Australian Wool Innovation Limited

AWI BUSINESS UNIT UPDATE

APRIL 2024

CONTENTS

Australian Wool Innovation (AWI) is the not-for-profit industry owned Research and Development Corporation (RDC) working throughout the worldwide wool supply chain on behalf of Australian woolgrowers to increase their long-term profitability.

Internationally we are better known as the Woolmark Company with offices globally in key wool markets. The Woolmark Company focuses on fostering talent, developing new innovations, and helping businesses realise the benefits of Australian Merino wool. It is one of the world's most recognised brands.

AWI's stakeholders range from growers here in Australia to mills in Europe, China plus global fashion brands. We leverage that extensive network to gather important insights that we share with our primary stakeholder, the woolgrowers of Australia.

AWI directly communicates regularly with growers. This ranges from wool market reports posted online and sent out via text message, to our quarterly magazine Beyond the Bale (hardcopy & online). In addition we provide a monthly e-newsletter and have a strong presence across social media including Facebook, Twitter, instagram and YouTube. AWI has recently launched a Woolgrower App and regularly conducts Webinars.

This quarterly business unit update is designed to provide key stakeholders with a snapshot of AWI business units and insights into key projects.

MARKET ANALYTICS

PRODUCTION - AWTA KTD

Australian Wool Testing Authority (AWTA) key test data at the end of March 2024 of the 2023/24 season has seen a decrease of almost 3% or 7.6m/kg in wool production when measured in greasy weight.

AWTA ktd end March '23	2023/24	2022/23	tonnes diff.	% diff.
NSW	92,702	96,572	-3,870	-4.01%
VIC	57,316	59,336	-2,020	-3.40%
QLD	6,149	7,385	-1,236	-16.74%
SA	40,164	37,323	2,841	7.61%
WA	48,841	51,707	-2,866	-5.54%
TAS	7,810	8,253	-443	-5.37%
TOTAL	**252,982**	**260,576**	**-7,594**	**-2.91%**

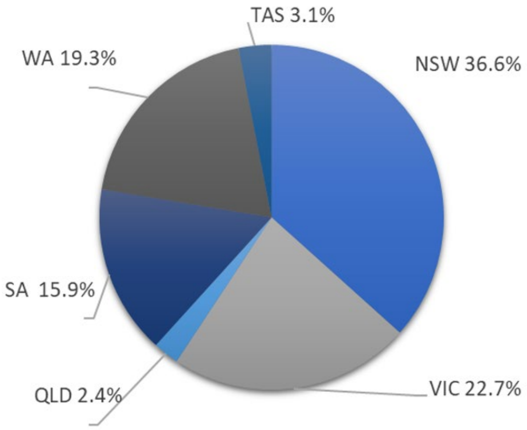
The only outlier to decreased volumes tested has been the state of South Australia which has recorded an increase of wool tested which is 7.6% higher up to this point of the season compared to last season.

All other states have had lower weights of between 3.4% and 5.5% except Queensland which is 16.7% lower which extraordinarily replicates the annual growth of last year, which was 16.7% higher than the previous season.

The expected Western Australian loss of production due to the struggles being uniquely faced in that state is beginning to. Tested volume by weight thus far for 2023/24 in WA is down by 5.5%, far outstripping the percentage losses of NSW and Victoria.

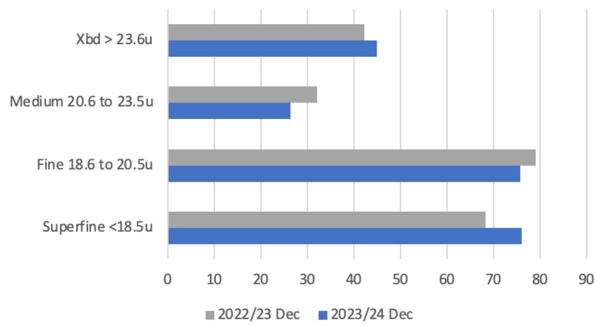
NSW remains the dominant producing state at 36.6% of the national volume.

2022/23 PRODUCTION BY STATE BY AWTA WSA SEPT '23



PRODUCTION - AWTA KTD

Following two thirds of the season having been completed, the trend of the changing fibre diameter distribution of the national clip remains firmly in play. Testing results shows that both extremities of the micron data are still on the growth side.



CLIP DISTRIBUTION BY MICRON GROUP

large production gain of 11.4% has been recorded at the finest (less than 18.5micron) end of the spectrum. The broadest wools of greater than 23.5micron have increased 6.6%.

The downside of the production data is in the mid microns. Fine wool has dropped 4.2% of its share, whilst the biggest loss has been in the Medium wool sector between 20.6 and 23.5 micron which has seen its percentage share of the clip drop by 17.8% year on year.

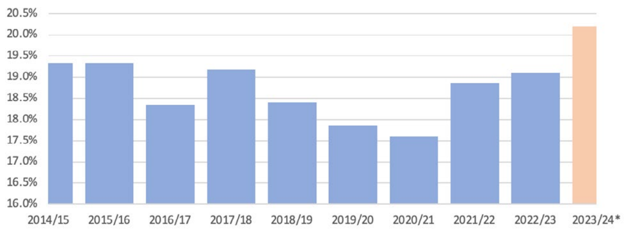
Mkgs	2023/24 Mar	2022/23 Mar	Difference	% change
Superfine <18.5u	75.92	68.14	7.78	11.42%
Fine 18.6 to 20.5u	75.73	79.08	-3.35	-4.24%
Medium 20.6 to 23.5u	26.34	32.06	-5.72	-17.84%
> 23.5u	44.98	42.20	2.78	6.59%

Merino wools finer than 20.5 micron make up 68% of the national clip as of March 1st, 2024, for the 2023/24 season.

Wools greater than 23.5 micron are currently **20.2%** of this season's clip.

MARKET ANALYTICS

% OF CLIP > 23.5U



PRODUCTION - AWTA KTD

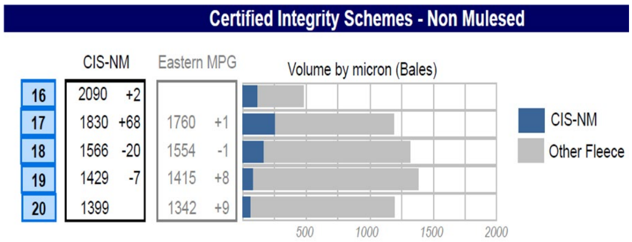
Auction sales since near the start of March have had substantially less volume than normal and particularly compared the previous year. This has seen offered and sold numbers revert significantly back towards the 2022/23 figures. At auction at the end of week 35 on 1st March 2024 of the 2023/24 selling season has: -

- **Offered** 1,192,802 bales (approx. 213.5mkg greasy) at auction compared to the 1,187,120bales (approx. 212.5mkg) offered at the same point of the selling season last year. That is 5,682 bales (approx.1.1mkg) more or **0.5% more** wool offered or an average of 196 bales more offered per sale week.

