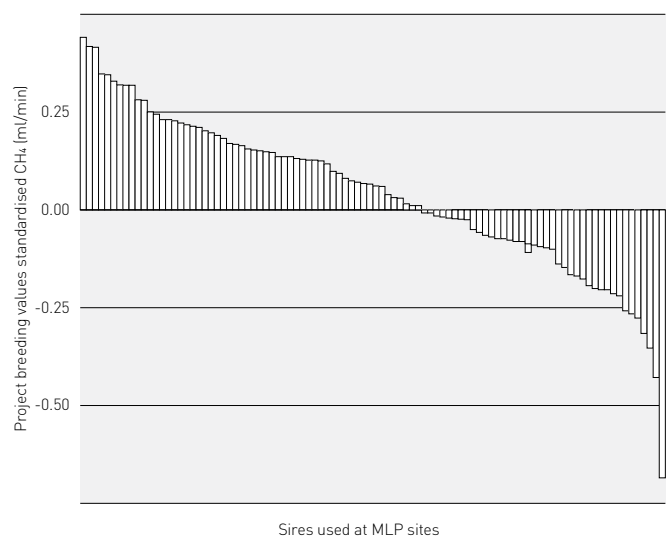


Figure 2. Project breeding values for sires used at MLP sites (PBVs currently reported are scaled which indicates the direction and magnitude of expected change but not explicit unit changes)

Next steps

Project breeding value reports for methane are now being distributed to the participating breeders including MLP sire entrants from the four participating MLP sites. A transition plan is in place to move from project-specific breeding values to research breeding values and eventually to ASBVs. This process will require strong genetic linkage across flocks and the continued collection of methane records to support multi-trait selection indexes that balance methane efficiency with other economically important traits like growth, reproduction, and wool quality.

A new project is being planned to continue sheep methane measurement and analysis through collaborations with the Zero Net Emissions from Agriculture Cooperative Research Centre (ZNE-Ag CRC) and the Global Methane Hub involving UK, Ireland, Uruguay, New Zealand and Australia (MLA, AWI and AMSEA). The ongoing engagement of sheep breeders and industry feedback is critical to refining breeding objectives and ensuring that methane reduction strategies remain practical and economically viable.

To have your flock involved in future recording you can reach out to Julius Van Der Werf (jvanderw@une.edu.au).

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The time is right to check your TIMERITE® spray date

With spring around the corner, now is the time for woolgrowers to find out their optimum spray date for the control of redlegged earth mites in their pastures. The TIMERITE® tool has recently been updated to reflect new data and improved modelling, so it's important for all woolgrowers to check they have the best spray date for their farm.



Redlegged earth mites and feeding damage.

Fast facts

- The TIMERITE® tool has recently been updated, so woolgrowers should check they have the Best spray date for their locality.
- The new TIMERITE® tool also now provides an Ideal spray window during which spraying results will be at least 95% as good as the Best spray date, thereby providing woolgrowers with more flexibility.
- The new tool is a lot easier to use because growers now only need to input the postcode of their property.

Redlegged earth mites (RLEM) can be a major pasture pest for woolgrowers in the winter rainfall regions of southern Australia. RLEM are small (1 mm long) with black bodies and red legs, spending most of their time on the soil surface, moving up onto plants to feed. The mites compete with sheep for pasture feed, which leads to production losses.

Strategic spraying of pastures in late winter-spring can help minimise RLEM damage to pastures the following autumn. However, the best date to spray depends on where in Australia the farm is located.

The optimum date for your farm can be obtained through the TIMERITE® tool at timerite.com.au.

"The TIMERITE® tool was first launched more than 20 years ago but has recently been upgraded, not only in light of new and improved modelling, but also to offer greater functionality and a simpler experience for growers," said AWI National Extension Manager, Emily King.

"Woolgrowers should use the new TIMERITE® to check they have the 'Best spray date' for their farm, as these dates have shifted with new data and improved modelling. In addition to the Best spray date, the tool also now provides a date range – the Ideal spray window – for which control of RLEM is still very high. This provides growers with improved flexibility to plan a spray window, then spray when the weather is suitable.

"The new TIMERITE® tool is also easier to use. Instead of the grower inputting their farm's coordinates, they now only need to enter their postcode. Additionally, growers now have the ability to visualise the impact on mite control if spraying outside the Ideal spray window."

TIMERITE® is effective against RLEM, but not

against other pasture pests (including blue oat mites and others which look similar), so it's important you know which pest you're dealing with on your property.

TIMERITE® works by accurately predicting the timing of diapause (overwintering) egg production and implementing control measures before this critical stage in the RLEM life cycle. By controlling RLEM populations prior to diapause egg production, the number of mites that hatch that following autumn is drastically reduced.

However, you should only spray when needed. Overuse of chemical spraying leads to pesticide resistance, which is becoming more widespread in RLEM. The first step in managing RLEM is to reduce risk within a paddock using the following strategies:

- Avoid sowing highly susceptible pasture species or crops into paddocks known to have high mite numbers.
- Incorporate a cereal crop into your rotation to reduce mite numbers.
- Control weeds, especially broadleaf weeds, within paddocks and along fence lines.
- Heavily graze pastures in spring.
- Burn stubbles to reduce mite numbers the following autumn.

TIMERITE® should be used when the risk of RLEM in the following season is high. This includes situations such as:

- High numbers of RLEM or significant feeding damage across the paddock in late winter-spring.
- Plans to sow a susceptible pasture species or crop (e.g. canola, medic or clover).

The TIMERITE® prediction for your farm is based on you using a long residual pesticide for control (e.g. omethoate). Other pesticides with shorter residual activity may have reduced efficacy.

TIMERITE® was originally developed and funded by AWI and CSIRO. Updates and improvements were made by Cesar Australia in collaboration with CSIRO, AWI, GRDC and MLA.

MORE INFORMATION
timerite.com.au

Key considerations for setting up containment feeding areas

Given the current seasonal conditions in southern Australia, setting up a containment feeding area is an investment to maintain animal health and condition, manage ground cover, and reduce feeding time.

Investing time in planning your containment pens will ensure that it remains a valuable and functional asset for years to come. AWI Extension SA Project Manager Jodie Reseigh and Talking Livestock's Deb Scammell provide readers with four main factors to consider when setting up containment:

Location

It is true what they say, 'location is not just important – it's everything'. The location of a containment area near yards and other handling facilities (even the shearing shed) will allow better monitoring of livestock and handling whilst in containment. If a suitable area is not available, locating the area near a laneway allows for ease of movement of sheep to yards and handling areas. Additionally, locating the area near feed storage (such as grain or hay) saves time and improves efficiency.

Slope is another key factor. A slope of 2–4% helps with drainage and water runoff, reducing bogging in pens and helping prevent animal health issues and disease spread. When designing the layout, consider whether water will flow from one pen to another, and where water from cleaning troughs will run. Ideally, water troughs should be placed at the bottom of the slope.

Feeding method

Before designing your containment yards, decide on the method of feeding the sheep. There are various feeding options, including feed troughs, communal pens, self-feeders, and fully automated feeders. Costs will vary depending on equipment and infrastructure required, as well as the time required to feed the sheep based on the method you choose. Be sure to provide adequate feeding space per animal.

Guidelines, depending on the method of feeding, include:

- Ad lib (e.g. self-feeders): 3–5 cm of trough space per head
- Total mixed ration: 14 cm of trough space per head
- Specific amount per head when all sheep need to feed at the same time (e.g. fed in a trough once per day): 30–40 cm per head.

Pen size and density

Pen size and density are critical. It's recommended to allow 7–10 m² per ewe, with pregnant ewes requiring larger spaces, especially as they approach lambing. Higher stock density reduces dust levels in the pen, as proportionally more urine and manure will be deposited on the pen surface.

When designing your containment area, consider the mob size and the number of ewes to be contained, with a recommendation of 250–300 ewes per pen. Larger mobs may result in shy feeders or ewes with varying condition scores, which negatively affects lambing outcomes.

Shade and shelter

Shade and shelter are key considerations to protect sheep from heat and cold stress. The use of shade cloth or other artificial structures are an effective way to provide shade, noting that sheep often use these areas to shelter from rain. Additionally, shelter from prevailing winds may be a key consideration and will help minimise dust.

Long-term planning for shelter belts of trees and shrubs around or between yards can provide both shade and wind

protection and reduce dust movement. Avoid areas with remnant vegetation due to the risk to the vegetation of high nutrient levels, soil compaction, and potential for ringbarking trees. If there are existing trees, ensure they are properly guarded.

Other considerations

Ensure you supply good quality water, a plan for all-weather access to the containment area, prevailing wind (where dust will blow to) and soil type (avoid powdery soils).

You should contact your local government authority to determine if approval is required for your new containment area.

MORE INFORMATION
wool.com/containment

AWI resources for dry seasonal conditions

With parts of the country experiencing particularly dry seasonal conditions, AWI reminds woolgrowers that it provides a range of resources to help them plan and carefully manage their enterprises during dry conditions, including:

Publications

- Feeding and managing sheep in dry times
- Managing fodder prices for droughts
- Managing sheep in drought lots
- Which sheep do I keep?
- Drought feeding and management of sheep (Agriculture Victoria)
- Releasing sheep from containment feeding.

Decision support tools

- Cost of production calculator
- LifetimeWool feed budget tables
- Feed On Offer library.

These and other AWI and external resources for dry times are available on the AWI website.

MORE INFORMATION
wool.com/drought

PHOTO: Darren O'Brien, Kyancutta, SA



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More international brands join the Woolmark+ Fellowship tour



The delegation from international brands learnt about responsible wool production and environmental sustainability, whilst also experiencing life on the farm.

A second delegation of sustainability leaders from across the international fashion industry recently visited several Australian wool-growing properties to learn about the eco-credentials of Australian wool and the options for the brands to partner with the industry to establish a more nature positive supply chain.

AWI hosted its second Woolmark+ Fellowship tour in March, bringing together sustainability leaders from top-tier international brands including the world's largest luxury fashion group LVMH, French luxury fashion house Chloé, Chinese sporting goods giant ANTA, Canadian outdoor brand Arc'teryx, Indian company Aditya Birla Fashion & Retail, and Australia's own Country Road.

This was the second Woolmark+ Fellowship tour to Australia and followed on from the successful first tour held in December involving Thom Browne, Diesel, Tod's, Brioni, and R.M. Williams (see the previous edition of *Beyond the Bale*).

Woolmark+ Fellowship tours provide the delegates with an opportunity to see first-hand how Australian woolgrowers are responsibly caring for the land and animals on their properties.

The tours also help AWI promote its Woolmark+ roadmap, which was

launched last year in response to brands increasingly seeking ways to minimise the environmental impact of their supply chains (see the box opposite). The delegation was shown ways they can get involved with the roadmap.

The four-day Fellowship trip in March kicked off in Sydney with the delegates learning more about the Australian wool-growing industry from AWI CEO John Roberts; AWI General Manager, Research, Bridget Peachey; and AWI General Manager, Processing Innovation & Education Extension, Julie Davies.

"The Woolmark+ Fellowship is all about fostering connections between Australian woolgrowers and key brands and individuals in the fashion industry," said AWI CEO, John Roberts.

"From hearing first-hand insights from woolgrowers to diving deep into cutting-edge research, the delegations embark on a journey with Woolmark to explore

the co-benefits that wool-growing has for the environment and the fibre's powerful potential to drive a nature-positive future."

During the four-day Fellowship trip in March, the delegation visited three wool-growing properties where they met local woolgrowers and gained first-hand insights into their nature-positive farming practices:

1. At TA Field's 3,000-hectare **Benangaroo Station**, Jugiong, which annually produces 420 bales of 17.5 micron wool, the delegates heard insights from farm manager Tom Macleay and saw a shearing demonstration by AWI shearer trainer Josh Clayton before they headed out to the paddocks for other hands-on experiences.
2. At the 3,800-hectare mixed farming **Warralong** property at Gundagai, the delegates learnt from woolgrower David Carr about how he works to enhance natural capital, from soil health to biodiversity, ensuring a resilient future for wool on the property.

3. At **Talmo Station**, Bookham, the delegates met woolgrowers Chris and Margot Shannon to hear how they work to restore and re-green the land, focusing on planting 430,000 native and biodiverse trees, as part of a larger effort to restore the environment and reduce the property's carbon footprint.

During the tour, the delegation received the following presentations from sustainability experts to complement their visit to the farms:

- Wool knowledge and introduction to Woolmark+ – from AWI Global Sustainability Manager (Acting), Lisa Griplas
- Woolmark+ Australian Wool Insetting Program – from Lara Phillips, Director, Pollination Group
- Natural capital accounting and the Woolmark+ Nature Positive Farming Framework – from Dr Sue Ogilvy, Farming for the Future.

During the tour, the delegates also heard from AWI Woolmark Certification & Traceability Manager, Mark Scott; Natural Capital Advisor for Riverina Local Land Services (LLS), Cherie White; and LLS Cultural Burning Officer, Dean Freeman.

Feedback from guests was overwhelmingly positive, with them all leaving with a deeper understanding of the wool fibre, the Australian wool industry, the environmental benefits of progressive wool-growing practices and how they can engage with the Woolmark+ roadmap.

Feedback on the Woolmark+ Fellowship tour from outdoor brand Arc'teryx

Arc'teryx is a Canadian high performance outdoor apparel and equipment company known for leading innovations in climbing, skiing and alpine technologies. Headquartered in North Vancouver, British Columbia, its products are distributed through more than 160 branded stores and more than 2,400 retail locations worldwide. The company uses Merino wool in some of its base-layers, tops and socks, and aims to use more.

Arc'teryx Raw Materials Sourcing Manager, Megan Lowe, attended the Woolmark+ Fellowship tour. Here she provides her thoughts on what she saw and experienced on the tour.

1. How has this experience changed or deepened your understanding of wool as a fibre for the future of apparel?

This brand trip has been an invaluable experience, deepening my appreciation for wool's potential as a fibre for the future.

Through insightful discussions with Woolmark's research leaders and sustainability team, I gained a greater understanding of the advancements being made in wool technology.

These conversations underscored the fibre's exceptional thermal and moisture management properties, making it a natural choice for high-performance apparel.

Additionally, the opportunity to meet with agricultural scientists and farmers pioneering wool-related sustainability initiatives was invaluable. Seeing first-hand the commitment to regenerative farming practices and responsible sourcing reinforced wool's role as a renewable and easily recyclable fibre. Their dedication to environmental stewardship highlights how wool is not only a fibre of tradition but a key material in shaping the future of sustainable fashion.

2. What impressed you most about the environmental practices you saw first-hand on the wool-growing properties?

One of the most striking aspects of the wool-growing properties was witnessing first-hand the deep passion farmers have for both soil health and the wellbeing of their flocks. Their commitment to sustainable practices was evident in the way they carefully managed crop rotations, grazing patterns, and utilised droughtlots to ensure the land remained productive and resilient.

Farmers proudly showcased various biodiversity initiatives they were actively working on, such as waterway planting and the establishment of wildlife corridors to support local ecosystems. At the same time, they thoughtfully pointed out areas where biodiversity programs were not applicable – where landscapes naturally foster lean ecosystems, demonstrating an understanding that conservation is not a one-size-fits-all approach.

Beyond the environmental efforts, farm life carried a strong sense of community. Farmers openly shared stories of how they support one another and their communities, fostering a collaborative spirit that strengthens the agricultural industry as a whole. Their passion extended to the future of the industry, as many were actively enrolling young people in apprenticeships and had succession plans in place to

ensure long-term sustainability and the continuation of their work.

It was inspiring to see the dedication, care, and forward-thinking approach these farmers bring to their land, their animals, and their communities.