- **Sold** 1,095,295 bales (approx. 196.1mkg greasy) at auction this season compared to the 1,044,389 bales (approx. 186.9mkg) sold at the same point of last year. That is 50,906 bales (approx. 9.1mkg) more or **4.9% more** wool sold or an average of 1,755 extra bales sold per sale week.

- Clearance at auction rates this season are at **91.8%** nationally of all wool offered compared to the **88.0%** cleared over the same period of the 2022/23 season. Whilst offerings have decreased substantially during February 2024, the decision to offer and sell by growers is also far greater and an improvement of **4.3%** in clearance rates at auction have resulted.

Raw wool value of wool sold this season is A$1.48 billion which is A$150 million less than the A$1.63 billion sold by the end of the same week last year. This is a **9.2%** year on year reduction of raw wool value sold so far. This must be viewed with the 4.9% more wool having been sold, which indicates the overall lesser values of total wool income/kg.



Volumes of certified non-mulesed and CIS labelled wools through week 35 showed low numbers once again for sale. The identifiable premiums from the AWEX reporting service were:

- 17 micron which had a weekly premium of 4.0% available.

- 18 micron achieved +0.8%

- 19 micron had a +1.0% premium.

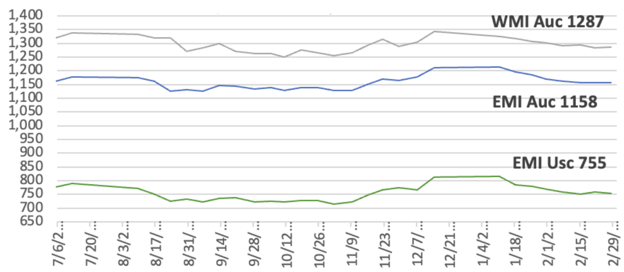
- 20 micron was the best premium at + 4.3% but with the lowest volume.

WOOL PRICE – EMI

- The 2023/24 season has seen the **Eastern Market Indicator (EMI)** in AUD improve from 1126ac/clean kg at the start of the selling season to be **1158ac/clean kg** by the end of week 35 (1st March 2024) This is an intra seasonal gain of 32ac or **2.8%** in Australian dollar terms. During the first two thirds of the season, the AUD EMI has averaged **1158ac/clean kg**.

- Year to year movement in the **AUD EMI** has seen a fall of 210ac from 1368ac/clean kg to 1158ac, an overall 15.4% reduction in AUD value.

2023/24 SEASON PRICE INDICATORS



MARKET ANALYTICS

- The USD EMI has advanced 7usc/clean kg from 748usc/clean kg at the start of the season in July to close week 35 (1st March 2024) at 755usc/clean kg. This is a seasonal gain in the US dollar terms of 0.9%. The USD EMI has averaged 754usc/clean kg for the first eight months of the season.
- The USD EMI has had a year to year reduction of 168usc from 923usc to 755usc, an 18.2% fall in the overall USD value of wool by indicator.

WOOL PRICE – WMI

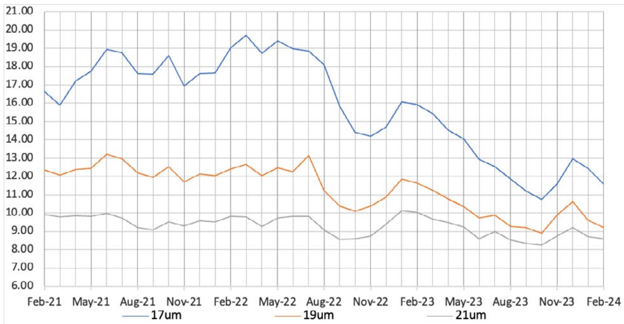
- The 2023/24 season has seen the Western market indicator (WMI) in AUD increase 16ac from the season opening price of 1271ac/clean kg to be 1287ac/clean kg by the end of week 35 (1st March 2024). This is an intra seasonal gain of 1.3% in Australian dollar terms. The AUD WMI has averaged 1295ac/clean kg for the two thirds of the season.
- The AUD WMI has depreciated from 1467ac to 1287ac on a year to year comparison. This is 180ac or 12.3% lower in the WMI in Australian dollar values. Whilst disappointing, the WMI has outperformed the Eastern indicators.

MERINO WOOL PRICE - BY MICRON PRICE GUIDES

AU dollar	16.5 mic	17 mic	18 mic	19 mic	20 mic	21 mic	22 mic
Jul-23	$ 20.24	$ 18.77	$ 16.16	$ 14.80	$ 13.85	$13.45	$13.11
Aug-23	$ 19.70	$ 18.26	$ 15.69	$ 14.28	$ 13.49	$13.13	$12.79
Sep-23	$ 19.24	$ 17.33	$ 15.40	$ 14.24	$ 13.27	$12.92	$12.58
Oct-23	$ 18.16	$ 16.93	$ 15.15	$ 14.00	$ 13.19	$12.98	$12.57
Nov-23	$ 18.51	$ 17.43	$ 15.57	$ 14.85	$ 13.30	$13.16	$12.51
Dec-23	$ 19.90	$ 18.94	$ 16.54	$ 15.53	$ 13.83	$13.47	$13.36
Jan-24	$ 20.28	$ 18.90	$ 16.49	$ 14.62	$ 13.61	$13.26	$13.08
Feb-24	$ 18.84	$ 17.76	$ 15.77	$ 14.11	$ 13.34	$13.19	$13.05
$/kg +/-	-$ 1.40	-$ 1.01	-$ 0.39	-$ 0.69	-$ 0.51	-$ 0.26	-$ 0.06
% +/-	-6.9%	-5.4%	-2.4%	-4.7%	-3.7%	-1.9%	-0.5%

Monthly averaged wool prices see losses of wool value progressively higher the finer the fibre diameter. The broader Merino wools have been resolute in comparison to their finer counterparts. This is indicative of the both the lack of Italian buying and the general downturn in worsted making at the luxury or more expensive end of the market – suiting and women's fine apparel.

MICRON PRICE GUIDE FOR AUSTRALIAN WOOL (USD/KG CLEAN)



WOOLMARK PRICE GUIDE SUPER 150 16.2U (USD/KG CLEAN)

CROSSBRED TYPE WOOL PRICE - BY MICRON PRICE GUIDES

Monthly averaged wool prices

26 mic	28 mic	30 mic	32 mic
$ 5.56	$ 3.19	$ 2.88	$ 2.55
$ 5.69	$ 3.38	$ 3.11	$ 2.57
$ 5.98	$ 3.65	$ 3.42	$ 2.86
$ 6.02	$ 3.87	$ 3.65	$ 3.15
$ 5.59	$ 3.55	$ 3.34	$ 3.07
$ 5.33	$ 3.48	$ 3.21	$ 2.93
$ 5.45	$ 3.53	$ 3.29	$ 2.93
$ 5.38	$ 3.61	$ 3.37	$ 3.08
-$ 0.18	$0.42	$0.49	$0.53
-3.2%	13.2%	17.0%	20.8%

MARKET ANALYTICS

CROSSBRED MPG 2023/2024

In comparison to the entire Merino sector, the crossbred wool types have staged a price recovery since the start of the season, albeit from a very poor, low price basis. Around 50ac/clean kg has been added to all types broader than 27 microns. The finer end of the crossbred price levels has been somewhat stymied by the Merino effect whereby the single most popular use for the 26micron and finer comeback and crossbred types is for blending with the medium to broader Merino types to "cheapen down" the 22.6micron (Type 56) and 24.1 (Type 58) micron standard China types.