3. What will you take away from the Woolmark+ Fellowship experience, and how do you see it influencing your work?

The Woolmark+ Fellowship has been an invaluable experience, offering deep insights into the wool industry and sustainable practices. One of the most significant takeaways is the importance of further education, both within our company and for our customers. By sharing the knowledge gained through the Fellowship, we can enhance understanding around the complexities of wool's benefits as a fibre, sustainability efforts, and the broader impact of responsible sourcing.

The Fellowship provided opportunity to meet with different levels of the supply chain and has highlighted disconnects within the supply chain, areas where greater transparency and collaboration could improve efficiency and sustainability. Recognising these gaps presents an opportunity to address challenges and create a more seamless, responsible supply chain that benefits all stakeholders.

Another key takeaway is the potential for deeper exploration into natural accounting and the ways we can expand our sustainability initiatives. Understanding and quantifying environmental impact in a meaningful way will allow us to make informed decisions that support long-term ecological balance and responsible business practices.

Overall, this experience has provided a fresh perspective on the industry, reinforcing the importance of education, collaboration, and innovation in our work. With these insights, we can continue to grow in our commitment to sustainability while ensuring that wool remains a valued and responsibly sourced material.

What is the Woolmark+ roadmap?

In response to shifting consumer preferences towards low-impact products, coupled with new regulatory measures and auditing requirements, AWI last year unveiled a comprehensive new roadmap known as Woolmark+.

The Woolmark+ roadmap contains 13 initiatives to support woolgrowers and their customers meet the challenges and tap into the opportunities that are uniquely available to the wool industry.

The roadmap is designed to help woolgrowers and supply chain partners accelerate nature positive outcomes for the industry, ensuring woolgrowers' commitments to nature are recognised and supported.

MORE INFORMATION
wool.com/woolmarkplus



Regen ag benefits under the spotlight

An AWI-funded study has provided valuable insights for woolgrowers seeking to improve on-farm environmental practices – such as soil carbon storage and pasture management – while maintaining productivity and profitability.

A recent AWI-funded project provides practical guidance for woolgrowers looking to improve their environmental performance without sacrificing productivity or profitability. The research was carried out in response to growing market demand for woolgrowers to demonstrate strong environmental credentials.

The project explored several key components of regenerative agriculture, specifically:

1. Pasture species diversity
2. Cell grazing
3. Soil organic carbon (SOC).

Whole-farm stocking rate and seasonal rainfall are major drivers of pasture productivity, SOC levels, greenhouse gas (GHG) emissions, and overall farm profitability. However, grazing management practices, particularly adaptive or cell grazing, and the selection of productive, locally adapted pasture species also play an important role in influencing these outcomes. While cell grazing and targeted species selection often have a greater immediate impact than overall species diversity, maintaining a diverse pasture remains important. Reduced diversity can limit seasonal forage production and undermine the long-term resilience and stability of the grazing system.

The project, titled 'DELIGHTED' (DoEs regenerative agricuLture Impact on GreenHouse gas emissions and profiTability), was led by Tasmanian Institute of Agriculture, a joint venture of University of Tasmania and the Tasmanian Government, as part of the Carbon Storage Partnership.

It focused on four commercial wool-growing properties in Western Victoria, the Coorong region of South Australia and the eastern wheatbelt of Western Australia, with annual rainfall ranging from 350 to 730 mm annually. Two of these farms self-identified as practicing regenerative agriculture, while the other two follow conventional management practices.



Pasture species, not species diversity, increased sward production

The researchers modelled whether increasing sward composition, from the *three* predominant pasture species in the existing pastures to *five* predominant species, increased pasture growth and SOC. In consultation with each case study farmer, perennial ryegrass was replaced by tall fescue and annual ryegrass; subterranean clover replaced white clover, and Phalaris was replaced by lucerne and cocksfoot.

The study found that the type of pasture species had a greater influence on productivity and SOC levels than species diversity. Simply adding more species did not guarantee higher pasture yields. As such, the *type* rather than *amount* of pasture species had greater effect on biomass production and SOC sequestration. However, in some cases, reducing diversity led to declines in seasonal growth, suggesting that diversity still plays a role in system resilience.

To boost pasture performance and soil health, the study recommends using high-yielding, regionally adapted species. A general guideline is maintaining 70% grass and 30% legumes

(such as clover), as legumes support nitrogen fixation and improve pasture digestibility.

Productive pastures reduce feed needs and emissions

Pastures with three high-yielding species produced more biomass, which lowered the need for supplementary feeding. These swards also sequestered more soil carbon, reducing net GHG emissions despite increased methane output from higher stocking rates.

The study highlighted the importance of aligning livestock feed demand with pasture growth. For example, in southern Australia, timing lambing with spring growth can help match stocking rates with peak pasture availability, reducing the reliance on supplementary feed.

Cell grazing increased pasture growth and soil carbon

The researchers modelled the impacts of cell grazing (short, intense grazing periods with long rest periods grazing) with traditional set stocking (continuous grazing with lower stocking density). Cell grazing improved profitability due to higher pasture productivity, greater



carrying capacity, lower feed costs, better soil carbon sequestration, and lower emissions.

Cell grazing promoted pasture recovery by allowing rest between grazing events, which helped rebuild root biomass and carbohydrate reserves. In contrast, continuous grazing depleted root reserves, especially when animals grazed regrowth repeatedly.

However, cell grazing requires more labour and better infrastructure. Woolgrowers must monitor pasture conditions closely and rotate livestock frequently. While recent advances in remote sensing technology are improving the practicality of monitoring pastures and moving stock, farm infrastructure (e.g. fencing and access to water) also needs to be considered; cell grazing generally requires smaller paddocks. Some farmers adjust paddock sizes to maintain the same overall total carrying capacity (dry sheep equivalents).

Rest periods between grazing depend on pasture type, stocking rate, and season. While longer rest periods benefit soil and plant health, very long rests (e.g. up to a year) may reduce overall farm profitability by lowering total carrying capacity.



Historical SOC is an important consideration

The study also examined how historical SOC levels influence future outcomes. Farms with low initial SOC (e.g. 1%) have more capacity to store additional carbon and reduce emissions after adopting new practices than farms with already high SOC (e.g. 3% on sandy soils and 7–8% on clays).

These findings have important implications for participating in carbon markets. These markets reward additional SOC storage after a change in

practice (known as additionality), so woolgrowers with low starting SOC may benefit the most from participation.

Before starting a carbon project, the researchers recommend woolgrowers assess their current SOC levels. Those with low SOC should focus on improving soil health and fertility and carbon storage, while those with high SOC should focus on maintenance to ensure that stored carbon is not lost, especially during drought or periods of low ground cover.

It's important to note that farm regions with low SOC may have the greatest potential to store carbon and contribute to reducing overall farm GHG emissions compared with areas that have not been cleared/cultivated, which generally have greater existing SOC levels.

The researchers caution that while carbon markets can provide additional income, wool and livestock prices still have a much greater impact on overall farm profitability, even when significant improvements in SOC are achieved.

MORE INFORMATION
wool.com/environment

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AWI's multi-pronged approach to wool harvesting

There are many elements to AWI's approach to make wool harvesting easier and more cost-effective for woolgrowers and the Australian wool industry

Shearer and wool handler training

AWI funds and supports hands-on, practical, in-shed training for shearers and wool handlers to attract and retain new workers, as well as increase workers' productivity, skills and professionalism. See page 28.

Wool harvesting ambassadors program

15 young shearers and wool handlers each year promote the industry at workshops, shearing competitions and in the media. These young professionals are positive role models for the industry.

Support for competitions

AWI provides support to local shearing competitions affiliated with Sports Shear Australia. The aim is to promote excellence in the wool harvesting industry, encourage young people the continued development of techniques in shearing and wool handling.

AWI shearing shed design

AWI and a working group of woolgrowers and shed staff in 2019 designed a shearing shed which addresses worker safety, animal welfare, improved shed efficiency and good wool quality outcomes. Dozens of sheds have now been built across the country using it. See wool.com/sheddesign

SafeSheds shearing shed safety program

SafeSheds is a best practice self-assessment guide and checklists to help woolgrowers improve the safety and working conditions in their shearing sheds. See wool.com/safesheds

Modular sheep delivery units

The AWI sheep delivery units provide a system that delivers sheep directly to the shearer, eliminating the time and energy that shearers spend on the catch and drag and minimising the chance of injury to the shearer. See wool.com/sheep-delivery

Biological wool harvesting

The University of Adelaide has made strong progress in identifying the most effective biological agent to create a weakened zone at the base of the wool fibre that enables the fleece to remain securely on the sheep without a net until it can be mechanically removed. Researchers are now analysing 12 promising candidate agents to determine which, if any, are most suitable for this role. This critical evaluation phase will continue for several months before consideration of a new two to three year phase of the project.

As a result, promising work by the University of Technology Sydney and the University of Wollongong on designing a device to harvest the weakened wool has been halted for now, while the focus remains firmly on confirming the agent.

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The high quality of AWI-funded wool harvesting training was on show at the busy event in Western Australia.

Interest in wool shown at WA harvesting event

Woolgrowers attending a recent AWI event in Western Australia witnessed the high level of training provided to shearers and wool handlers in the state, as well as seeing modular sheep delivery units in action.

the wool harvesting industry, thereby helping to attract a quality workforce, raise wool harvesting standards and improve the culture in shearing sheds. There are ambassadors in each Australian state.

AWI director Neil Jackson and Industry Relations Officer WA Tennille Norrish were in attendance to talk

An AWI Wool Harvesting Industry Workshop was held in March for the third year running at Rhodes Pastoral in Boyup Brook, WA. The event was attended by woolgrowers, shearers and wool handlers who showed a positive outlook for the wool industry.

The day included a shearing and wool handling workshop for experienced shearers and wool handlers to develop their skills under the guidance of top level AWI trainers. Woolgrowers that attended the event could witness what wool harvesting training comprises – from grinding combs and cutters correctly to best practice footwork and technique – all designed to increase skills, productivity and woolgrowers' returns through improved clip preparation.

AWI Wool Harvesting Ambassadors in WA were there to assist the trainers and also demonstrate to woolgrowers the modular sheep delivery units manufactured by RW Engineering at Darkan – see box below. The shearers and wool handlers in AWI's Wool Ambassadors Program are selected as positive role models for

to woolgrowers and answer questions about AWI's broad range of wool harvesting initiatives – from shearing shed design and safety to training.

"The event was a great opportunity for woolgrowers to not only witness first-hand where their wool levies are being invested by AWI, but also meet with the trainers and other industry representatives. It also gave growers the opportunity to gather with other growers and discuss what is working best in their wool enterprises," said Tennille.

"There was a lot of genuine interest in all the activities on display. It was a very busy shearing shed full of motivated shearers, wool handlers and woolgrowers, with plenty of positive discussions about wool."

The Wool Harvesting Industry Workshop was funded by AWI and offered to attendees at no cost. AWI thanks Rhodes Pastoral for providing the facilities.

Sheep delivery units in action

The sheep delivery units manufactured by RW Engineering at Darkan that were on display for growers at the AWI Wool Harvesting Industry Workshop are based on the design developed by AWI.

The sheep delivery units provide a system that delivers sheep directly to the shearer, minimising the time and energy that shearers spend on the catch and drag. It also minimises the chance of injury to the shearer from the dragging and twisting movements.

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.

Each modular unit holds sheep in a race at the back of the unit (you can see the sheep moving up the race at the

right-hand side of the image). The shearer simply opens the gate (white gate in the image) and collects the sheep from the race and manoeuvres the sheep the metre or so to the centre of the board before starting shearing.

The potential benefits for woolgrowers and the industry of the sheep delivery unit include:

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



RW Engineering's modular sheep delivery units were on display at the event.

There are six manufacturers across Australia now manufacturing commercially available systems based on the AWI design and are fulfilling more and more orders from woolgrowers.

MORE INFORMATION
wool.com/sheep-delivery



Pandurra, SA



Strathbogie, Vic



Bendigo, Vic



Boyup Brook, WA



Willalooka, SA



Denmark, WA

Shearer and wool handler training

AWI funds hands-on, practical, in-shed training for shearers and wool handlers across the country to attract and retain new entrants into the wool harvesting industry; increase workers' productivity, skills and professionalism; and increase returns to woolgrowers through improved clip preparation practices.

AWI regularly funds and support hands-on practical in-shed training for shearers and wool handlers. Pictured above is a small selection of AWI-funded courses recently run across the country.

As well as novice workshops and improver workshops, AWI also funds education programs for high school students.

- **Novice workshops** – These provide school leavers and new entrants to the wool industry, generally aged 16 to 25, with training geared towards gaining full-time employment in the industry.
- **Improver workshops** – These are run to assist new entrants and learner shearers currently working in industry to improve their shearing and wool handling skills.
- **Education programs** – These are targeted at high school students in years 9 to 12 and have an emphasis on the variety of career pathways within the industry.

“With the increased availability of experienced shearers, across all states including those from overseas, the opportunity for someone completing a

novice course to progress to a full-time stand has become more limited,” said AWI National Manager, Wool Harvesting Training & Careers Development, Craig French.

“As a result, during the past year AWI has placed more focus on mentoring and keeping full-time learner shearers engaged and improving their skills, with the aim to help retain them in teams on a stand. As well as training shearers, AWI also has a focus on attracting and retaining wool handlers and other wool harvesting staff.”

AWI continues to present learner shearers with an AWI Learner Shearer Toolkits which contains a Heiniger handpiece and other shearing gear. The toolbox provides an extra incentive for budding shearers to build up their skills and stay in the industry. The gear is not a simple handout; the shearer must first pass strict criteria.



Rhys Frauenfelder and Jack Hewitt being presented with their AWI Learner Shearer Toolkits at Tara Sports Shear in Queensland by AWI trainer Karl Goodman in March.

AWI-funded trainers carry out wool harvesting training in New South Wales, Western Australia, Queensland and Tasmania. In Victoria and South Australia, the AWI-funded training is provided by Shearing Contractors Association of Australia Shearer Woolhandler Training Inc (SCAA SWTI).

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.

To arrange training in your state, email craig.french@wool.com or swt@wool.com. Keep an eye on the Facebook channels of @australianwoolinnovation (NSW, WA, Qld) and @shearerwoolhandlertraining (Vic, SA, Tas) for the latest updates.

MORE INFORMATION
wool.com/harvestingtraining

Training wool harvesting trainers



Shearing and wool handling trainers came together in February at Naracoorte, South Australia, for a workshop on best practice wool harvesting techniques.

Workshops such as this one are held across the country to ensure both current and new trainers carry out a consistent and high level of shearing and wool handling training at AWI-funded in-shed training and workshops.

The aim of this particular workshop in February was to help ensure consistency in the AWI-funded training that SCAA



SWTI carries out in Victoria, South Australia and Tasmania.

As well as being attended by current SCAA SWTI trainers, plus some trainers from Western Australia and Queensland, present at the Naracoorte workshop were a lot of new and up and coming trainers for Victoria, South Australia and Tasmania.



For the shearer trainers at the workshop, there was a strong focus on dealing with large sheep, and the latest shearing patterns and techniques. Meanwhile, the wool handlers spent time drafting a new AWI Basic Guide to Woolhandling which includes techniques to make it as easy as possible for new entrants into the industry and to advance existing wool handlers to be as proficient in the shed as possible.



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Educating wool's next generation

AWI is involved in a range of initiatives to encourage the younger generation into the wool industry. Reported here is a snapshot of some of the AWI-supported initiatives undertaken in the past few months.



SA Sheep Expo

More than 100 high school and tertiary students and young professionals from across Australia attended the SA Sheep Expo in April at the Adelaide Showground, during which the young sheep enthusiasts developed a better understanding of the sheep and wool industry and the opportunities it offers them.

AWI is a Foundation Sponsor of the three-day SA Sheep Expo and has supported the educational initiative in each of the eight years it has been held since the event was established in 2016.

The interactive program for students included hands-on sessions, demonstrations and presentations from leading industry experts. Each year a focus is given to a key topic of the industry; this year the topic was 'focusing on the ewe', with sessions covering subjects including lamb production, biosecurity, markets, health and nutrition, genetic evaluation, and tips and tools to support and manage on-farm and off-farm decisions.

AWI National Extension Manager, Emily King, and AWI Industry Relations Officer for South Australia, Shannon Donoghue, attended the SA Sheep Expo and provided sessions on managing ewes in dry times, feed budgeting, and

pregnancy scanning. Josh Sneath of SCAA SWTI provided sessions on shearing and wool handling.

There was also information on career pathways in the sheep industry, scholarship and work experience incentives, and some great prizes and bursaries on offer.

All participants were allocated a stud sheep supplied by a breed society/association to be accountable for over the duration of the Expo. This included mucking out, feeding, and general care.

Participants were also able to compete in age groups in sheep handling and judging competitions, with scholarships and other prizes up for grabs.

The Expo not only increased the students' practical knowledge of how to run successful sheep enterprises, but also provided them with exposure to the wide range of career pathways within the sheep and wool industry. The event enabled students to engage at a grassroots level within the industry and provided them with the opportunity to build industry networks for their future in the industry.

MORE INFORMATION
sasheepexpo.com.au

Peter Westblade Scholarship training weekends

Now in its thirteenth year, the Peter Westblade Scholarship (PWS) delivers practical, hands-on training and mentoring to young people aged 18 to 30 pursuing a career in the sheep and wool industry.

Established in 2011, the annual scholarship honours the late Peter Westblade, a Lockhart sheep producer who was passionate about breeding profitable sheep and was a strong supporter of young people interested in agriculture.

A key element of the PWS program is the running of annual training weekends, established to encourage, educate and mentor young enthusiasts with practical training for the sheep and wool industry. As one of the sponsors of the training



Southern Tablelands Flock Ewe Championship

To boost their knowledge about sheep selection, agricultural students and teachers from three schools attended the AWI-sponsored Southern Tablelands Flock Ewe Championship held in the Crookwell region of NSW in March. In its tenth year, the Championship brought together eight flocks from Taralga, Crookwell, Boorowa and Gunning and placed them against each other.

In addition to viewing the Championship, the 40 visiting students – from Boorowa Central School, Crookwell High School, and St Stanislaus' College (Bathurst) – undertook hands-on sessions to assess quality in Merino ewes based on a range of breeding characteristics.

The students also participated in a junior judging competition in which they were asked to judge the sheep and speak to the judging panel regarding the reasons for their selections. The students learnt a great deal from the industry representatives in attendance and enjoyed networking with local woolgrowers.



weekends, AWI is supporting the next generation of the Australian sheep and wool industry.

For the past six years, training has been held at Wyvern Station, which is a 50,000-hectare property owned by T.A. Field Estates at Carrathool in the Riverina of NSW. T.A. Field Estates has been a long-term supporter of the PWS and this year again generously hosted the event which was attended by 30 keen young professionals at the end of May.

For the first time, an additional training weekend was held this year, doubling the total number of young sheep enthusiasts able to attend training weekends in 2025 to 60.

Applications were received from across Australia.

Local producer group Monaro Farming Systems joined the PWS to help deliver the extra training weekend in its region after hearing about the positive impacts of previous years' events. The event was held in March at Jimenbuen Pastoral Company, an agricultural enterprise south of Dalgety on the Monaro of NSW. Jimenbuen is run by the Glasson family and operates on 4,250 hectares, with a



primary focus on breeding high quality, fine wool Merinos.

"One of the goals of the PWS is to help as many young people as we can and this weekend certainly did just that. I have come away inspired by not only the industry experts that presented, but also from the attendees' enthusiasm and curiosity," said PWS Chair Joe Walden.

The two weekends consisted of hands-on workshops and mentoring sessions to improve the participants' skill sets and build their industry networks. While the individual attendees gained a lot from the weekend, the benefits will also flow through to their employers and the wider industry.

A host of woolgrowers and other industry specialists were guest speakers at the two events to pass on their invaluable knowledge to the next generation. Topics covered included sheep selection, stockmanship, pasture assessment, animal health, working dogs, business skills, the wool pipeline, and professional development.

MORE INFORMATION
pwscholarship.com.au

The 'Your future in wool' guide is available for free to download from the AWI website.



Guide to careers in the wool industry

To encourage more youngsters to consider a career in the wool industry, AWI has produced a 98-page guide that showcases the diverse range of roles within the wool industry: from farmhand to wool classer, AI technician to veterinarian, extension officer to livestock agent.

The *Your future in wool* guide also provides the pathways that students can follow to embark upon the particular career in wool that interests them. It also helps them investigate the skills, knowledge, attitude and experience they need to excel in the industry.

There are also lots of stories about real people working in the wool industry and they share some great tips about what it takes to be successful and make the most of the available opportunities.

The guide also includes a range of useful websites and handy decision-making tools to help students on their journey in the wool industry.

MORE INFORMATION

The booklet is available at
info.wool.com/careers-booklet

TURN OVER FOR AN ARTICLE
ON THE SCHOOL MERINO
WETHER CHALLENGE



More students learning sheep management skills



There are 76 schools from across NSW participating in this year's School Merino Wether Challenge. Pictured are West Wyalong High School's Stage 5 Agriculture students weighing the six wethers they have been allocated; the students weigh the sheep each week to keep track of their progress.



There are 41 schools from across South Australia participating in this year's School Merino Wether Competition. Pictured are secondary school students at Balaklava High School where students from Years 7 to 12 are using the wethers as an opportunity to improve their practical sheep management skills.

School Merino Wether Challenges in every state in Australia are in full swing, providing more than 3,000 high school students with practical, hands-on sheep management experience as they look after teams of Merino wethers.

School Merino wether competitions are under way in all six states across the country with their aim to educate high school students about the commercial production of Merino sheep. The competitions provide the students with a memorable 'hands on' learning experience covering a broad range of sheep and wool production skills.

There are more than 160 schools across the country involved in the AWI-supported initiative this year.

Each school team looks after several wethers from studs in their state for about six months, with the students forming a close relationship with their wethers. This provides a unique and practical experience for the students, much different from classroom learning. Each school team then shows their wethers during a competition later in the year and are judged according to their meat and wool quality.

A special set of learning resources has been made available on AWT's Learn About Wool website to help teachers



There are 14 schools from across Victoria participating in this year's School Merino Wether Challenge, an increase from the 11 that participated in the state's inaugural competition last year. Pictured are secondary school students at Manangatang P-12 College in the Mallee region of Victoria with their six wethers.

deliver an engaging and educational 10-week program about sheep and wool production to their students. The program is ideal for those taking part in the Merino wether competitions and it has been very well received by ag teachers.

The Merino wether competitions were initiated 15 years ago in South Australia by the SA Stud Merino Sheepbreeders Association (Merino SA), with similar competitions having since been introduced in New South Wales and Western Australia during the past decade. Following the success of these three initiatives, students in Tasmania and Queensland held their first state competitions in 2023, and students in Victoria held their first state competition in 2024.

All the competitions are supported by AWI, as well as Stud Merino Breeders

Associations, individual studs, schools, teachers and students.

"AWI continues to support the annual School Merino Wether Challenges as part of the company's commitment to fostering the next generation of wool industry professionals," said AWI Grower Services Manager, Tom Hersee.

"The program spans every state and reaches more than 3,000 students, not only giving students practical, hands-on experience with Merino sheep but also opening doors for them to careers in Australia's wool industry. The growing participation in the AWI-supported initiative highlights its value in helping shape the positive future of wool-growing in Australia."

MORE INFORMATION
wool.com/school-comps

What do the students gain by participating?

- Practical, hands-on skills in sheep management
- A better understanding of sheep and wool production as a business
- Contact with many aspects of the Merino sheep industry
- A chance to network with industry participants and other students
- An enjoyable experience with Merino sheep and the industry
- A positive perspective on a career with sheep and wool.



AWI and Woolmark

Working to increase the
global demand for Australian wool



Australian brand Cable recently launched a new Woolmark-certified Heritage 365 knitwear collection, which includes these long wrap cardigans made from 100% Australian Merino wool – see page 34 for details. This and other images to promote its collection were photographed by Cable at Mount Hesse in Victoria.

New Cable collection highlights Australian wool

Everyday luxury meets enduring tradition in the new Heritage 365 collection from Australian womenswear brand Cable. The Woolmark-certified 40-piece knitwear collection is crafted entirely from Australian Merino wool and has been designed for year-round wear.

Since its launch in 2007, Cable has emerged as a prominent Australian womenswear brand and a respected specialist in the art of knitwear. Cable's designs embody the warmth and relaxed spirit of Australian life.

The family-owned Australian brand is authentically steeped in the country's wool heritage. Founder and Creative Director Georgina Austin has a long family history that is intertwined with the wool industry. Her great-great-grandfather founded Thomas S. Beaumont & Sons, a pioneering buyer of Australian superfine Merino wool and the starting point of four generations of wool buyers.

This legacy is reflected in Cable's knitwear collections that are centred around high-quality Merino wool.

Cable's new Heritage 365 collection

The Heritage 365 collection, which was launched in April, continues to reflect the brand's commitment to its origins, heritage, and relationship with Australian wool. The new collection features iconic Cable styles made from 19.5 micron Australian Merino wool.

"Heritage 365 reimagines our origins. With respect for tradition and styled for today, we've reimagined signature silhouettes – including our original Long Wrap cardigan," Georgina said.

Each piece is named after a member of Georgina's family or a wool-growing region that has shaped Cable's story. From superfine staples to longline knits, socks, gloves and beanies, every piece blends the breathable comfort of Merino wool with Cable's refined aesthetic. The collection has been designed for layering, longevity and year-round luxury.

"In the world of textiles, few materials match the versatility, comfort, and sustainability of Merino wool. You can do a lot of beautiful things with wool. We promote our products as investment pieces and so we need to have a very good quality yarn to back this up. Wool stands out for its natural properties and enduring appeal," Georgina said.

Proudly certified by Woolmark for fibre content and performance, the Heritage 365 collection continues to reflect Cable's focus on quality.

"Cable prides itself on achieving the highly coveted global Woolmark certification, a global benchmark of excellence in the textile industry," Georgina said.

"In an era where consumers are increasingly discerning about the products they buy, Woolmark certification offers a seal of approval that signifies quality, performance, and sustainability. The team at Cable is proud that our Merino wool knitwear exemplifies this mark of excellence."

Marketing of the collection

To promote its Heritage 365 range of Australian Merino wool knitwear, Cable has rolled out a marketing campaign that includes stunning imagery and videos of the new collection photographed at the historic Mount Hesse property in south-west Victoria. The magnificent

visuals are being used in the brand's digital, social and in-store promotion of the collection.

On its website alongside the online store, Cable promotes the benefits of wool including the fibre's biodegradable, renewable, odour resistant and temperature regulating properties. Cable also includes a dedicated page highlighting what Woolmark certification means and the benefits it provides for consumers, and another page on how to care for Merino wool apparel including laundering and storage tips.

In addition to its online store, Cable has 22 of its own brick-and-mortar stores, plus a presence in many more boutiques and stockists across Australia, including David Jones.

Woolmark is supporting in-store activations about the Heritage 365 collection at the flagship stores of David Jones on Elizabeth Street in Sydney (12 May – 8 June) and Bourke Street in Melbourne (10 June – 7 July). Woolmark has also provided training about wool to 80 of Cable's retail staff with a focus on the new collection.

The Heritage 365 collection that has been launched in Australia uses more than 5,500 kg of Australian Merino wool. The brand plans to also launch the collection overseas.

MORE INFORMATION

cablemelbourne.com/pages/cable-heritage-365-collection



The Hampden Merino Jumper (right) and the Glenelg Merino Cape and Superfine Merino Turtle Neck (above).



Athleisure inspired by modern, rural women



Fifth generation woolgrower Bridgitte Brooks from the Mid West of Western Australia has launched Homestead Road, a new athleisure brand inspired by the lifestyle of rural women. The brand's garments have timeless elegance and embody the rich heritage of Australian Merino wool.

Bridgitte Brooks (centre) with fellow rural women wearing Merino wool tops from her Homestead Road athleisure brand. "When creating Homestead Road, it was really important to me to create a brand that truly reflected rural women and be a brand that rural women could relate to," Bridgitte said.

Having grown up on her parents' wool-growing property at Bringo near Geraldton, Bridgitte now farms at Yuna with her husband Jeremy. Bridgitte is also involved operationally with her family farm and the business is currently undergoing succession planning. Homestead Road reflects Bridgitte's determination to support the Australian Merino wool industry while at the same time celebrating rural women.

"Homestead Road has been several years in the making. Initially, while having my four children, I had envisaged creating a baby blanket using my family's wool. But while doing research, I examined the athleisure wear market which I noticed comprises garments that are either too technical or too plain. Seeing a gap in the market, I decided to create something that was more stylish and multifunctional," Bridgitte said.

"I signed up to do a 'How to start your own fashion business' course and, keen to feature Merino wool in my designs, I completed all the online courses that I could from Woolmark. I then began working on my apparel designs, sourcing, manufacturing and establishing the business."

Bridgitte launched a wool felt cap in September last year, but the Homestead Road main apparel collection – comprising athleisure singlets, T-shirts and a jumper – was launched in March this year.

"The garments are designed to be effortless, functional and useful – but most of all be feel-good clothing. They are garments that can be taken from day to night, task to task – as is the life of a busy, multi-tasking rural woman. It's timeless apparel that speaks to the sensibility and sophistication of women on the land," she said.

An ode to the wool industry

Every piece from Homestead Road is crafted from Australian Merino wool, ensuring not just quality but also reflecting the brand's deep connection to the fibre and the land.

"Wool is an exceptional fibre with its hand feel and versatile qualities. It is nature positive and, most of all, it's what my family has done for generations and I wanted to continue this legacy in a form where I could connect, educate and celebrate with consumers in our modern world," Bridgitte said.

"I wanted to make sure that the fabrics I source and designs I create truly do this wonderful fibre justice and all the people along the supply chain that make it happen.

"I have poured my heart into this brand, ensuring that every stitch, every fit, and every fibre aligns with my vision for people to fall in love with the beauty and quality that is Australian Merino wool – to feel connected to its heritage, sophistication, functionality and timelessness.

"The brand is an ode to the wool industry which has given my family for generations so much more than just a farming business – it's given joyful childhoods, a grounding in nature, the best people you will ever meet and a strong development in resilience."

Homestead Road may be a small business in its infancy and based in rural Australia, but Bridgitte says she hopes the hard work she has put into the brand will ensure that it grows and prospers, along with the future of Australian wool.



Bridgitte with her father Frank Clune at the wool-growing property in the Mid West of Western Australia where she grew up.

MORE INFORMATION
homesteadroad.com.au

The Wool Series from Sportscraft

Australian lifestyle brand Sportscraft has continued its long-standing relationship with Woolmark by launching a new apparel collection that highlights the natural beauty of Australian Merino wool and the woolgrowers who produce it.

Leading Australian lifestyle brand Sportscraft says it is proud to champion Australian Merino wool through its partnership with Woolmark, a collaboration that has spanned more than six decades. Sportscraft was the first Australian brand to become a Woolmark licensee back in 1964.

Sportscraft last month launched a new autumn/winter collection – The Wool Series – that contains a wide range of Woolmark-certified garments including jumpers, cardigans, polos and coats designed to provide comfort, style and longevity.