Shipping and Logistics

DP WORLD and the Maritime Union of Australia reached an agreement at the Fair Work Commission, bringing months of protected industrial action to an end. The agreement was announced just one day after the previous board meeting on Friday (2 February) at the conclusion of three days of facilitated negotiations before the FWC. Endorsement by MUA members employed by DP World was granted with DP World wharfies returning to work. The MUA began industrial action at DP World's Australian terminals in October 2023 after negotiations for a new enterprise bargaining agreement collapsed.

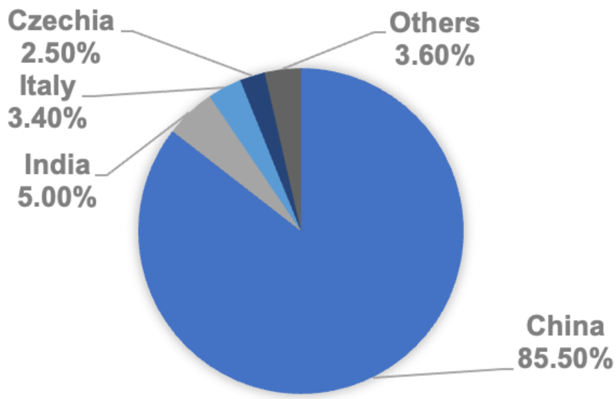
Export Destinations

Not unsurprising but still notable, at the completion of the first half of the 2023/24 season, Chinese import of Australian wool by percentage of volume has grown even further. By the end of the Australian Bureau of Statistics (ABS) reporting period in December 2023, export data show that 85.5% of all Australian wool flowed through to offload in China. Last year's completed season, China's import was 82.6% by volume.

At the halfway point of the 2023/24 season, 96.7% of all wool export has been in the raw greasy state. A further 2.2% was exported as carbonized wool and 1.1% was in the scoured form.

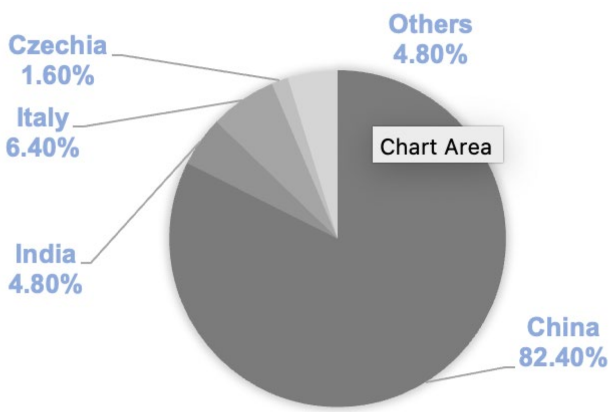
The lack of competition that has been reported for the first six months has become progressively worse, from both the Italian and Indian users buying dropping off even further leading into the Christmas recess. The first two months of the new calendar year of 2024 has not seen any obvious improvement in sale rooms, but ABS figures will confirm or dispute that when released in due course.

EXPORTS BY VOLUME JULY TO DECEMBER 2023



The drop off by Italy in value was exacerbated from the October to December period by falling to just 6.4%. This lines up with the 50% drop off in purchasing and business reported from the TWC Italian and other European offices. Italian wool, import value from Australia would normally be around 11% as a $ value figure.

EXPORTS BY VALUE JULY TO DECEMBER 2023



ON-FARM RESEARCH

HEALTHY PRODUCTIVE SHEEP

AWI AOP 2023/2024 Investment Focus: Train growers and advisors in moving to a non-mulesed enterprise and flystrike management covering tactical responses, strategic risk management and breeding for flystrike resistance to reduce risk.

In February, three pilot workshops for StrateFly pilots were held in New South Wales, South Australia, and Victoria. StrateFly is a one-day workshop designed to raise awareness of the requirements for moving to a non-mulesed enterprise. The attendees provided highly positive feedback, with 76% stating that the workshop was very valuable for their business, and almost all saying that they would recommend it to others. More StrateFly pilots are planned for April.

AWI AOP 2023/2024 Investment Focus: Commission projects in flystrike management tools targeting the viability of the fly.

The Steering Group for the "Sterile Insect Technique to eradicate sheep blowfly on Kangaroo Island" project has been formed. This group comprises representatives from several organisations, including AWI, MLA, SARDI, UoA, AHA, SA Sheep Industry Fund, and Keith Bolto, a grower from Kangaroo Island.

During the Steering Group first meeting, the research team provided an update on the progress of constructing a mobile modular facility on Kangaroo Island for the mass rearing of sterile sheep blowfly males. This initiative is funded through the Local Economic Recovery program (specifically for bushfire recovery) and is led by Dr. Maarten van Helden, (University of Adelaide and a Senior Entomologist at SARDI). The facility will be officially opened on the 24 May.

Producers from Victoria, NSW, WA, SA and Tasmania are being recruited for the Deakin University project to develop a new fly lure technology. This project, funded also by an Australian Research Council (ARC) Linkage Grant, will build the key biochemical data to develop a novel fly lure technology (at scale) to be used on-farm. Samples of wool and skin from healthy and fleece rot-affected animals will be collected across 5 states. Woolgrowers that contribute to this 3-year project will receive a personalised written summary each season, covering flystrike trends specific to their property and their sheep, and the opportunity to discuss the findings with the blowfly experts. For more information and expressions of interest, please see flyer attached.

AWI AOP 2023/2024 Investment Focus: Support for co-ordination of a national wild dog program.

AWI continues to manage and implement, in consultation with the National Wild Dog Management Consultation Committee, the National Wild Dog Management Action Plan. This includes administration of the National Wild Dog Management Coordinator (ON-00857, co-funded by AHA) the National Wild Dog Management Implementation Manager and the Communications Coordinator, as well as associated operational activities for FY24 and FY25 (funded by a Federal Government Grant, ON-00894).

AWI AOP 2023/2024 Investment Focus: Increase knowledge and tools available to growers to assist them in choosing feedbase options suited to their region and production system.

An updated version of the Pasture Picker website, to be designed in consultation with MLA, will be developed in-house and hosted on AWI's server. The new interface will operate similarly to the Food On Offer (FOO) library and allow users to select pasture species suitable for local conditions and intended use. Original partners (GRDC, Dairy Australia and AgriFutures) will be invited to be involved, as well as commercial seed companies and other RDCs (Australian Eggs and Australian Pork Limited). AWI have commenced internal discussions with the AWI digital team to determine the level of commitment required from an in-house developer. A proposal for the Pasture Picker re-design has been drafted and will be shared with MLA for feedback prior to distribution to other original partners.

Woolgrower resources from the recently closed 'No more gaps with superior shrub systems' project are being developed. These resources will include a producer fact sheet on the benefits of saltbush shrubs, such as Anameka™, in a sheep production system and a 'how to' guide on the establishment and management of these shrubs.