Sportscraft has proudly supported Australian Merino wool through its long-standing partnership with Woolmark for more than 60 years. The brand highlights Merino wool's natural breathability, moisture-wicking properties, and unparalleled softness, making it an ideal choice for year-round wear.

The garments in the collection are available to purchase online on the Sportscraft website and in Sportscraft and David Jones stores across Australia.

Sportscraft's digital and social media marketing campaign included a take-over of the Sportscraft website's homepage, plus webpages telling the story of woolgrower Campbell Basnett on his farm (see below), a lookbook featuring The Wool Series, and an easy-to-follow guide on how to care for wool clothing. There are direct links throughout the website to the online store where customers can purchase the wool garments.



"Wool is a premium product and we're proud to grow it."

Campbell Basnett, woolgrower



Sportscraft's Woolmark-certified Sunshine Textured Stitch Cardigan made from 100% Merino wool (left) and Juliette Boiled Wool Bomber (below).

Sportscraft showcases wool-growing

The marketing of The Wool Series features third generation woolgrower Campbell Basnett of 'Nerragundah' at Gunning in the Southern Tablelands of NSW. His 6,000 sheep grow wool averaging 15.5 to 16 micron.

Sportscraft filmed on location at Campbell's farm to capture firsthand the passion, innovation and sustainability that not only reflects his family's proud legacy but is also driving forward the future of wool.

"My grandfather bought the farm in 1966. It's been Merino country ever since. I just like seeing what we're growing here go into a bale of wool, go to Sydney, be shipped off around the world, and then see the garments that it produces," Campbell said.

The farm is a family operation, with Campbell, his wife and their three daughters all involved.

"I think the lifestyle keeps you passionate in the game. There's something really special about raising your kids on the land. It teaches you patience, resilience – and you get to do it together," he said.

Sustainability is central to the way the family farms – from carefully managed grazing to investing in genetic improvement.

"It's about balance – looking after the land, improving the sheep, and keeping an eye on the future. Wool is a premium product and we're proud to grow it. It's a natural alternative to synthetics. It breathes, lasts longer, and it's renewable."



Through its six-decade partnership with Woolmark, Sportscraft continues to support Australian Merino wool and growers like Campbell – celebrating the craftsmanship and tradition that make this premium fibre an essential part of modern life.

MORE INFORMATION
sportscraft.com.au

Superfine woolgrower Campbell Basnett at Gunning in NSW features in Sportscraft's marketing campaign.



Illuminating the beauty of Aussie wool

The distinctive hero image of Rakumba's Big Glow marketing campaign, photographed in the shearing shed on the wool-growing property on which the Rakumba's Managing Director grew up.

The versatility of Australian wool is demonstrated in a new, contemporary lighting design that has been created with support from Woolmark and launched on the international stage by Australia's oldest luxury lighting brand Rakumba.

The innovative lighting design, called Big Glow, was created by Melbourne-based Rakumba in collaboration with Studio Truly Truly, a design studio founded by Australian husband and wife team Joel and Kate Booy who have lived in The Netherlands for more than a decade.

At the heart of Big Glow lies its pioneering use of Australian wool. Utilising technical knowledge from Woolmark, Rakumba has created a product that combines non-woven Australian wool with plant-derived compostable fibre to offer a fresh, eco-conscious approach to lighting. First-cross lambswool of 22–28 micron is being used.

The entire production process of the product, from wool-growing to final assembly, occurs within Victoria. This commitment to local production supports Australian farmers and industry, provides traceability, and reduces the environmental footprint of each piece.

The design of Big Glow was inspired by the contrast between the blazing sunlight that Joel and Kate Booy grew up with in Australia and the soft glow of interiors in Europe where they now live.

"We missed the sun, but also desired the gentle, comforting glow of soft light. We wanted to achieve this with a sustainable focus," Joel said. "Wool perfectly embodies the warm and comforting quality we were searching for. The fibres have a soft ecru colour, and the glow of the material is genuinely natural as a result."

Woolmark support shines a light on wool

The development of Big Glow has been supported by Woolmark to highlight the potential of Australian wool in lighting design.

"Big Glow exemplifies how natural fibres such as wool can be integrated into modern interiors. This project is a shining example of promoting wool's potential and natural benefits beyond traditional apparel textiles," said AWI CEO John Roberts.

Rakumba's Managing Director Michael Murray was raised on a wool-growing property in Victoria's Western District so he fully appreciates and supported the use of wool in the Big Glow design. As a tribute to his roots, the century-old woolshed at 'Wongan' where Michael grew up is the backdrop for Big Glow's striking marketing imagery (see above).

"Big Glow is not just a product; it's a showcase of Australian creativity and a celebration of our heritage. I'm particularly proud that we're showcasing the versatility and beauty of Australian wool in such an innovative way," Michael said.

"Woolmark's support for this landmark product development, which is set to become a future design icon, has been exceptional and is highly valued. Being able to tap in to the wealth of knowledge and expertise at Woolmark significantly helped bring Big Glow to life, and gave our product development and management teams confidence during the rigorous R&D effort that has delivered what we consider to be one of Rakumba's most significant product developments in our 57 year history."

Performance as well as style

Big Glow isn't just a beautiful design piece; it's a high-performance lighting solution.

"With independently controlled interior glow and directional down illumination, Big Glow significantly ups the ante of the standard glowing sphere," explained Head of Design at Rakumba, Dan Treacy.

"It's functional, luminous presence fills spaces with an atmosphere of warmth while providing practical task lighting. The wool-based materiality offers natural acoustic benefits, absorbing sound and filling spaces with an atmosphere of warmth."

Studio Truly Truly's Kate Booy envisages Big Glow being used across both residential and contract interiors.

"A feature pendant over the dining table in a beautiful apartment, or a luminaire bringing a warm glow to a bedroom. We also see Big Glow as perfect for commercial interiors from hospitality through to education, public spaces and office areas requiring a softly-glowing yet high performing sustainable lighting solution with acoustic benefits."

Big Glow made its global debut in April at Milan Design Week, the world's largest trade show for interior furnishing and design. It is available in a range of sizes.

MORE INFORMATION

rakumba.com.au/big-glow

Latest wool fashions showcased locally

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

Showcasing the latest wool apparel of some of Australia's greatest brands and retailers, the AWI Runway Kit was launched 13 years ago and has been on tour across Australia ever since.

"The curated collection of garments assists the organisers of regional shows to showcase great examples of wearable wool fashion at their events. The collection contains commercially available wool outfits that can be bought in Australia," said AWI Events Project Manager, Vanessa Peyton.

Each year, the AWI Runway Kit is used by the organisers of a wide selection of events, from large shows like the Australian Sheep & Wool Show in Bendigo, Victoria, to smaller events like the Karoonda Farm Fair & Show in South Australia.

"The AWI Runway Kit has featured in the Karoonda Farm Fair fashion parades for some 10 years and its appearance at the 40th Karoonda Farm Fair & Show brought an exquisite selection of garments by iconic Australian designers to the crowd during the two days of the event at the end of March," said the coordinator of the Karoonda Farm Fair fashion parades, Elizabeth Kerr.

"This year's parades, run by the Mallee Storm Netball Club, showcased the timeless and high quality wool clothing from Country Road, Marcs, Oxford, Saba, Seed Heritage, Uniqlo, Zara and local brand Iris & Wool from Burra in South Australia."

Other events at which the AWI Runway Kit has recently been exhibited include the Don Brown Memorial Merino Ewe Competition, Condobolin, NSW (February); SA Stud Merino Expo, Burra (March); Queensland State Sheep Show, Roma (May); and Campbell Town Show, Tasmania (May).

Upcoming shows at which you can view the AWI Runway Kit include the Australian Sheep & Wool Show, Bendigo, Victoria (July) and Sheepvention, Hamilton, Victoria (August).

"The AWI Runway Kit has been refreshed to include looks from the Autumn/Winter 2025 collections of leading brands such as Cable, Iris & Wool, Marcs, Sass & Bide, Seed Heritage, Trenery, Uniqlo, and Witchery," Vanessa said.

"The 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."

Enquiries from event organisers interested in borrowing the AWI Runway Kit should be directed to Vanessa Peyton at vanessa.peyton@wool.com.



Above: One of the garments from the AWI Runway Kit at the Don Brown Memorial Merino Ewe Competition in Condobolin, NSW, in February. Pictured is the 100% Merino Wool Funnel Neck Knit and 80% wool Mini Skirt from Seed Heritage.



Garments from the AWI Runway Kit being showcased to the crowds at the Karoonda Farm Fair & Show, South Australia, in March. Pictured are the ZW Collection Draped Pencil Dress from Zara (top right) and the 100% wool Poppy Dress from Iris & Wool (right).



Strengthening Australia-China wool industry ties

Ten young members of the Chinese wool industry recently visited Australia as participants in AWI's 2025 China Future Wool Industry Leaders program, and returned to China with an increased knowledge of and appreciation for Australian wool.



The China Future Wool Industry Leaders study tour brought to Australia representatives from major companies and organisations in the Chinese wool textile industry with the aim to strengthen ties between the two countries' wool industries.

The tour was organised by AWI and is a key output from a grant provided by the Australian Government's National Foundation for Australia-China Relations (NFACR).

The participants included representatives from some of the largest companies in the wool supply chain in China, including the vertically integrated Nanshan, top makers Tianyu and Sunwoo, spinner Xiniao, home textile manufacturer JHT, and brands/retailers Uniqlo and ICICLE.

Key Chinese wool industry organisations were well represented, with participants from the Nanjing Wool Market, China Wool Textile Association and Zhangjiagang Industrial Association. A representative from Austrade in Beijing and Woolmark in Shanghai also travelled to Australia to accompany the delegation.

Prior to leaving China, the participants had a briefing by Woolmark and the Australian Consul-General John Williams at the Austrade office in Shanghai.

Highlights of the tour in Australia included several farm visits for the Chinese participants to learn first-hand how wool-growing enterprises operate. This was the first time that most of them had seen the source of the wool that they work with every day back in China. The farms visited in NSW were Little Range, Boorowa; Willow



The ten participants in the China Future Wool Industry Leaders study tour with champion Merinos at the Sydney Royal Easter Show.

Glen, Bathurst; and Sweet Wattle, Oberon; while in Victoria they visited Lal Lal Estate near Ballarat, which is owned by Mr Qingnan Wen, the president of Tianyu.

The delegation also learnt what happens to wool in Australia after it leaves the farm gate. They visited the wool auctions at Yennora in Sydney, toured the Australian Wool Testing Authority operations at Kensington, and the Elders state of the art wool handling facilities at Ravenhall – see page 21.

In addition, the tour included visits to the Sydney Royal Easter Show, the National Wool Museum at Geelong, Parliament House in Canberra, and the AWI/Woolmark office in Sydney.

Supporting wool's future

The delegates said the China Future Wool Industry Leaders tour gave them a much greater understanding of and appreciation for the wool supply chain in Australia.

“Through this tour, I have come to appreciate the maturity and professionalism

of Australia's Merino wool industry,” said Marketing Manager Jiani Gu of Xiniao.

“The knowledge I've acquired will not only significantly benefit my future development, it will enable us to have more collaboration with growers and help our marketing department to better promote wool in the future to our clients and customers.”

Zhangjiagang Industrial Association Manager, Jacques Ji, said the visit provided him with a much deeper

understanding of the rigorous standards, transparency, and professionalism that underpin the Australian wool industry.

“Meeting the woolgrowers, exporters, and industry leaders face-to-face was an invaluable opportunity which allowed me to build

connections, exchange ideas, and better appreciate the passion and resilience that drive this industry forward,” he said.

“This experience has strengthened my determination to contribute meaningfully to the future of the wool trade, and to help foster even closer ties between China and Australia.”

The study tour complemented a similar study tour last year to China by ten up-and-coming members of the Australian wool industry, which also received NFACR grant funding. That tour included visits to Chinese wool processing mills and the Nanjing Wool Market Conference. The participants returned to Australia with optimism having witnessed China's high level of investment in the wool industry (see the December 2024 edition of *Beyond the Bale*).

A second Australian delegation on Future Wool Industry Leaders program left for a tour of China in late May this year.

“It was particularly inspiring to see how woolgrowers are adapting to challenges such as climate change, market fluctuations, and evolving consumer expectations; all while maintaining an extraordinary commitment to quality and care for the land.”

Jacques Ji, Manager, Zhangjiagang Industrial Association

Woolgrowers witness China's immense investment in wool



The woolgrowers were impressed with the scale, technology and quality of the wool industry in China.

A group of 30 woolgrowers and Elders staff visited China in March on a two-week tour of textile mills and retail operations that process and sell Australian wool. They were impressed by China's high level of investment in the wool industry.

Australian woolgrowers proudly put great effort into producing their wool each year, but most growers do not get the opportunity to see what happens to their fibre once it is pressed into bales and driven past the farm gate.

Approximately 85% of all Australian wool ends up being exported to China for processing, with about half of that wool being manufactured into products sold domestically to consumers in China. As part of ongoing effort to connect Australian woolgrowers with the people and places that handle their wool after it leaves the farm, Elders recently hosted a trip to China for 30 woolgrowers and staff from New South Wales, Victoria, South Australia, Western Australia and Queensland.

"This kind of trip helps complete the picture for growers," said Elders District Wool Manager Craig Potter, based at Ararat in Victoria, who attended the China tour.

"They spend their time on farm growing the wool, but the tour lets them see what happens next: who's using it, what they value, and how it gets turned into the final product."

Andrew Dennis of Rosewood Wool Services organised and conducted the tour on behalf of Elders, as he has done for the past 15 years.

"The woolgrowers came away amazed at the passion in the Chinese industry for Merino wool at both a processor and retail level. To see the scale and breadth of some of the processing facilities first hand is mind boggling for the first time visitor," Andrew said.

Woolgrowers Michelle Elsom and her daughter Grace, who farm with Michelle's husband David and other daughter Emily at 'Old Ripponhurst' near Warrabkook in the Western District of Victoria, were very impressed with what they saw on the tour.

"After visiting several Chinese textile mills during our time away, we were amazed at the amount of investment that is going into the industry – from the research and development phase to new factories and automation," they said.

Wool processing and manufacturing

The group began their tour in Shanghai and visited Tongxiang to see the newly opened **Redsun/Sunwoo** combing mill which is the newest and perhaps the most efficient combing mill in the world. It is certainly a showpiece for the industry; the new mill can scour 40 million kg of wool per year, and comb about 24 million kg of wool top which is equivalent to 200,000 bales of wool.

Similar to Elders' automated wool handling facilities in Melbourne (see page 21), the combing mill uses numerous robots to sort, stack and deliver greasy wool bales to the production line. Barrels of carded sliver and combed wool top are moved around the combing mill seamlessly by automated machines, and the finished product wool store is also fully robotised.

“This newly built facility neatly fits into the Chinese government’s stated aims of improving manufacturing efficiency and making greater use of artificial intelligence and robotics and so is considered one of the premier combing mills in the world,” Andrew said.

A whole day of the tour was spent at the vertically integrated **Nanshan** mill in Shandong Province following wool from the greasy stage to the finished suit.

“The scale of the Nanshan textile operation is certainly impressive with 2,000 suits per day being made for a variety of customers as well as worsted fabric for the Chinese domestic market and export markets across the world,” Andrew said.

“Growers were simply amazed at the complexity of the process required to turn greasy wool into a suit, the investment involved and the number of hands touching the fibre on its way through the pipeline.”

Back in Shanghai, the group also visited Woolmark licensee **Shanghai Challenge**, a renowned producer of fine knitwear and undergarments. Again the implementation of automated machinery was clear to see as rolls of fabric trundled around the factory floor without the assistance of humans.

Marketing, education and retail

A visit to the premier retail outlet of leading Chinese eco-luxury brand and Woolmark licensee **ICICLE** was particularly exciting for woolgrowers Michelle and Grace Elsom. Wool from their Warrabkook property was used in the brand’s Dew Wool collection of traceable outerwear, which was developed in collaboration with AWI subsidiary Woolmark (see the September 2024 edition of *Beyond the Bale*).

At the store, Michelle and Grace were able to scan the QR code on a coat in



AWI Country Manager for China, Jeff Ma, presenting to the woolgrowers.

the collection and see their farm details displayed, including pictures of them as the producers of the 17.5 micron Merino wool used in the product.

“We were really humbled to see our wool in a product hanging in the high-end Chinese clothing store **ICICLE**. To have the Dew Wool collection launched on our property in Australia and to then see a coat hanging on a rack available for sale in China with a QR code linked back to our farm is once in a lifetime for us,” they said.

The AWI/Woolmark team in Shanghai hosted the delegation at the **Wool Education Centre** in Donghua University which is a functional space to showcase new product developments and often used as a training facility for retail staff and newcomers to the industry.

The delegation learnt a lot about the scope of the wool industry in China and how AWI/Woolmark supports the manufacturing sector as well as retailers.

“We are always delighted to receive visits from Australian woolgrowers so we can show them first-hand where their wool levies are being invested,” said AWI Country Manager for China, Jeff Ma.

“At the Wool Education Centre, which AWI helped establish in 2018, we gave presentations to the woolgrowers on topics including the Chinese retail market, our recent consumer and trade marketing projects, as well as our Woolmark licensee program and R&D initiatives.”

Australian Merino genetics in China

After some tourist stopovers at the Great Wall and the Forbidden City, the group visited a sheep farm and artificial insemination breeding centre in Inner Mongolia.

The group talked with farmers and local government officials about the difficulties they face

producing Merino wool in such a harsh environment. Each local farmer has only between 200 and 300 Merino sheep, but given the severity of the winter all animals are housed for up to five months of the year.

The wool being produced, using imported Australian rams and ewes which are then used at the breeding centre to produce flock rams for the local farmers, was a good quality 20-21 micron wool although with a lowish yield given the feeding regime.

“There’s a lot of pride in what they’re doing, and a real willingness to share ideas,” Craig said. “It was obvious how excited they are about wool and the opportunities it brings.”

Shearing is still an arduous process in this area with most animals being shorn by hand, but the small flock size does lend itself to excellent husbandry and lambing percentages were reportedly more than 150%.

As with woolgrower gatherings all across the world, a large dinner featuring lamb in many dishes and local wine and beer ended a successful visit.

The group ticked off some further tourism highlights of China before returning home very enthusiastic about the future of the wool industry.



Woolgrowers Grace and Michelle Elsom with an ICICLE coat containing wool from their farm.



Australian Merino genetics in Inner Mongolia.



Massive marketing of Merino in Korea

Video billboard advertising of wool apparel in the famous Gangnam district of Seoul.

Campaign promotion of wool apparel on Musinsa's e-commerce platform.

Following two previous marketing collaborations with South Korea's leading e-commerce fashion platform, Musinsa, Woolmark last year ran a third, larger and even more successful campaign with the enormous online retailer.

During the recent autumn/winter marketing campaign with Musinsa, more than 750,000 Merino wool items were available from 88 participating brands – an increase of 118% in wool products compared to the previous year's campaign.

Campaign results

766,000	wool products promoted (+118% YOY)
88	participating brands
170,000	kg of wool sold (estimated) (+42% YOY)
22%	net sales uplift (10% above target)

Representing an estimated 170 tons of wool, it was Woolmark's largest ever collaborative autumn/winter campaign in the South Korean market.

The country ranks as the sixth largest e-commerce market in the world – and fashion is the largest segment. Online shopping continues to increase, making

Woolmark's collaboration with Musinsa a strategic priority. Established in 2013, Musinsa is the largest fashion e-commerce platform in Korea with A\$1.07 billion sales in 2023 and an annual sales growth rate of 40%.

Marketing campaign increased sales

Launched in November 2024, the extensive digital and social marketing campaign boosted sales of a diverse selection of contemporary wool products across menswear and womenswear, two-thirds being knitwear and a third being woven products.

Across the campaign sales period, there was a net sales uplift of wool products of 22%, which is 10% above the campaign target.

"Through brand sales driven by the campaign, we achieved an increase in the quantity and revenue of wool products this year,

just as in previous years," said Manager of the Commerce BA Team at Musinsa, Mr Sungmin Shim.

"Despite the ongoing economic downturn and weakened consumer sentiment, Musinsa continues to grow, and sales of the Autumn/Winter 2024 wool products increased by more than 22% compared to last year. We hope to continue collaborating with Woolmark."

As well as showcasing the premium benefits of Merino wool, the environmental credentials of wool were central to the campaign, which had the tag line 'Merino wool, touch of nature' along with 'A gift from nature, Australian Merino wool'.

"By increasing consumer awareness of Australian Merino wool as a premium and natural fibre, the collaboration very successfully helped drive Merino wool product sales on the Musinsa e-commerce platform," said AWI Regional Manager Japan & Korea, Samuel Cockedey.

"In addition, working with Musinsa also increased Woolmark's brand image which could potentially encourage the many brands on the platform to develop further Merino wool products for their future collections."

Digital and social marketing campaign

Targeting consumers aged 20-30, the digital and social campaign drove consumers to a specially designed landing page on Musinsa's e-commerce website, linked to a Merino wool category page, where products could be purchased. A special app push message was sent to Musinsa customers.

The campaign had some great results, with total impressions (the number of times the campaign was seen online) reaching 43 million which is 9% above target. The number of landing page views was 333,000 which is 26% more than last year.

Video billboard advertising in two of the busiest areas of Seoul was also undertaken, which achieved a reach of 283 million.



Famous Korean actor Daniel Choi was featured in the campaign wearing styles from the Cambridge Members' Merino wool collection.



Building the suiting market in Korea

Woolmark is defending and building the suiting market in Korea, most recently in collaboration with premium brand Cambridge Members and famous Korean actor Daniel Choi.

Woolmark recently held a marketing campaign with Cambridge Members, the second largest premium suiting brand in Korea. Established in 1977, Cambridge Members belongs to Korea's fifth largest apparel group Kolon Industries which had annual sales worth A\$3.7 billion in 2023.

Although the men's suit market in Korea has faced downward pressure from the casualisation of apparel for a number of years, net sales in the men's suiting market increased to about A\$5.32 billion in 2023, a rise of 8.4% from the previous year. This renewed interest in men's suits is a reflection of a recent trend towards men's grooming, especially among Gen Z.

Launched in October, the Cambridge Members' marketing campaign – themed 'The Timeless Classic' – promoted 34,000 traditional suit and business casual menswear items, representing an estimated 40 tons of wool.



A special pop-up installation at the major Lotte department store in Incheon promoting the benefits of Merino wool and the Cambridge Members' wool apparel.

The campaign involved a digital and social media campaign as well as promotion in the brand's 60 brick-and-mortar stores, which resulted in an uplift in sales of wool products compared to the previous year.

Brand Manager of Cambridge Members, Mr. DongYoon Shin, said he was delighted with the successful outcomes of working with Woolmark.

"Despite the challenging market conditions – where the current economy is performing worse than last year and impacting our year-on-year sales – we were still able to secure a sales uplift, which exceeded our expectations in this economic and political climate," he said.

"I sincerely appreciate Woolmark for providing us with a valuable opportunity to execute diverse marketing

activities. I look forward to continued collaboration with Woolmark in the coming years to deliver the message of Merino wool's premium quality to more customers and maximise the effectiveness of our efforts."

The digital campaign included a special landing page on the Cambridge Members website which included information on the benefits and provenance of Merino wool, plus all-important links to products that customers could buy. A special Cambridge Members app push message was sent to 15,500 Cambridge Members' customers. The number of views of the landing page, promotional video and total engagement were all well above campaign targets.

A highlight of the campaign was the involvement of famous Korean actor Daniel Choi who was featured in the campaign wearing seven styles from the Cambridge Members' Merino wool collection.

As part of the promotion, an interview with Daniel and a pictorial of him wearing the Merino wool apparel also featured in the Korean version of *WWD*, the fashion-industry trade journal for readers ranging from global business leaders to aspiring fashion students looking to become future designers.

"The campaign in Korea with Cambridge Members successfully positioned Merino wool as a premium fibre in the traditional menswear market to increase awareness and sales of Merino wool during the autumn/winter season," said AWI Regional Manager Japan & Korea, Samuel Cockedeey.

"It has also strengthened our relationship with Cambridge Members and its parent Kolon

Industries which will help us to encourage them to develop and sell more Merino wool products in the future."

Kolon Industries also owns the Brentwood suiting brand, whose Action Suits were featured in the previous edition of *Beyond the Bale*.

Award winner's study tour to Japan and Korea



Award-winning young designer Angelica Kilkolly from the Central Coast of NSW returned from her recent study tour of the wool supply chain in Japan and South Korea impressed by the innovation, knowledge and enthusiasm for wool she witnessed.

FETICO, one of Japan's most exciting womenswear brands that is inspired by classic feminine styles; a retail tour of the multi-brand clothing emporium Dover Street Market Ginza; and learning about R&D and marketing undertaken by Woolmark in Japan.

Seoul, South Korea

In Seoul, Angelica visited Samwon Ilmo, a Woolmark licensee that specialises in the manufacture of wool yarns; Aztech WB, a Woolmark

licensee that specialises in producing suiting fabrics; and the Woolmark office to learn about how company works to grow demand for wool in this important market for Australian wool.

Angelica also undertook a retail tour of the famous Gangnam district of Seoul which is famous as an upmarket shopping area. Stores she visited include sustainable fashion brand Re:Code; Amomento which produces sophisticated timeless classics; premium multi-brand fashion store Beaker; womenswear brand Nothing Written; and Recto which produces minimal, classic styles for men and women.

"The retail tours in Seoul and Tokyo were so valuable; the quality of workmanship was so inspiring and I finally got the chance to see and touch garments from some of my favourite designers in real life," Angelica said.

Fleece to Fashion Awards celebrate wool

Graduating at the end of 2023 with a Bachelor of Design in Fashion and Textiles with Honours from University of

Technology Sydney (UTS), Angelica has a love for knitwear exemplified by the range of techniques used in her winning designs at the 2024 Fleece to Fashion Awards.

"I love working with wool because of its properties, versatility, and sustainability. As designers and consumers, it's essential that we consider the environmental impact of the clothing we create and wear. Wool, being renewable, biodegradable, and requiring fewer resources to produce compared to other materials, is a perfect example of how fashion can embrace both innovation and sustainability," Angelica said.

"The Fleece to Fashion Awards have provided me with such an incredible experience, to first go to Armidale and see firsthand the passion and dedication of the Australian wool industry that grows this incredible fibre, and then travel overseas to witness the wool being crafted by some of the world's best manufacturers and brands. Everybody I met on the study tour was so lovely and welcoming, and extremely knowledgeable."

Angelica is currently working as a seamstress/designer at Australian made sustainability label Re/lax Remade.

Based in the New England region of NSW, the Fleece to Fashion Awards is an annual competition that promotes the unique, versatile and sustainable qualities of Merino wool, while celebrating fashion designers from across Australia who embrace the

fibre in their collections. The Awards are sponsored by AWI along with local businesses and woolgrowers. Entries for the 2025 competition open on 1 July.

MORE INFORMATION
fleecestofashion.com.au



Designer Angelica Kilkolly during the study tour at the Matsumaru factory (top) and the Shima Seiki head office (bottom) in Tokyo.

At last year's Fleece to Fashion Awards held in Armidale, NSW, Angelica Kilkolly won the Supreme Award of the competition, the AWI Industry Immersion Award, which provided Angelica with a tour of the wool supply chain in Japan and South Korea.

Angelica travelled in March to Tokyo and Seoul where she received a wool supply chain induction, dove into wool manufacturing and learnt about the vibrant fashion and retail landscapes of the two countries.

Tokyo, Japan

In Tokyo, Angelica visited the office of leading textile machinery manufacturer Shima Seiki, which is famous for its WHOLEGARMENT® knitting machines that knit garments in three dimensions, in one entire piece without seams. Angelica also toured the Matsumaru factory that produces WHOLEGARMENT® knitwear for CFCL, a large contemporary fashion brand that specialises in knitwear.

"The technological advancements in WHOLEGARMENT® knitting I saw at Shima Seiki were absolutely mind blowing. For instance, they have a device which can scan a piece of yarn, upload its qualities to their online database, and then produce a realistic 3D digital simulation of your garment before it's even knitted," Angelica said.

Other highlights of Angelica's stay in Tokyo were a visit to the fashion show of

Joint campaign with Japanese online giant drives wool sales

Following on from two successful marketing collaborations in previous years with Rakuten Fashion, Woolmark has undertaken another campaign with the second largest luxury fashion e-commerce platform in Japan to promote a massive selection of Merino wool apparel for consumers to buy during autumn/winter 2024/25.



Fashion model and musician Keigo Okazaki was one of the celebrities involved in the marketing campaign, which helped drive engagement and wool sales.

Campaign results

2.3 million	wool rich items promoted (+15% YOY)
790	brands involved (+12% YOY)
575,000	kg of wool promoted (estimated) (+15% YOY)

The two-month campaign, which was launched in November last year, put Merino wool at the front of digitally savvy shoppers' minds – all with the aim to make Merino wool the most coveted apparel fibre for Japanese consumers during the peak selling winter season.

Rakuten Fashion is a huge and growing premium fashion e-commerce platform. Its parent company is a Japanese e-commerce titan with annual revenue in the past financial year worth A\$25 billion.

"The objective of our marketing campaign with Rakuten Fashion was twofold: education and action. Firstly, to increase Japanese consumers' awareness of Merino wool's eco-credentials and benefits, and secondly, drive large-scale consumer purchases of Merino wool apparel throughout the autumn/winter season," said AWI Regional Manager Japan & Korea, Samuel Cockedey.

"This was the largest campaign of this type we have ever conducted in the Japanese market. It showcased Merino wool products from 790 brands, with

more than 2.3 million wool rich products available to purchase, an increase in volume of 15.7% from last year."

Digital and social marketing campaign

The key objective of the campaign was to direct consumers to a wool landing page on the Rakuten Fashion website which showcased an enormous range of shoppable wool-rich apparel and accessory products for men, women and children.

The wool hub also included editorial content highlighting the benefits of Australian Merino wool including its quality and eco-credentials. The key message of the campaign centred on 'Merino wool, a gift from nature', which resonated well in the Japanese market.

A multi-channel digital and social campaign on Rakuten Fashion's owned media drove online traffic to the wool landing page through advertising banners on the Rakuten Fashion website, push notifications on its mobile application, e-newsletters to its

large client base of consumers, and posts on its Instagram channel. Additional online traffic was driven through Woolmark's own digital and social channels.

The digital campaign performed extremely well, achieving 78 million impressions (which is the number of times the campaign was seen online) and 450,000 clicks through to the wool hub page where customers could buy wool products.

Celebrity imagery boosts sales

The campaign included imagery featuring famous Japanese influencers Kiko Mizuhara and Keigo Okazaki which significantly boosted engagement and sales. Kiko Mizuhara is a Los Angeles-based actress and model who grew up in Japan and is regularly listed as one of the top 3 Instagram influencers in Japan. Keigo Okazaki is a notable male fashion model and musician.

"A key learning from the last year's campaign with Rakuten Fashion was that using models or influencers with a strong follower base in the key campaign visuals can make up for reduced media buy budgets, and the two celebrities we used in the most recent campaign reflected this by again boosting engagement and sales," Samuel said.