ON-FARM RESEARCH

AWI AOP 2023/2024 Investment Focus: Increase grower understanding and adoption of best practice management for reproduction efficiency.

The 'Prioritising lamb survival interventions' project with Murdoch University had been delayed and is now due for completion at the end of the financial year. Outputs from the project will include a prioritised list of management interventions for lamb survival, ordered by increase in lamb survival and profit per unit of management change. The analysis delivered through this project will provide a foundation for a future decision support tool. Key messages will be integrated into existing extension programs and resources.

AWI and MLA are currently developing a suite of resources to promote the adoption of pregnancy scanning. Resources that have been drafted include a producer guide on pregnancy scanning, a fact sheet, a pre-scanning preparation checklist, a resource catalogue, and a cost-benefit report. These are undergoing final review by AWI and MLA managers before being mocked up into a co-branded AWI and MLA design.

AWI AOP 2023/2024 Investment Focus: Support woolgrowers to increase their overall wool-growing productivity through access to genetics and genomics tools and information.

The MLP and Sire Evaluation projects continue to provide important data to support the continued research and development of MERINOSELECT. All 5,700 MLP ewes have been genotyped and play an important role in the Merino Genomic Reference Flock. Final data on MLP ewes to be collected in July at only remining New England site. Around 40% of 2022 "current drop" Merinos in MERINOSELECT have been genotyped.

Across flock Breech and Body Strike Research Breeding Values for the New England MLP sires will be on display at the last MLP sheep field day at the New England CSIRO site on 29 May.

On an annual basis the MERINOSELECT and DOHNE genetic trends are published in Beyond the Bale along with the key highlights of those trends. The most recent trends were published in the September 2023 edition. Sheep Genetics released new Research Indexes in May 2023. They are being updated from breeder feedback provided to date to have a greater wool focus and reduced focus on higher adult weight. They are due to become the default indexes in May 2024 (the old indexes will no longer be reported).

R&D projects into feed efficiency, feed intake, methane, resilience and feet health continue as they are the key next generation traits requiring R&D prior to the adoption phase.

Inconsistent AI results have slowed the use of high merit semen. "Predictors of AI success" has collected data on 30,000 ewes and in the analysis phase with some encouraging results that will be published at international conference in August. Meetings with Australian AI service providers will take place soon thereafter.

AWI AOP 2023/2024 Investment Focus: Support woolgrowers to breed for increasing flystrike resistance.

Final ClassiFly resources are nearing completion and StrateFly pilots are underway. Both workshops address breeding Merinos with increased resistance to flystrike.

The link sires used in Sire Evaluation are selected on the criteria of being productive, flystrike resistant sires with good tops to cull ratios.

Early breech and body flystrike genomic only Research Breeding Values (RBVs) show promise and are already demonstrating a strong correlation with the known causes of breech and body strike, which is a good validation of the analysis results, but further data is required (ON-00866).

As more data is collected under ON-00866, new ASBVs of Urine Stain and Faecal Consistency will be combined with the already existing Wrinkle, Dag, Cover and Colour ASBV's to produce a multi trait Breech Strike ASBV.

ENVIRONMENTAL SUSTAINABILITY

AWI AOP 2023/2024 Investment Focus: Assist woolgrowers to monitor, measure and improve on-farm natural capital, increase drought resilience and enable new income streams such as carbon and biodiversity markets.

ON-FARM RESEARCH

Farming for the Future (FftF)

The collaborative FftF project is designed to generate evidence that quantifies the relationship between on-farm natural capital and business outcomes, including profitability and productivity. The project will also generate a publication on the management of biodiversity on livestock farms with a focus on woolgrowers.

Natural capital and environmental performance measures for Australian wool growers

A top priority for AWI is identifying credible, evidence-based and cost-effective metrics that enable wool growers to measure, manage and report on-farm natural capital and environmental performance over time. With this project, we will build on the outputs of the FftT project to achieve our strategic objectives; to provide leadership on how natural capital and environmental performance of Australian wool growers should be measured and reported. The project will describe the key metrics of greatest relevance for sustainability and resilience in the wool growing sector and those measures that are the most commercially measurable. To do so, it leverages the extensive database of natural capital, management and financial data that has been collected by the FftF project on 130 Australian farms, the published methods of reporting to sustainability-conscious brands and the newly developed Biodiversity Management Index (BMI), as well as the experience and expertise of the FftF team. Stakeholder engagement will commence shortly and will include woolgrowers and third-party certification bodies to provide input into design.

The impact of pasture biodiversity and grazing management on pasture productivity, GHG emissions and profit

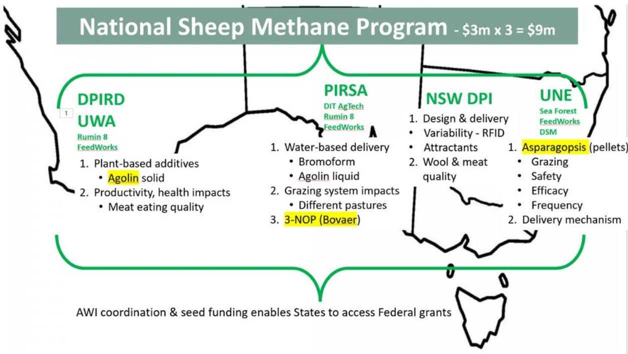
This new AWI project is being delivered by the University of Tasmania, and will investigate two key components that underpin the concept of regenerative agriculture, plant species diversity and cell grazing, to identify the extent to which they impact on soil carbon, pasture production, greenhouse gas emissions and profit. Plant species diversity and cell grazing will be modelled over the long term, evaluating seasonal performance over 100 years of real climatic conditions to provide more rigorous insight as to the benefit of each treatment relative to conventional enterprise management. This project will add further richness and rigour to AWI's current investment in the Carbon Storage Partnership

Methane mitigating feed additives for grazing sheep (MERiL)

$3M of woolgrower funding is leveraging an additional $6M Federal Government and research partner funding to explore GHG emission reductions in grazing sheep through dietary additives.

AWI initiated the National Sheep Methane Program (NSMP), which is a collaborative approach to RD&A to implement practical and safe ways for producers to reduce methane emissions in grazing sheep. The NSMP is coordinated across sheep producing states, involving the University of New England, NSW Department of Primary Industries, the Department of Primary Industries and Regions South Australia, Department of Regional Development and Industries Western Australia and the University of Western Australia.

The NSMP team has submitted an application to capitalise on the final phase of the Government's MERiL grants. The proposed project will build on findings from previous MERiL grants to further optimise feed additives as solutions for enteric methane mitigation in grazing sheep.



Agri Technology

AWI AOP 2023/2024 Investment Focus: Invest in innovative solutions targeting wool harvesting alternatives to improve shearer and or animal welfare and increase shearing efficiency.

ON-FARM RESEARCH

The project to develop a biological agent to create a weakened zone of wool is progressing well, pharmacological trials will start in mid-April at Roseworthy. These trials will determine the dose and release profile of the most effective agent to achieve maximum fibre weakening (to inform potential drug design eg polymer encapsulation). The rate and routes of metabolism and excretion of the most effective agent will be also identified in order to determine potential residue issues and withholding periods.