An exhibition at Toyoshima's head office in Tokyo demonstrating how FibreTrace verifies the journey of wool through the supply chain. Pictured are AWI Product, Education Extension & Trade Licensing Manager, Japan, Tomohiro Nishizawa; Toyoshima's Mr Takeshi Okamoto holding the jumper and swing tag; AWI Regional Manager Japan & Korea, Samuel Cockede, holding a FibreTrace scanner; and Toyoshima's Mr Junya Nakai.

Toyoshima's traceable wool journey with FibreTrace®

In response to market demand for traceable wool, large Japanese trading house Toyoshima has successfully trialled FibreTrace® technology to show the journey that wool takes along all stages of the supply chain from the fibre to the end product.

Consumers worldwide are increasingly interested in the source of their clothing. Consequently, for many brands, being able to demonstrate traceability along their supply chains is becoming an essential part of business.

Toyoshima is a large Japanese trading house handling various textile products including wool, with annual sales worth more than A\$2.4 billion in 2023. In response to requests from its customers for traceable wool, Toyoshima has been looking for a traceability solution.

The amount of raw materials and yarn that Toyoshima handles is amongst the highest in Japan. The trading house handles both worsted and woollen yarns, and handles the largest amount of worsted yarn in Japan. It supplies yarn to Japanese weavers and knitters, but also trades in other wool products including woven fabrics which it sells to luxury brands in Europe.

Successful trial of FibreTrace technology

In its search for a traceability solution, Toyoshima has trialled FibreTrace® Fibre textile verification technology.

The technology involves FibreTrace's non-toxic pigment ID being embedded within fibres to create a unique, scannable



Scanning the QR code on the jumper's swing tag opens a map that shows the journey along all the stages of the supply chain from fibre to end product. In this case it showed (1) the wool scourer in Australia, (2) top maker in China, (3) spinner in China, (4) knitter in Japan, (5) the jumper at Toyoshima's head office exhibition.



identifier that stays with the fibre throughout its entire journey and life, even if the fibre is reused or recycled. Using specialised scanning technology, the pigment can be detected and verified at any point in the supply chain, providing immediate, reliable confirmation of fibre authenticity and origin.

Toyoshima first became aware of FibreTrace technology during a visit to a textile factory in Vietnam, as part of a Woolmark-organised tour of Vietnamese suppliers in 2023. Toyoshima's head of digital traceability Mr Okamoto contacted FibreTrace and subsequently decided to

investigate the technology for Toyoshima's wool business.

With support from Woolmark, Toyoshima earlier this year successfully trialled the FibreTrace technology along one of its wool supply chains tracing the production of three jumpers from the fibre in Australia to the end products. As a result of the successful trial, Toyoshima feels there is a huge business potential in FibreTrace technology for the

larger-scale traceability of wool through the supply chain.

“Toyoshima has an important obligation to ensure transparency in the supply chain for the products we provide to our customers. FibreTrace is a unique supply-chain solution that merges its proprietary physical technology with blockchain-based digital measures. We are pleased and excited to collaborate with AWI to deliver Australian wool to our Japanese customers with complete peace of mind,” Mr Okamoto said.

Traceability back to the farm

FibreTrace pigment is usually embedded in wool fibre during the wool scouring process. However, Toyoshima in the future wants to show traceability all the way back to the specific farm.

Toyoshima and Woolmark are investigating ways to digitally connect FibreTrace with the Australian Wool Traceability Hub (AWTH). The AWTH is an Australian wool industry-owned digital platform to track the journey of wool from farm to first-stage processor. If connected, FibreTrace and AWTH would provide an entire chain of custody from the farm to the end product, creating an even better provenance story at retail for the end product.

“Toyoshima is one example of many companies outside of Australia that are developing or working with digital traceability platforms. By getting as many bales of Australian wool as possible into the AWTH system will help promote Australian wool and build demand for the fibre,” said AWI Program Manager, Woolmark Certification & Traceability, Mark Scott.

FibreTrace Technologies Ltd, Asia Pacific Regional Manager Rebekah McQuoid, says FibreTrace is thrilled to be collaborating with Toyoshima and the Australian wool industry.

“We’ve seen outstanding global success in marking Australian Cotton, with more than 250,000 FibreTrace marked Good Earth Cotton bales sent globally in the past three years; delivering real-time, end-to-end transparency from farm to store and beyond. We’re excited to bring that same level of traceability to Australian wool. Now, Australian wool can carry its story – with physical and digital traceability – wherever it goes, helping build the ultimate full-circle, sustainable economy,” Rebekah said.

MORE INFORMATION

toyoshima.co.jp
fibretrace.io
awth.com.au

Onward and upward with wool in Japan

Woolmark has provided marketing support to five of the main brands owned by one of the largest apparel groups in Japan, Onward Kashiya. The campaign helped sales of the brands’ Merino wool knitwear, coat and footwear collections during the recent autumn/winter season.



The recent joint collaboration with Japanese apparel group Onward Kashiya involved four womenswear brands and a popular footwear brand.

months during the recent autumn/winter season, to promote Woolmark-certified Merino wool knitwear and coats from Onward’s four leading womenswear brands: 23KU, Jiyu-ku, iCB, and J-Press Ladies.

Woolmark-certified wool rich shoes from Onward’s popular footwear brand Steppi were also promoted this season. The Steppi brand is well known for its very light and comfortable knitted women’s business and casual shoes. For the first time they are available in a wool variation, adding warmth, moisture-wicking, and odour resistant properties to an already successful product. They are the first Woolmark-certified shoes to be launched in the Japanese market.



Wool rich knitted shoes from Steppi

“It is very rewarding to see the effort that AWI puts into educating and inspiring Onward about Australian Merino wool is resulting in its brands increasing their use of the fibre in their apparel ranges, and now expanding into footwear.”

Samuel Cockedeay,
AWI Regional Manager
Japan & Korea

The joint promotion of the five brands’ wool products was Woolmark’s largest-ever collaboration with Onward. More than 125,000 wool rich items were promoted, which is a 3.3% increase from last year, resulting in sales of wool products worth more than A\$18 million.

The campaign focused on positioning Merino wool as the natural fibre of choice for Japanese women’s premium apparel and footwear, while also promoting the quality and comfort aspects of Onward’s Woolmark-certified Merino wool products.

As well as a growing interest in sustainability, Onward has a strong focus on increasing its digital sales. The collaboration therefore focused on digital and social media promotion to drive traffic to dedicated landing pages on Onward’s e-commerce platform. This included dedicated e-newsletters sent to 1.7 million customers. Key visuals for the campaign were jointly produced by Woolmark and Onward. The campaign generated more than 13 million impressions (the number of times the campaign was seen).

The campaign also gained additional visibility through the use of signage and display material in 350 of the brands’ brick-and-mortar stores across Japan.

2025 International Woolmark Prize shines fashion's spotlight on wool

The winners of the 2025 International Woolmark Prize were announced in April at a special event in Milan at which the world's best emerging design talents showcased their Merino wool collections.

Aims of the International Woolmark Prize

1. Drive Australian wool sales on a global scale.
2. Increase awareness of Merino wool and the Woolmark brand.
3. Educate and mentor emerging designers about wool.
4. Build a global network of wool advocates.
5. Generate new business leads for AWI and the wool supply chain.

This illustrious fashion award and talent development program 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.

Since its inception in the 1950s, the International Woolmark Prize has been awarded to young fashion designers that have gone on to become some of the most era-defining creatives of their generation: from Karl Lagerfeld and Yves Saint Laurent to Giorgio Armani and Ralph Lauren.

Relaunched in 2012 by Woolmark, the International Woolmark Prize is an award for the world's most promising design talent. The program is now held every two years and the judging criteria has an increased focus on sustainability and innovation.

The International Woolmark Prize program is a lot more than a fashion design award. The program provides the international designers with education, mentorship, networking opportunities, early-stage funding, global wool supply chain access and commercialisation of their collections.

"Importantly, the International Woolmark Prize 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 alumni across the world," said AWI CEO John Roberts.

"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."

AWI's Measurement & Evaluation unit has conducted an assessment of the International Woolmark Prize program's impact during the ten years following the program's reintroduction in 2012. The assessment estimated that for every \$1 invested by AWI over the ten years, there has been an average \$2.41 return on investment for woolgrowers.

As well as the main **International Woolmark Prize** awarded to the best emerging designer, there are two other awards:

- The **Karl Lagerfeld Award for Innovation** which has from this year been expanded to be an industry award and is presented to a brand or individual within the fashion industry who has pushed the boundaries of Merino wool innovation.
- The **Supply Chain Award** is presented to an outstanding member of the supply chain who has demonstrated exceptional leadership and innovation in advancing sustainable practices.



The 2025 program for emerging designers

Selected from hundreds of applicants, eight of the world's most promising design talents secured their place as finalists in the 2025 International Woolmark Prize: ACT N°1 (Italy), Diotima (USA), Duran Lantink (The Netherlands), Ester Manas (Belgium), LGN LOUIS GABRIEL NOUCHI (France), LUAR (USA), Meryll Rogge (Belgium), and Standing Ground (UK/Ireland).

All eight finalists were then supported by Woolmark's Innovation Academy, a mentoring and education program that offers access to International Woolmark Prize partners, manufacturers and mentors across the supply chain.

The finalists each developed six Merino wool looks, either as part of their Autumn/Winter 2025 collection or as a stand-alone collection, that highlighted the innate versatility, innovative nature and eco-credentials of Merino wool.

The winner was selected by an expert panel of judges comprising distinguished industry heavyweights and chaired by Donatella Versace, the Chief Brand Ambassador of Versace, one of the world's leading and most recognised luxury fashion brands.

The winner was announced in April at a special event in Milan at which the finalists showcased their collections to 200 industry stakeholders in a showroom format. With a combined total of more than 92 million followers, this year's event talent (including judges and ambassadors) amplified their involvement in the prize to a large and engaged audience.

All the finalists will now continue their International Woolmark Prize journey, joining a prestigious alumni of more than 600, and have the opportunity to be stocked in some of the world's leading stores via the International Woolmark Prize Retailer Network.

The program boasts a global network of more than 50 international supply chain and retail partners including Saks Fifth Avenue, Bergdorf Goodman, Browns, Lane Crawford, MODES, McMullen, Boon The Shop, MyTheresa, Net-A-Porter, MR PORTER, and Selfridges.

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.



Designer Duran Lantink with a model wearing one of his winning designs.

2025 International Woolmark Prize winner: Duran Lantink

Fashion designer Duran Lantink, who is based between Amsterdam and Paris, won the 2025 International Woolmark Prize.

He impressed the judges with his ability to use Merino wool to reinterpret traditional knitting techniques in a truly modern way. The designer incorporated 3D reconstructed knitwear while including historical Dutch knitting techniques and the use of recycled army sweaters, combining with innovative woven check patterns, merging sustainability with craftsmanship.

“I feel very honoured to receive this award and I’m just so happy

because we worked so hard with so many collaborators and it’s just really great to get this recognition,” Duran said.

Chair of the judges Donatella Versace said, “We are in a moment when we need to feel better. Duran makes us feel that. His collection is a wonderful combination of respect for the fibre and a joyful sense of the future.”

Two weeks after his win, Duran was appointed as the new permanent creative director of the renowned Jean Paul Gaultier fashion house, which is a reflection of Duran’s enormous design talent.

2025 Karl Lagerfeld Award for Innovation winner: Pieter Mulier

Pieter Mulier, the Creative Director of French luxury womenswear brand Alaïa, is the inaugural winner of the Karl Lagerfeld Award for Innovation in this new format, selected for his innovative and continued use of Merino wool.

His commitment to innovation and craftsmanship was exemplified with Alaïa’s Summer Fall 2024 One Yarn collection. The entire collection was crafted using a single Merino wool yarn, developed across the space of a year in close collaboration with Alaïa’s long-standing textile and knitwear suppliers.

Mulier challenged the Alaïa team to continuously reimagine the

yarn, transforming it not only into classic tailoring fabrics and knits but also into unexpected textures – fluffed up Merino wool fur, densely packed chenille, woven into delicate organza, and blended with nylon for outerwear.

“I am so honoured and happy to receive the inaugural Karl Lagerfeld Award for Innovation,” Mulier said. “At Alaïa, wool plays an important role in the search for innovation and modernity. In my Summer Fall 2024 collection, one single yarn was used as a full concept, pushing how the richness of wool can be translated in all shapes, sizes, textures and forms.”



A garment from Alaïa’s Summer Fall 2024 One Yarn collection.

Südwolle Group’s Chief Sales Officer Stéphane Thouvy receiving the award from AWI CEO John Roberts at the ceremony in Milan.



2025 Supply Chain Award winner: Südwolle Group

Germany-based yarn spinner Südwolle Group won the 2025 Supply Chain Award for its continual commitment and dedication to innovation and product development, meeting customer needs and supporting the wool industry. In particular, Südwolle Group’s innovation in both fashion-forward luxury and high performance wool yarns plus sustainability commitments make it a world leader in the textiles industry.

“As ambassadors for wool we actively promote this fantastic fibre – through our global yarn production network, and our strong partnerships with manufacturers, brands and designers across diverse industries,”

said Südwolle Group Chief Sales Officer, Stéphane Thouvy. “We keep investing and exploring new techniques and possibilities, with the development of new technologies, or the creation of new blends with other fibres, to enhance wool’s properties.”

The Südwolls Innovation Hub is the creative voice of Südwolle Group, inspiring designers, brands, and manufacturers in a business-to-business environment by exploring what wool can achieve. From sparking fresh ideas to refining concepts for the market, the Hub is a catalyst for progress and collaboration.

MORE INFORMATION
[woolmarkprize.com](https://www.woolmarkprize.com)

High-performance wool fabrics showcased

Woolmark and its partners successfully raised awareness of the performance benefits of wool to the textile trade at the recent Performance Days trade show in Munich, Germany. The show is an important destination for the trade to source high performance functional fabrics for its sportswear, workwear, sportive fashion, and athleisure collections.

Woolmark's promotion of wool

The Woolmark booth at the show was very busy with many visitors seeking information about wool for potential use in their collections.

A popular feature of the booth was Woolmark's The Wool Lab sourcing guide to the world's best commercially available wool fabrics and yarns. On display were two editions of the sourcing guide devoted to sports and outdoor apparel, together containing a total of more than 250 fabric swatches – see woolmark.com/thewoollab.

Another highlight of the Woolmark booth was a display of selected performance and workwear developments and samples including the Merino wool-rich uniforms of the Luna Rossa Prada Pirelli sailing team.

The focus topic at this year's Performances Days trade show in Munich was 'Certifications: Which Ones Matter', which is a topic that provided Woolmark with the opportunity to highlight its Woolmark Certification Program.

Wool industry collaboration at the show

The Woolmark booth was located at the trade show in a special Wool Area, which was an initiative instigated by Woolmark to bring together its partners in one area of the trade show and thereby provide more visibility for wool. The Wool Area was expanded at the March show to contain a newly created Wool Forum dedicated to showcasing and sourcing wool fabrics.

A highlight new yarn development unveiled for the first time at the show was a new wool-alginate blend yarn launched by Woolmark licensee Südwole Group. Alginate fibre is a natural fibre derived from seaweed. The yarn has particularly high moisture absorption and was developed in collaboration with Woolmark and Portugal-based textile manufacturer IMPETUS.

"The organisers of the trade show reported that the feedback from exhibitors in the Wool Area has been consistently positive, with other companies also expressing their interest in being part of the Wool Area in the future," Stefan said.

"Visitor feedback has also been excellent. The Wool Forum was one of the highlights for many, and Performance Day's decision to expand the wool theme has been very well received. It highlights the ongoing innovation and relevance of wool in the textile industry."



The Woolmark booth (top) and Wool Forum at the recent Performance Days trade show in Munich, Germany.

Held during two days in March, Performance Days featured suppliers showcasing their latest innovations in high-performance functional fabrics. The trade show attracts designers, sourcing and material managers, and product development executives from global brands and retailers looking to source new fabrics.

This year's event had an increased number of attendees and once again proved that it is the place to be for manufacturers and decision makers in the sports and functional fabrics industries. Woolmark has exhibited at the trade show for more than 10 years. The company is a global partner of the show and has a good relationship with its organisers.

Woolmark's Germany-based Product & Education Extension Manager Stefan Franke says it's important for the Australian wool industry that its fibre is highlighted to brands in the textile trade at the time when they are considering

fibre and fabric choices for their upcoming collections and product ranges.

"Performance Days in Munich is a key trade show attended by important players in the sports apparel industry so it's vital that wool is well represented," Stefan said.

"The trade show provided a great opportunity for Woolmark to engage with and help inspire the

supply chain to include Australian wool in their upcoming collections. Our presence at the show enabled in-depth discussions and connections with the supply chain and proved to be a valuable way for Woolmark to increase awareness of the natural and performance benefits of Merino wool.

"Merino wool is the ideal performance fibre due to attributes such as softness next to the skin, breathability, thermoregulation, elasticity and odour resistance. Furthermore, in contrast to synthetic fibres, wool is a natural, renewable and biodegradable fibre."

Wool by the pool

Iconic swimwear brand arena has brought to the Japanese market the first ever specially designed pre- and post-swim garments that include wool, enabling professionals and amateurs to remain comfortable before and after swimming.



Japanese Olympian Tatsuya Murasa wearing his arena wool-rich garments at the Japan National Swimming Championships in March. Tatsuya qualified for next month's World Aquatics Championship in Singapore.

The arena garments have been specially made to fit the body shape of swimmers, allowing for easy movement during warm up and post-swim stretching. The top is tailored for swimmers' large width across the shoulders making it easy for them to raise their arms. The pants have an easy-to-turn leg design.

Inspired by the innovative wool-rich beachwear collection launched by arena last year in collaboration with the Woolmark team in Italy (see the September 2024 edition of *Beyond the Bale*), the iconic swimwear brand has developed and launched in Japan a brand new product category that utilises the performance benefits of Merino wool: a jacket and pants for poolside.

With a presence in more than 100 countries across the world, arena is a huge international swimwear company with growing sales. The company was created in 1973 by sports visionary Horst Dassler (son of the adidas founder Adi Dassler and nephew of Puma founder Rudolf Dassler), and has been famous throughout its history for its performance swimwear and sponsoring elite athletes from Mark Spitz to Shane Gould.

In Japan, the arena brand is operated by the Descente Japan Group and has a high degree of consumer recognition. The brand is positioned as a leading label for performance swimwear and is a sponsor of notable Japanese professional swimmers.

Wool-rich pre- and post-swim garments

Woolmark in Japan has provided in-kind support to arena in Japan to develop and launch the new poolside jacket and pants.

The products are Woolmark certified and are made in Descente's factory in Japan from a wool blend fabric produced by Japan's largest wool spinner and fabric manufacturer Nikke. Nikke was one of the first companies in the world, and the first ever Japanese company, to become a Woolmark licensee when the Woolmark licensing program was founded in 1964.

The inclusion of wool in the garments' fabric provides a high degree of moisture management enabling the swimmer to remain comfortable before their swim and after their swim when the potential for chilling is greatest. The wrinkle resistance and UV protection provided by the wool are additional benefits.

Olympians feature in the marketing campaign

The garments were commercially launched in April, but were showcased the previous month when they were worn by the top four Japanese athletes participating in the 2025 Japan National Swimming Championships.

The marketing campaign comprises a digital and social media promotion. There is a dedicated landing page on the arena website that includes information about the products' features, the benefits and eco-credentials of wool, and the all-important links to the product pages at which customers can make a purchase.

A key part of the campaign is imagery and a video of two high profile swimmers wearing the garments: Japanese Tatsuya Murasa who competed at the Paris 2024 Olympics, and Hong Kong swimmer Siobhán Bernadette Haughey who is a medallist from the Tokyo 2020 and Paris 2024 Olympics and a world record holder.

"The decision by arena to include wool in the new poolside products is a reflection of both the versatility of the fibre and Woolmark's growing relationship with the brand," said AWI Regional Manager Japan & Korea, Samuel Cockedey.

"It is very pleasing to see that Merino wool's exceptional natural properties are making it increasingly common in the new market of aquatic activities. Woolmark will continue explore new markets for Merino wool to increase demand for the fibre, which will benefit Australian woolgrowers."


MORE INFORMATION

store.descente.co.jp/arena/feature/arn_woolmark

200m short course world record holder and Olympic medallist Siobhán Bernadette Haughey from Hong Kong featured in arena's marketing campaign for its new wool-rich pre- and post-swim garments in Japan.



The 2025 Woolmark Performance Challenge asked tertiary students from across the world to create innovative, high-performance solutions tailored to withstand nature's harshest elements across three distinct sports: motocross, auto racing, and off-road cycling.



Woolmark Performance Challenge provides an education in wool

Providing tertiary students with an in-depth knowledge of and appreciation for wool is a key component of AWI's Woolmark Performance Challenge. The educational aspect of the initiative has this year also involved champions from the sports of motocross, auto racing, and off-road cycling explaining what they need from their gear to help them excel.

Since its launch in 2018, the Woolmark Performance Challenge has cemented its place as the world's leading ideas platform for the sports and performance-wear market, harnessing ground-breaking design with the unique natural properties of Australian Merino wool.

Unlike other competitions which are based solely on design aesthetics, the Woolmark Performance Challenge asks tertiary students to harness the power of engineering and garment technology, as well as

nature, to innovate and give athletes advanced apparel solutions.

The industry partner of AWI's 2025 Woolmark Performance Challenge is Alpinestars, the Italian world-leading manufacturer of apparel and equipment for motor and other action sports. Tertiary students entering the competition were required to choose a brief for one of three sports: motocross (MX), auto racing, and off-road cycling.

Many online and face-to-face events were held across the world during this year's Woolmark Performance Challenge competition to educate tertiary students about the performance benefits of Australian wool. Pictured are some examples: Istituto Europeo di Design in Milan, Italy (top), Donghua University in Shanghai, China (middle), and University of Oregon, USA (bottom).

For the 2025 competition, 237 educational institutions from 31 countries registered to take part. Submissions closed on 30 May; the finalists will be announced in July and the winners announced in November.

Wool education a key component

The Woolmark Performance Challenge is much more than a competition. A key element of the initiative is to educate tertiary students about Merino wool.

“The Woolmark Performance Challenge offers an unrivalled opportunity for students to immerse themselves in the world of wool along the supply chain,” said AWI Program Manager – Education Extension, Kelly Mcavoy.

“This educational element of the competition not only arms the students with information to assist in their competition entry, but will also encourage and inspire them to think about wool in their future careers.”

As they progressed through the duration of this year's competition, the students were educated about the attributes and benefits of the fibre by utilising the Woolmark Learning Centre, and they attended educational webinars and face-to-face training in locations across the world from Woolmark and other industry experts.

In addition, at the beginning of the competition, a 40 minute global webinar from Woolmark and Alpinestars provided expert insights into Merino wool's place in the sports and outdoor market. A further 60-minute technical innovations webinar from Woolmark provided students globally with an in depth look at the latest innovations in wool, from yarn developments to cutting-edge fabric technologies, dyeing, and finishing advancements.

MORE INFORMATION
woolmarkchallenge.com



INSIGHTS FROM SPORTING CHAMPIONS

A series of videos were this year delivered to students by three sporting champions who provided their first-hand experience of the apparel-related challenges they face during their sport.

Gordon Shedden – auto racing



Three-time British touring car champion Gordon Shedden, who has also been featured many times on the Top Gear TV show,

explained the challenges of auto racing.

“It's really important to operate at high performance when conditions get tough. The car is completely enclosed, there is no air conditioning, you can't open the windows, and therefore heat is a massive thing when racing. On a warm summer's day when it is 25°C or 30°C outside, we will see extreme temperatures of up to 60°C inside the car. The challenges are massive,” Gordon said.

“In terms of innovation, who knows where the future will go? Merino wool provides such a versatile material, it can be soft, it can be strong, and it's particularly lightweight – and these are all key concepts which racing drivers would be really keen to explore.”

Jeffrey Herlings – motocross



With a host of motocross world championships to his name, along with the prestigious record of most GP wins in history,

Jeffrey Herlings from The Netherlands, known as ‘The Bullet’, is widely regarded as one of the fastest dirt bike riders of all time and is a living legend in the sport.

Jeffrey talked about how technology needs to keep moving forward to help improve performance and prevent injuries from falls.

“As pants and jerseys got way lighter, my performance started getting better because there was less weight to carry ... it really helps us to lose only minimum sweat and keeps us fresh while we are riding,” Jeffrey said.

Bernat Guardia – off-road cycling



Professional mountain bike rider and former World Cup downhill rider Bernat Guardia from Spain explained that

one of the main challenges for apparel in his sport is getting the right balance between protection (for a fall) and mobility while riding.

“Something we can benefit from a lot in our sport is having an inner layer that regulates the temperature because we wear a lot of protection, a lot of layers on us which makes us sweat a lot which affects our performance. Something with moisture control and heat control could benefit us a lot,” Bernat said.

“And if that layer can bring some protection that would be awesome because we could get rid of some layers which will provide better mobility.”

Training retail staff increases wool sales

Woolmark works with brands and retailers to help educate their staff about wool. The training builds their knowledge and confidence to invest in wool product lines, and also helps the shop floor staff advise customers more effectively which increases wool purchases.

Woolmark has been delivering wool training programs to brands and retailers in key markets for many years. More than 80 training programs were delivered during the 2023/24 financial year to international and Australian brands and retailers.

Training is often provided by Woolmark to support brands/retailers with the launch and marketing of a new wool collection, particularly if Woolmark assisted with the product development. However training can be provided as a stand-alone service to brands/retailers.

The aim of the training is to increase sales of the brand/retailer's wool apparel and related products, which directly benefits Australian woolgrowers by building the demand for wool.

The training is aimed at two broad types of staff within brands and retailers:

1. Back room decision makers – these are the company's buyers, product developers, sourcing teams and merchandisers. The training provides them with a strong knowledge about wool, the product manufacturing process, and the latest innovations and trends, which stimulates their interest and builds their confidence to stock and retail wool products in their stores.

2. Shop floor staff – these are the front-line staff who talk to, interact with and actually sell the products to customers. By getting to understand the superior qualities of wool garments, staff working on the shop floor effectively become 'product ambassadors'. This training of retail staff is a cost-effective way for AWI to market wool.

Below are three examples of the many training programs that Woolmark has recently rolled out to brands and retailers across the world.



Italian fashion brand Tod's

As part of Woolmark's ongoing global education initiative with new Woolmark licensee Tod's, a group of the brand's international retail trainers and sustainability managers recently visited the Schneider Group's Pettinatura di Verrone production plant and the Vitale Barberis Canonico wool mill in the Biella region of Italy to learn about wool processing. This immersive experience complements Woolmark's global retail training program, which has already equipped more than 150 of Tod's retail managers from across the world with the tools to share expert knowledge about wool with their local sales teams.



Indian clothing brand Octave Mettle

Octave Mettle, a popular clothing brand in the north of India, recently introduced wool to its product range. To support them with the launch, Woolmark conducted a train-the-trainer session about Merino wool to the brand's sales team so they could then pass on their new knowledge about the fibre to their own retail staff. "The session exceeded our expectations. The knowledge and insights gained will undoubtedly contribute to the success of the upcoming launch, and the retail team at Octave Mettle is excited to apply what they learned," said Octave's Marketing and Sales Head, Ankur Bhardwaj.



Turkish knitwear brand Intem Triko

Marketing team members from Intem Triko, one of Turkey's leading ready to wear knitwear manufacturers and brands with an annual production capacity of 6.5 million units, in April received in-person retail training from Woolmark. The training provided a tailored experience aligned with Intem Triko's retail goals. "The event was highly appreciated by everyone; it was both educational and informative. Seeing the journey of wool from raw material to finished product provided us with valuable insights that will help us guide and advise our customers better in future orders," said Intem Triko.



Gülay Gökbayrak of Woolmark Turkey teaching the students about the supply chain of Australian wool.

Wool education inspires sustainable fashion students

Thanks to an imaginative educational initiative run by Woolmark, fashion students in Turkey have learnt about the benefits of Australian wool and explored the role the fibre can have in sustainable fashion systems.

As part of the Sustainable Fashion course at Eskişehir Technical University (ESTU) in Turkey, students undertook a bold and imaginative project to design modular garments made from wool that are suitable for a slow-fashion circular model of production and consumption. A modular garment incorporates detachable or adaptable elements that can be reconfigured into different styles of garment.

The students were tasked to create their designs in response to a hypothetical scenario set in 2050 in which governments had restricted textile production under a Material Preservation Act because of the detrimental effects of fast fashion, and wool had become the primary material for all clothing due to it being a natural, renewable, biodegradable and recyclable fibre.

Although this hypothetical scenario was created by Woolmark for ESTU, it has been included in the Fashion Fictions project – an international, open-access initiative founded by Professor Amy Twigger Holroyd of Nottingham Trent University in the UK – and it can be accessed and used by anyone across the world. Launched in 2020, the Fashion Fictions project has been used by thousands of participants to design garments for fictional yet plausible future fashion systems to address real-world sustainability challenges.

Education about wool

The initiative strengthened Woolmark's engagement with university-level students – the next generation of designers and decision-makers in the fashion and textile industry.

“By introducing students early in their academic journey to the provenance, performance, and sustainability benefits of Merino wool, Woolmark is inspiring greater awareness and uptake of wool in their future creative and professional practices,” said Gülay Gökbayrak of Woolmark Turkey.

“The initiative also addressed the current lack of in-depth wool education within tertiary design curricula, and highlights wool's role in circularity and its relevance in sustainable fashion systems.”

To equip the ESTU students with knowledge about wool to complete their project, they were provided with a series of seminars presented by Woolmark and other industry experts.

Led by Gülay Gökbayrak, the students were first introduced to wool via the online Woolmark Learning Centre education

platform, which was followed by a face-to-face seminar at ESTU in which Gülay presented a Circular by Nature session which highlighted wool's technical properties, environmental benefits, and circular design potential.

The students also attended seminars by Woolmark Sustainability Manager Europe, Elisabeth van Delden, who outlined the limitations of lifecycle assessments and called for more holistic tools to capture the full environmental performance of wool; sustainability expert Mehmet Baba from Fuerte Consultancy who examined certifications in the textile industry; and assistant designer at Turkish slow fashion brand GIYI, Hilal Arslan, who talked about sustainable fashion design practices.

Positive feedback

Feedback from the students and ESTU faculty was that the project and seminars were enjoyable, useful and significantly increased their understanding of wool's properties and benefits.

“This design-driven experience has left a lasting impression on the students. It's been truly rewarding to see how wool – as both a material and a mindset – can inspire young designers to imagine a more sustainable future,” said Gülay. “The designs created by the students, while rooted in real-world design thinking, reflect the mindset of a new generation of designers who embrace complexity, sustainability, and vision.”

Assistant Professor Sanem Odabasi of the ESTU Textile and Fashion Design Department says the educational project and seminars were highly informative and engaging.

“They provided valuable insights into sustainable fashion practices and the importance of wool in circular design. Including practical examples and industry perspectives made the content relevant and impactful,” she said. “Wool's natural properties make it highly durable and suitable for sustainable fashion applications. After this experience, I am more likely to choose wool products in the future.”

MORE INFORMATION

fashionfictions.org/2025/01/15/world-263
woolmarklearningcentre.com



An example of the students' designs, showing how modular wool garments can be reconfigured into different styles and products, thereby enabling consumers to create more sustainable and transitional wardrobes.