Out of the 14 wool bioharvesting project applications submitted in response to the recent call for proposals, 4 have been selected for funding. All selected projects aim to develop and test a weakened wool removal mechanism within the first 6 months, using different approaches. If these early prototypes are successful, the projects will proceed to integrate the removal mechanism into a handpiece or a robot effector for an automated system. Clear Go/No Go points will be included in every project to test and validate the different components/phases of the systems proposed.

PROCESS INNOVATION & EDUCATION EXTENSION

Student Education

The Learn about Wool program continues to advance its mission of educating and empowering students and textile professionals in the Australian wool industry, fostering enhanced expertise and industry growth.

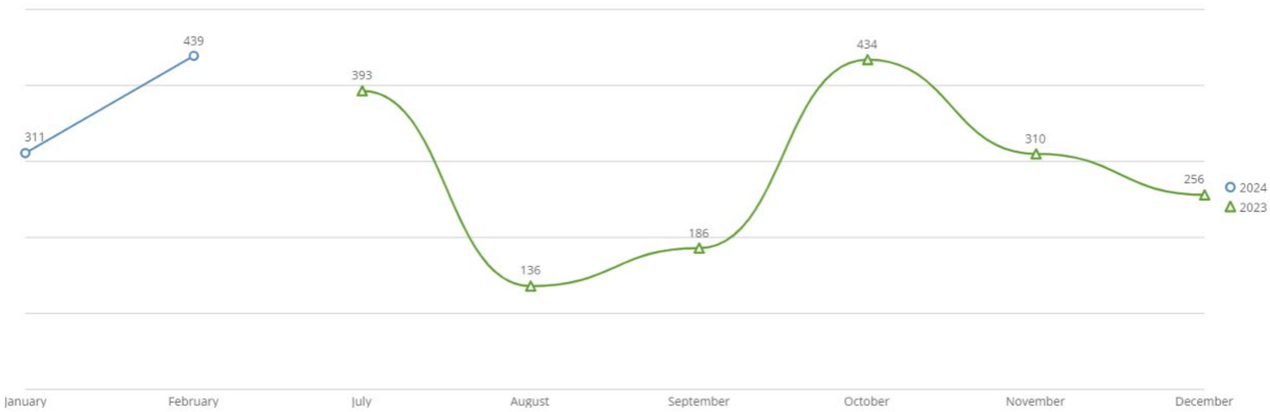
We're pleased to announce the release of the new Learn about Wool Careers booklet, now accessible online.

YOUR FUTURE IN WOOL

Are you looking for a career where you can play a key role in a more sustainable world, while building lifelong connections in a global community?

DOWNLOAD THE CAREER BOOKLET

In January and February, the Woolmark Learning Centre platform witnessed a significant increase, with a total of 750 new user registrations and 321 course completions during this period.



Wool4School

Wool4School Australia is proud to confirm amazing sponsors and prizes for the 2024 competition. Please find below the key sponsors and their prizes:

• BERNINA Australia

A sewing machine (all categories) or overlocker (for senior, aspiring and teacher only)

• EMU Australia

A pair of Platinum Stinger Minis for the mid-designer winner and all 5 x lucky draw winners

• Whitehouse Institute of Design

A 50% Scholarship to Brisbane, Melbourne or Sydney campus

• Assembly Label

PROCESS INNOVATION & EDUCATION EXTENSION

A week-long internship with the iconic Australian brand

$100 voucher for each category winner.

Trade extension

D-house hosted Talk Series:

A monthly talk dedicated to innovation, technologies, sustainability, fashion and materials by addressing the challenges and opportunities that the sector offers us on a daily basis.

- Tuesday, 16th January 2024
- Topic: "New Technologies and Fashion. A successful dialogue"
- 3D printing and its many applications, the future of this technology and the main potentials.
- Total attendees: 30

Panel:

- Valentina De Pietri Head Of Collection Development Coperni Paris
- Alessandra Bambini Senior Sales Manager Italy, Fashion Stratasys
- Maria Clelia Scuteri Jewel Designer & Founder
- Eva Monachini D-house Coordinator

SUSTAINABILITY

MAKE THE LABEL COUNT

PEF CONSULTATION – CALL TO ACTION!

- Public consultation on the Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear is now underway. Widespread feedback to the European Commission is vital by 28th April 2024 to avoid PEFCR misleading consumers and harming natural fibre industries.
- The current PEFCR advantages products made from synthetic fibres and disadvantages products made from wool. In addition to almost entirely overlooking crucial aspects such as microplastics pollution from synthetics and the inherent biodegradability of wool, and flawed assumptions on durability that favour synthetics, the PEFCR compares different life stages of natural and synthetic fibres – significantly advantaging the latter.
- We're calling on everyone working in the wool industry to participate in this public consultation. MTLC has prepared draft responses that can be submitted (please see attached). Every submission counts as they get officially recorded in the consultation ledger and necessitate a public response by the PEF Technical Secretariat or European Commission.
- Your submission will help ensure a fairer assessment of wool.

Here's how you can help

1. **Read our short summary** (Appendix 1) that explains more about the public consultation and what the key issues are with the PEFCR.
2. **Prepare your PEF feedback excel sheet:** Make the Label Count has drafted a response in the officially required excel sheet (Appendix 2). You can use this to familiarise yourself with the issues and use the responses in your submission. Make sure you add your name and organisation where indicated.
3. **Access the public consultation** here: https://tinyurl.com/5ctjwcj3 If you already have an ECAS account, please login via this link. If you have not yet registered on the ECAS platform, please follow the attached instructions on how to create an ECAS account using this link: https://tinyurl.com/4z64hkd7.
4. **Submit your feedback**: submit your excel sheet by the **28 April 2024 deadline**.
5. **Please make sure to submit your feedback in the template format**. ("3.0 A&F_RTC_PublicConsultation_CompanyName.xlsx") **provided to ensure it will be considered**. Use the 'drag & drop or browse for files' window to upload your file. Please also add the label consultation when uploading.

Make the Label Count Campaign aims

- The aim of the Make the Label Count (MTLC) campaign is to work with the European Commission to improve EU's Product Environmental Footprint (PEF) methodology before it is introduced in the EU market for apparel and footwear so that wool does not receive a bad rating based on incomplete information.
- To date we have had 65 meetings with EU Institutional stakeholders, including European Commission, Members of European Parliament (MEPs), Member State Permanent Representatives (PermReps) etc. Email outreach to 303 EU institutional stakeholders.
- There are currently 33 members (and counting) who have joined wool in this advocacy to form the MTLC coalition from cotton, silk, hemp, alpaca, mohair, manufacturers, environmental NGOs and more. We are currently onboarding more cotton organisations to join the coalition.

EU LEGISLATION UPDATE

- **Empowering Consumers for the Green Transition Directive:** takes measures against greenwashing practices by banning generic environmental claims such as biodegradable, carbon neutral, eco, green, natural, and similar that lack substantiation. The Directive entered into force on 26 March 2024. Member States have 24 months to transpose it into national legislation.