Market intelligence report

Here we look at the decreasing production volumes of Australian wool, the recovering wool prices, and the relationship between the Purchasing Managers Index and the EMI.

Australian wool production in the 2024/25 season

Table1. AWTA key test data for the season up to the end of April

	2024/25 (tonnes)	2023/24 (tonnes)	YOY difference (tonnes)	YOY difference (%)	% of national 2024/25 total
New South Wales	97,029	102,652	-5,623	-5.48%	38.1%
Victoria	60,165	65,206	-5,041	-7.73%	23.6%
Western Australia	45,140	56,359	-11,219	-19.91%	17.7%
South Australia	38,754	45,209	-6,455	-14.28%	15.2%
Tasmania	7,779	8,504	-725	-8.53%	3.1%
Queensland	6,107	6,723	-616	-9.16%	2.4%
TOTAL	254,974	284,653	-29,679	-10.43%	100%

The Australian Wool Testing Authority (AWTA) tested 255 million kg (mkg) as at the end of April 2025 of the 2024/25 season. This is a 10.4% reduction in wool tested compared to the same 10 months of the previous season.

All states of Australia have seen decreases. The biggest production loss has been in Western Australia (down 19.9%) where producers are coping with dry conditions and adjusting their land use due to changes in Government policy.

Drought-affected South Australia has also seen a big fall in production (down 14.3%) with reduced sheep numbers and lowered fleece weights/clean kgs.

NSW and Victoria are responsible for 61.7% of the national production, which is somewhat helping to hold up the national total.

Wool selling volumes at auction for the 2024/25 selling season by the end of sale week 46 (16 May 2025), compared to the same period in the previous season, has seen:

- **13.79% less wool offered** – 1,385,675 bales offered compared to the 1,607,373 bales offered last season, a drop of 221,698 bales.
- **13.86% less wool sold** – 1,276,506 bales sold compared to the 1,481,853 bales sold last season, a drop of 205,347 bales.
- **Very similar clearance rates at auction** – 92.12% compared to the 92.19% cleared last season.
- **12.55% drop in raw wool value, approximately A\$250 million less clip revenue** – A\$1,742 million sold this season through the auction system compared to the A\$1,992 million sold last season.

Australian wool production forecasts

Table 2. AWPFC fourth forecast (May 2025)

	2023/24 estimate	2024/25 fourth forecast	Change YOY (%)	2025/26 first forecast	Change YOY (%)
Sheep numbers shorn (million head)	71.6	63.0	-12.0%	57.5	-8.7%
Average cut per head (greasy kg/head)	4.44	4.45	0.2%	4.46	0.2%
Shorn wool production (mkg greasy)	318	280	-11.8%	257	-8.4%

The Australian Wool Production Forecasting Committee's (AWPFC) fourth forecast of Australian shorn wool production for 2024/25 is 280 mkg greasy, which is 11.8% lower than the 2023/24 season estimate – see table 2.

This 2024/25 forecast reflects the continuing drought conditions in western Victoria and South Australia and a decrease in the number of sheep shorn in all states. Commodity prices, input costs and variable seasonal conditions continue to impact

sheep producers' decisions regarding their enterprise mix, particularly in Western Australia.

Average cut per head in 2024/25 is forecast to be comparable with 2023/24, at 4.45 kg greasy (up 0.2%).

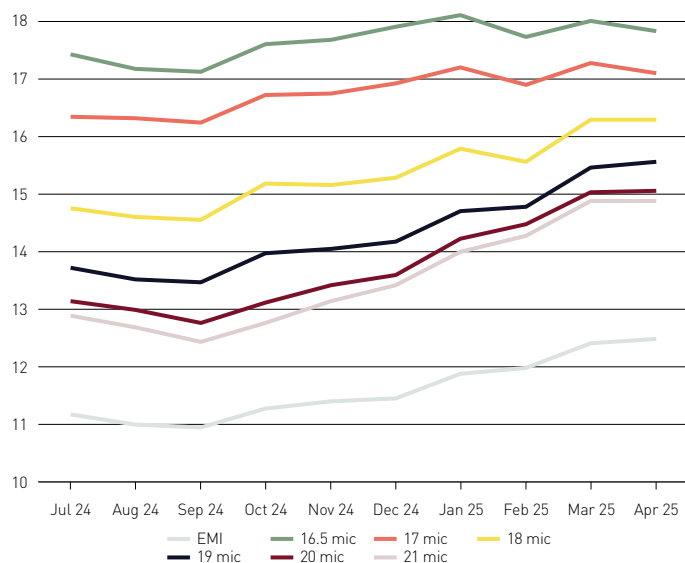
AWTA key test data for the 2024/25 season to the end of March shows small year-on-year changes in mean fibre diameter (down 0.3 microns), staple length (up 0.3 mm), staple strength (down 1.5 N/ktex) and yield (down 1.1%). VM was unchanged at 2.2%.

Sheep slaughter from July to December 2024 was up 29% compared with the same period in 2023 and was 58% above the five-year July to December average. Lamb slaughter was down 6% compared with July to December 2023 but remained 12% above the five-year average.

The APWFC's first forecast of shorn wool production for the 2025/26 season is 257 mkg greasy, an 8.4% decrease on the 2024/25 forecast.

Australian wool prices

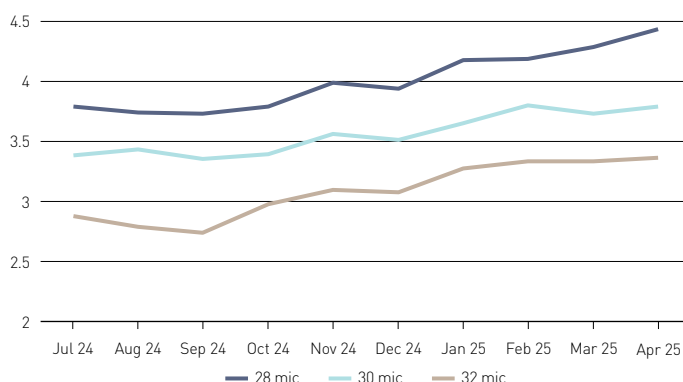
Figure 1. 2024/25 season wool prices (\$) – Merino sector



Since the start of the 2024/25 season, all wool types and descriptions have increased their values. The overall market value, as measured by the Eastern Market Indicator (EMI) has improved 11.8% or 132 ac/clean kg since 1 July 2024 – see Figure 1. However, when measured in the demand indicating USD EMI, the market has achieved just a 38 usc/clean kg gain, a 5.1% increase over the 10 months so far of this season.

In the Merino sector, all types broader than 18 microns have gained substantially, with 150 to 200 ac/clean kg rises registered. This represents a general appreciation of 12% in this wool type sector. A lowering supply – particularly broader than 19.5 microns – is the core factor, accompanied by the demand for uniforms, value suiting, jackets and knitwear items remaining solid to slightly strengthening during the whole season, before the emergence of tariff impositions.

Figure 2. 2024/25 season wool prices (\$) – crossbred sector



Superfine Merino wools finer than 18 microns have been less sought after. Whilst gains of 40 to 80 ac/clean kg have been made (around 4% better), the prices are indicative of the struggling sales available at the top end of the apparel retail market. European buying at auction is particularly slack and unpredictable.

The crossbred wool market has steadily climbed since the start of the season – see Figure 2. Around 15% of value (50 ac/clean kg) has been added to grower returns, with most growers now able to get returns from their wool that are close to at least paying the shearing costs. Gains in this sector are indicative of homewares, interiors and cheaper coats being sought by shoppers looking for value.

The worst performing types in the market have been the cardings and oddment segment. Most types have remained near the same overall value throughout the season, indicative of the carbonisers struggling to create demand and the cheapness of competing fibres.

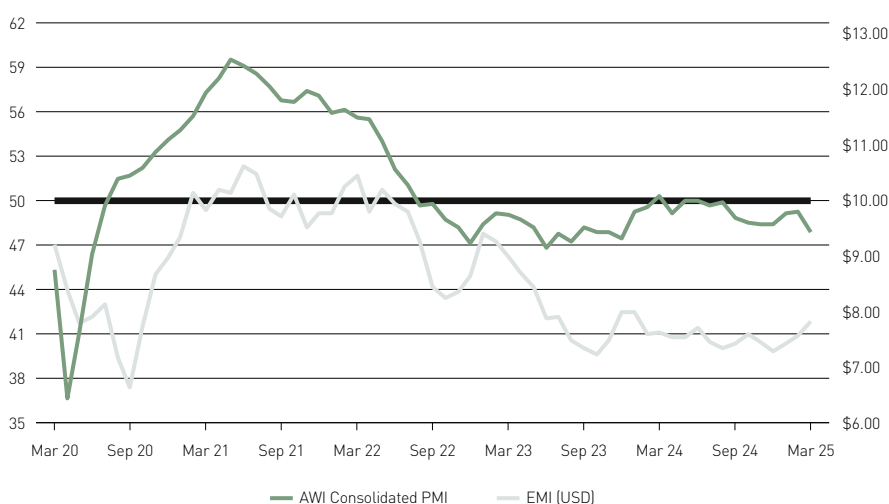
Purchasing Managers Index

Unsurprisingly, the Purchasing Managers Index (PMI) (Source: GlobalData) of most nations has taken a big hit in March/April due to the actions of the US. The AWI consolidated PMI (see Figure 3) measures an averaged sentiment derived from published data from:

- USA, down from 51.6 to 49.0 (-5%),
- Japan, down from 49 to 48.4 (-1.2%),
- Italy, down from 47.4 to 46.6 (-1.7%),
- South Korea, down from 49.9 to 49.1 (-1.6%)
- UK, down from 46.9 to 44.9 (-4.3%).

In somewhat of a shock, the individual country figure for China for March 2025 increased from 50.2 to 50.5 (+0.6%) which was its best PMI for a year (March 2024 was 50.8).

Figure 3. AWI consolidated PMI and EMI during past 5 years



Australian woolgrowers helping to improve European textile labelling

MAKE THE LABEL COUNT



The proposed environmental labelling on apparel products for sale in the European Union (EU) that threatened to disadvantage Australian wool has been deferred. AWI and other natural fibre organisations continue to defend natural fibre products in upcoming EU textile sustainability policies.

AWI CEO John Roberts says Australian woolgrowers have made a difference in the EU by raising their concerns about the shortcomings of the Product Environmental Footprint (PEF) methodology that rates wool and other natural fibres poorly.

Although the EU's labelling proposals have been deferred, John says it is vital that Australian woolgrowers continue to be heard so that natural fibres including wool are treated fairly in the EU.

"Thanks in part to the ongoing strong voice from woolgrowers, the proposed environmental labelling on apparel products for sale in the EU has been deferred for now," John said.

"However, it remains vital to maintain the pressure on EU policymakers so they recognise the environmental and biodiversity benefits of natural fibres and fulfil their promise to put fast fashion out of fashion.

"Addressing the biases and limitations in the EU's sustainability rules is essential to ensure a fair and accurate assessment of wool's sustainability credentials so that consumers are not misled. It 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 a driving force in environmental policy, other markets across the world could potentially follow its lead and adopt similar initiatives to the EU in their own jurisdictions."

In April, a new petition was launched by Make the Label Count (MTLC) urging the European Commission to ensure fair treatment of natural fibres, including wool, in upcoming EU textile sustainability policies.

Formed in 2021, MTLC is an international coalition of organisations representing a wide range of natural fibre producers, manufacturers, brands, standards organisations and



The roundtable event held inside the European Parliament in Brussels on 7 April, hosted by the Make the Label Count Campaign, which advocated for natural fibres including wool.

environmental groups. AWI is a founding coalition member of MTLC.

The petition garnered widespread support from the public as well as woolgrowers and industry organisations. It urges EU policymakers to:

- recognise natural fibres' benefits in new sustainability policies
- ensure robust, science-based environmental criteria to prevent greenwashing
- promote a responsible fashion model that limits fast fashion and encourages biodegradable, renewable and recyclable fibres.

In parallel with the launch of the petition, a roundtable event was held inside the European Parliament in Brussels on 7 April, hosted by MTLC and moderated by MTLC spokesperson and International Wool Textile Organisation (IWTO) Secretary General Dalena White.

The session, titled 'From Farm to Fashion: how natural fibres protect and support our environment', brought together leading EU policymakers and highlighted the environmental impacts of different fibres, how fair labelling practices can provide clarity, and what policymakers must consider to ensure a sustainable textiles sector.

During the past five years, AWI has worked collaboratively with like-minded organisations globally to highlight concerns and address the weaknesses of PEF methodology on two fronts. Firstly, in the European Commission's PEF Technical Secretariat where AWI has been providing expert advice based on its science and research via the IWTO. Secondly, in advocating to EU policymakers as part of the MTLC campaign.

MORE INFORMATION
makethelabelcount.org

Extract from a letter sent last month by MTLC to the European Commission

"As you set out to review the Environmental Footprint methods, we urge you to recognise and appropriately weigh the inherently circular benefits of natural fibres. Offering **biodegradability**, **renewability**, and several centuries of commercially viable **recyclability**, only natural fibres can be sustainable in the long term. These attributes, and in particular the return of nutrients to the soil for use again, provide a key solution to many of today's pressing environmental challenges at a time when we must reduce waste, increase soil health, combat microplastic

pollution, and move away from fossil fuel dependence.

Responsibly managed, natural fibre production actively restores ecosystems by enhancing soil health, increasing biodiversity, and countering climate change through sequestration of atmospheric carbon – contributing to a regenerative approach rather than a destructive one. These **positive environmental impacts** must be accounted for in any review of the Environmental Footprint methods to ensure a fair and comprehensive assessment of textile sustainability."

'World of wool' photo gallery

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.



Sundown

A beautiful sunset view of the old runway on **Daryl Cooper's** farm north of **Leeton** in the Riverina of **NSW**. The photo was shot by his cousin from the city on their afternoon stroll.



sHedway founder Carol Mudford

Founder of sHedway, **Carol Mudford**, last month won the 2025 NSW AgriFutures Rural Women's Award for her work in suicide prevention and mental health awareness within Australia's shearing industry. Carol is a registered nurse, shearer and wool handler from **Dubbo, NSW**. In 2023, Carol founded sHedway, a not-for-profit organisation dedicated to promoting positive mental health in shearing sheds across the country. What began as a simple Facebook page (facebook.com/sHedwayLimited) has grown into a national initiative. Pictured is Carol giving a talk to participants at an AWI-funded wool harvesting workshop in Dubbo (left), and receiving her award from NSW Minister for Women, Jodie Harrison MP (right). At the awards, Carol wore a 100% Australian Merino wool dress from Smitten Merino.



International Back to Back Wool Challenge

The wool community isn't generally a fan of 'fast fashion', but a unique and fantastic exception is made for the International Back to Back Wool Challenge. Held at the Dennis family's Tarndwarncoort Homestead at Warncoort in Victoria on 29 March, three teams of wool crafters battled it out to create a full-size jumper directly from a sheep's back to a human's back in the quickest time possible. Each team includes a blade shearer, handspinners and knitters. The winning team, Koorooman Sapphire Ewes, took just 11 hours, 42 minutes and 12 seconds to complete the jumper, and retained their Australian Championship title. The Guinness World Record time is 4 hours, 45 minutes and 53 seconds held by a Dutch team. Next year will be the 30th Challenge with hopes of a record number of teams worldwide. The Challenge promotes wool worldwide and raises funds for cancer research.



Rise and shine

Marcus Gellert of **Glenthompson**, who also runs plenty of Merinos, sent in this photo of some composite ewes against the backdrop of a glorious sunrise on his south-west **Victoria** farm.



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