SUSTAINABILITY

- **Ecodesign for Sustainable Products Regulation (ESPR):** sets requirements for how products should be made to improve circularity. All textile garments will need to comply with minimum ecodesign requirements, which will be set out by the Commission in delegated acts. The Directive notes that the ecodesign requirements should be consistent with PEF. The agreement still needs to be formally approved by Parliament and the Council.
- **Substantiating Green Claims Directive:** sets rules for the substantiation and verification of environmental claims made on products. The European Parliament adopted its position on the directive, emphasising the shortcomings of the PEF methodology and its lack of criteria regarding textiles' microplastics release. This reflects MTLC's advocacy position. The Council of the EU now needs to negotiate its position on the file with the final position not expected to be negotiated until after the EU election in June 2024.
- **Waste Framework Directive:** tackles overproduction and overconsumption. The proposal introduces an EU-wide extended producer responsibility (EPR) scheme, which will require those who place products into the EU market to bear the costs of separate collection, sorting, and recycling. MTLC's MEP engagement was successful in including amendments to ensure eco-modulation of fees will be based on weight and quantity to ensure heavier wool products are not disadvantaged. The European Commission will be setting the criteria for textiles in delegated acts. The European Parliament adopted is position. The Council of the EU now needs to negotiate its position on the file, after which co-legislators will start interinstitutional negotiations in the next legislative mandate.
- **Textile Labelling Regulation:** The Commission plans to update the textile labelling Regulation to incorporate criteria for both physical and digital labelling of textiles. These will encompass sustainability and circularity elements, as laid out in the ESPR. The new regulation draft is expected for Q4 of 2024.

SHEEP SUSTAINABILITY FRAMEWORK

- AWI and MLA launched the 2024 National Sheep Producer survey in March to seek valuable feedback regarding on-farm practices. The survey results help support reporting in the Sheep Sustainability Framework and bring awareness to the positive changes by industry in animal husbandry, environmental and farm management. The next Sheep Sustainability Framework annual report is due out August 2024.

EXTENSION NETWORKS

While many wool-growing regions of Australia received significant late and out-of-season rainfall, many regions remain patchy and most that haven't received follow up falls are relatively dry now. A lot of growers are reporting still feeling like they're 'playing catch up' as harvest ran late and a lot of sheep jobs that are traditionally undertaken in the cropping lulls were compressed into a shorter period of time. Most in the mixed farming zones are now in full preparation for sowing, with many having sprayed multiple times over summer to keep weeds suppressed in their fallow country.

Reports of fly and worm activity have been widespread and are ongoing, particularly in areas that experienced a relatively mild and humid summer. Barber's pole worm has been rampant in a large swathe of southern Australia, which has been the case for the past four summers in some parts, due to seasonal conditions.

Most growers are reporting their sheep are in good condition but a lot of areas are starting to dry off now and have pregnant ewes or are joining so are supplementary feeding. Pregnancy scanning results reported to date have ranged from average to excellent.

Face-to-face AWI Extension Networks' Producer Advisory Panel (PAP_ Meetings in SA, WA and Queensland took place in February and March. Feedback from the recent PAP Meetings shows growers continue to be concerned about commodity prices (mostly in the red meat and crossbred wool prices, with growing concern recorded in Merino wool prices) and high input costs. Other key, widespread concerns include grower attrition from the industry and access to labour (both shearing and general labour, though access to quality shearing teams has improved in a lot of areas).

Face-to-face AWI Extension Network PAP Meetings in Victoria, NSW and Tasmania will be completed before June 2024.

AWI rebranded its investment in the six AWI Grower Extension Networks on 12 March 2024. The purpose for this was to have a unified brand across Australia which more clearly showed woolgrowers where their levy is being invested. The rebranding project included new logos, websites, enhanced social media presence, and updated banners and uniforms for the contractors who work on each of these investments.

The new names of the AWI Extension Networks are as follows:

- AWI Extension NSW (formerly AWI Sheep Connect NSW) www.awiextensionnsw.com
- AWI Extension QLD (continuing to invest through Leading Sheep with Queensland Government) www.awiextensionqld.com
- AWI Extension SA (formerly AWI Sheep Connect SA) www.awiextensionsa.com
- AWI Extension TAS (formerly AWI Sheep Connect Tasmania) www.awiextensiontas.com
- AWI Extension VIC (continuing to invest through BESTWOOL/BESTLAMB with Agriculture Victoria) www.awiextensionvic.com
- AWI Extension WA (formerly The Sheep's Back – name changed in September 2023) www.awiextensionwa.com

Grower feedback to this change has been largely positive across the nation, with many saying it's a much clearer name and 'does what it says on the box'.

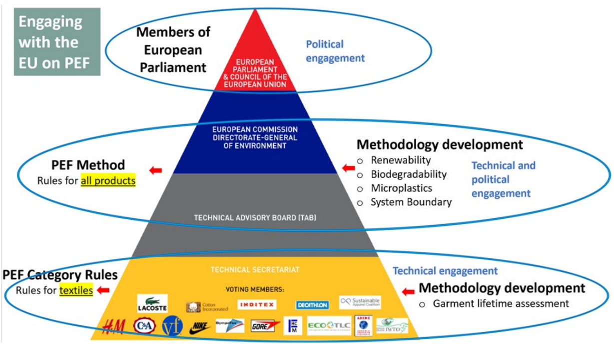
FIBRE SCIENCE

AWI AOP 2023/2024 Investment Focus: Contribute to the development of textile environmental rating schemes to level the playing field across fibre types and enable accounting for wool's environmental credentials.

EU PEF (Product Environmental Footprint)

Over the last four years IWTO has been engaging with the EU to influence and improve PEF methodology to help create a level playing field for wool products in this proposed textile rating scheme.

The EU is a large organisation and we have found it necessary to engage at each level in their decision-making structure



Yellow level – PEF Technical Secretariat (TS)

The TS's life has extended from the planned 2.5 years to an expected 4.5 years, largely due to a delay in the provision of PEF-compliant datasets by the EU's LCA provider.

The TS has now largely completed its active phase, with the most substantive methodology changes to the PEF Category Rules document made in December.

Whilst moderate methodology improvements were achieved for wool in the areas of reparability, circularity and microplastics, considerable flaws remain that that will result in wool scoring poorly relative to other fibre types.

The best opportunity to raise awareness of the flaws is in the upcoming (and final) public consultation on PEF which has now opened and closes on 28 April.

Widespread wool industry support along the supply chain is needed to have the necessary effect, together with efforts from other members of the Make The Label Count campaign.

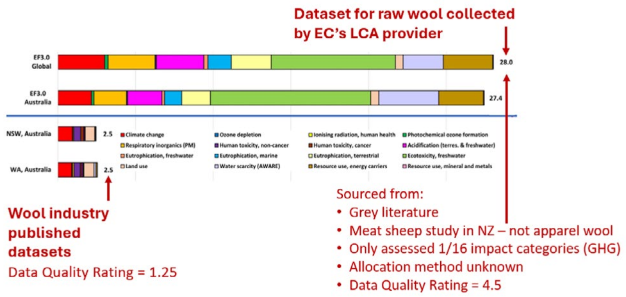
ii. Blue Level - Directorate-General of the Environment (DG ENV)

The PEF process is overseen by the EC Directorate-General of the Environment which in turn relies on the Technical Advisory Board (TAB) to review the validity of any methods presented.

Our focus has been on replacing the desperately poor-quality datasets for wool collected by Commission's LCA provider (Data Quality Rating 4.5) with the much higher quality (and lower impact) datasets prepared by the wool industry (Data Quality Rating 1.25) – as per the image below.

The raw wool and wool processing LCA datasets have now passed the EU's data quality requirements for inclusion in PEF and have been submitted to the European Commission.

We have strongly recommended the EC replace their existing poor-quality datasets with these new datasets due to them being higher quality and more representative of global wool.



FIBRE SCIENCE

Red level – European Parliament & Council of the European Union

Engaging with Members of the European parliament through the MTLC campaign is continuing to be a productive pathway in influencing decision-makers and policy development.

AWI AOP 2023/2024 Investment Focus: Generate evidence to support industry's eco-credential claims.

Highlighting wool's circularity – Extended Producer Responsibility (EPR)

EPR legislation is coming in Europe and other domains to tax brands for the end-of-life costs of the clothing they sell. Capitalising on wool's long history of reuse and recycling, a video has been completed highlighting the advantages of wool to brands and the broader market.

Parallel work is underway via IWTO to reduce the risk of harmful chemical use by the wool industry which could result in significant reputational harm to wool.

Stewarding the landscape

Evidencing the wool industry as proactive, forward-looking and carefully stewarding the environment is important to maximising market interest in wool. In combination, the two projects below are helping build the business case for woolgrowers to improve on-farm natural capital and identify the most effective pathways to do so.

- Farming for the Future – is providing the evidence and practical support that growers require to incorporate natural capital, including biodiversity, as part of the foundation of a profitable farming business. A new project has commenced identifying the most credible and cost-effective metrics for reporting on-farm environmental performance. Engagement will shortly commence with woolgrowers as well as third-party certification bodies, who we are encouraging to adopt these metrics.
- Carbon Storage Partnership – aims to identify the most effective techniques and interventions growers across Australia can take to reduce greenhouse gas emissions, sequester carbon in soil and vegetation, and build biodiversity in their environment. A new project has now commenced, exploring more deeply the impacts of rotational grazing and increased biodiversity.

AWI AOP 2023/2024 Investment Focus: Generate knowledge of wool's carbon account to inform delivery of Australia's climate goals as well as the Sheep Sustainability Framework.

Pathways to low emission sheep

The research paper detailing sheep industry's GHG emissions from 2005-2023 has been temporarily deferred, while awaiting the government's revised modelling to improve estimation of the Australian flock size.

The second paper focussing on identifying the most effective potential future carbon reductions in the Australian sheep industry is now being prioritised.

AWI AOP 2023/2024 Investment Focus: Develop a robust evidence base of wool's health and wellbeing attributes to enable ongoing promotion to the growing wellness and sustainability market.

Evidencing next to skin Merino garments as therapeutic to eczema

The study at Northwestern Hospital in Chicago has continues to progress more slowly than planned, since COVID, and in light of budget limitations, this project has now been terminated. Analysis of the results to date will proceed but the smaller participation rate will reduce the study's ability to demonstrate a statistically significant benefit from wool.

This decision brings this successful theme of research to an end.

Generating a test protocol to measure garment breathability in dynamic sports

This project is providing a robust evidence-base for promoting wool's advantages to the active outdoor market over coming years.

Development of a fabric-based test method to objectively demonstrate wool's ability to keep wearers more comfortable and expend less energy in stop-go sports such as cycling and rock climbing is well progressed and three supporting journal papers have been published. The final step includes a short research study to finalise the proposed test method changes and disseminate the new knowledge to the active outdoor market. This includes liaising with wool-focussed brands to gain their help to encourage Standards organisations to incorporate this variant to the protocol in the ISO 1109 test method.

WOOL HARVESTING

TRAINING DAYS / CATEGORIES

This current 23/24 financial year AWI has trained & up skilled 3286 participants. With a total of 1506 training days to deliver this training.

In Shed shearer training	1444
In Shed wool handler training	454
Industry workshop	189
Novice schools	347
Improver Shearing	143
Wool Handling workshops	14
TOTAL	**2531**

Exposure to the wool harvesting Industry with high school workshops and career expos with the following students.

High school workshops	562
Expo career days	193
TOTAL	**755**

In Shed Shearing - On the job training in the workplace whilst shearing in a working team

In Shed Wool Handling - On the job training in the workplace whilst working as a wool handler

Industry Workshops - Existing workers trained in a practical one day workshop for all wool harvesting staff.

Improver Shearing - Full time learner shearers that require more than in shed on the job training.

Wool Handling Work - New entrant workers in a 2–3-day workshop in a working shed as extra staff.

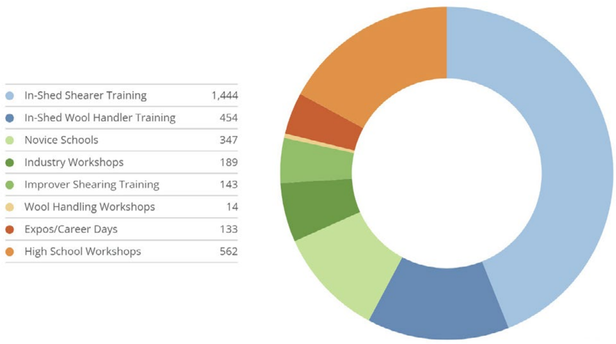
Novice Courses - New entrant participants in a 5-day structured and consistent novice course.

High School Work - Introducing school students to the skills needed to work as a wool handler, providing a pathway for these students, in school holidays and post school to enter the industry.

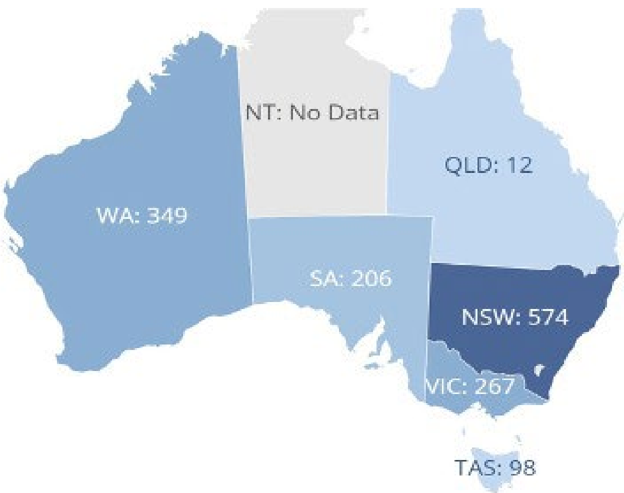
Expo / Career Days - Exposure to the wool harvesting roles and opportunities in industry for students to provide a pathway and highlight the wool harvesting industry.

PARTICIPANTS TRAINED 23/24 FINANCIAL YEAR (YEAR-TO-DATE)

- **TOTAL PARTICIPNATS TRAINED** with **3286** working in industry & upskilled year-to-date.
- **EXISTING WORKERS TRAINED** with **2003** existing workers trained in the workplace, either with an AWI in shed training day or at an AWI industry workshop and/or an AWI improver course.
- **NEW ENTRANTS TRAINED** with **588** participants trained at either an AWI novice school, or at an AWI wool handling workshop or trained as a learner new entrant with an AWI in shed training day in wool handling with on-the-job training.
- **HIGH SCHOOL EXPOSURE** with **755** participants trained are school students, with AWI offering one day high school practical workshops & attending expos/career days.

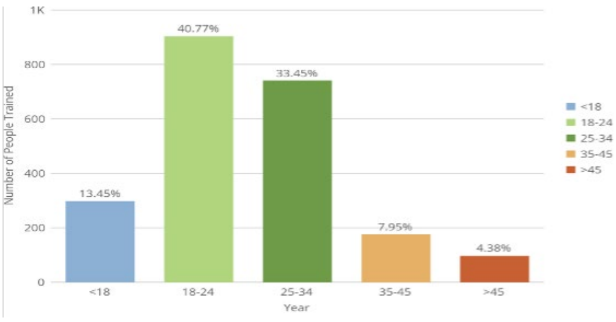


1506 training days delivered by AWI 23/24 Year to date.



WOOL HARVESTING

PERCENTAGE OF PARTICPANTS TRAINED BY AGE GROUP



AWI Wool Harvesting Ambassadors

With 17 Wool Harvesting Ambassadors here in New Zealand, competing in the Golden Shears, we have had a lot of success with most making the semifinals in their respective grades. All have showcased the wool industry as a positive and valuable pathway for a career as either a shearer or as a wool handler, they are all to be congratulated and thank you to other sponsors that made this exchange a great success. These include

EWIT, Heiniger, West Coast Wools, Fox & Lillie, IO Merino, SCCA Training, WASIA & AWI.

2024 GOLDEN SHEARS highlights include:

- Karl Schoff (QLD) 2nd in Novice Shearing Final
- Grace Schoff (QLD), Charlie Baker (NSW) & Will McGuire (NSW) all Junior Shearing semi finalists
- Marites Woods (NSW), Emily Spencer (TAS) & Joseph Knoll (SA) all intermediate shearing semi finalists
- Ethan Harder (WA) Top 30 Open Shearing
- Cally Spangler 4th in the Junior Wool Handling Final
- Alexander Schoff (QLD) in the Australian Team & competed in the Trans-Tasman Test

A very impressive group of ambassadors that have improved as either shearers or wool handling from this program, providing a structured and professional approach to learning new skills needed in wool harvesting. It is good to showcase the younger talent we have in Australia and the ambassador program is making some noise around New Zealand in a positive way.

AWI Ambassador Video

https://www.dropbox.com/scl/fi/icfhupsexw0zdd653aifn/WA_AMBASSSADOR_LAUNCH_2023_02.mp4?rlkey=izdihpny0d43bf32pih6f1ryb&dl=0

RETENTION RATES

The following is a breakdown of current retention rates (those participants working full time in sheds) by state, covering those trained by AWI funded training as current year to date 2023/24 Financial year period to-date.

STATE	Trained	Retained	Retention Rate
NSW	948	806	85%
SA	399	375	94%
VIC	581	534	92%
WA	478	387	81%
TAS	158	142	90%
QLD	44	32	73%

SA, VIC & TAS are States that have Novice courses paid for by their respective state governments therefore the AWI investment is in post novice level training and therefore a higher retention rate of participants trained. NSW has approximately 35% contribution by the state government, with QLD & WA has No contribution for training at this level.

EMERGING MARKETS

BANGLADESH, PERU AND MEXICO

Business Development Manager contractors in each market started in March with extensive onboarding programs which includes learning all facets of the company and supply chain, understanding of the Emerging Markets Strategy and outcomes and training in TWC learning tools such as the Wool Appreciation Course.

First tasks are to build an industry network which focuses on textile associations, spinners, knitwear manufacturers and buying/sourcing offices and look for opportunities for trade marketing within market to carry out a trade marketing campaign.

VIETNAM

After a successful tour of Vietnam with Japanese trading houses we have continued supported Vietnamese suppliers to start selling products and working on product development and innovations with the trading houses.

TWC will for the first time have a stand at SaigonTex trade show in April, sharing a space with Da Lat Worsted Spinning (Süedwolle Group).

TRACEABILITY UPDATE

AUSTRALIAN WOOL TRACEABILITY HUB

The Australian Wool Traceability Hub, the collaborative initiative involving key industry organisations to establish a traceability data source for the Australian wool industry, has been progressing according to project plans.

The AWTH Working Group has been actively working on the project, with regular meetings and updates. Recently, the group has been reviewing the first three requirements for the AWTH are now in the later stages of development, including:

- Commercial Traceability
- EAD response, and
- Dashboards for Grower, Seller, and Buyer

An industry communications plan for 2024 will be rolled out soon. The plan outlines the foundations for the Australian Wool Traceability Hub, including its purpose, key features, governance, the roles of participating entities, and how individuals can be involved.

An industry soft launch is planned to be provided at IWTO Congress in April 2024, with registrations for the platform opening afterward. It is expected that data will be flowing through to the platform for the selling season starting in July. To assist in the funding of the AWTH, a grant application has been submitted to the Federal Government.

CHINA REPORT

China continues to reign supreme as the most important market for Australia's wool industry, with Australian wool clip exports to China accounting for 82.5% in the 12 months of the July 2022 to June 2023 season. According to China Wool Textile Association's latest report, Australia's wool import in China increased by 52% over the period of January and February 2024 compared to the same period of last year. This is in tandem with the macro view of fast-improving bilateral relations between China and Australia, as well as renewed, and consistent, demands in the domestic market.

From a micro perspective, Woolmark China is observing a local market and industry brimming with enthusiasm, collaboration and opportunity. For the second year running, Woolmark China hosted a three-day event that encompassed presenting the latest Merino wool trends, market insights, innovative products and design sessions at the Wool Education Centre (WEC) at Donghua University (DHU), Shanghai, China. Taking place during the same period as SpinExpo and Intertextile, a total of 128 guests from fashion brands and supply chain partners attended the 12 forums and 3 workshops, an attendance increase of over 20% compared to the inaugural event during Fall/Winter 2023.

In addition to Woolmark China employees as speakers and workshop hosts, industry experts from the Beijing Institute of Fashion Technology (BIFT), Santoni (machinery) and Indidye (natural dyeing) were also invited as speakers, thereby reinforcing the WEC's position as an invaluable wool hub for tertiary education, industry partners, designers and brands alike to congregate and connect with one another.

Many key meetings also took place over the course of those three days, with brand partners and supply chain partners all seeking further assistance from Woolmark China and expressing a keen interest in value chain opportunities, ranging from wool textile sourcing and The Wool Lab viewings, to applying for the Woolmark licensing program and collaborating on marketing projects. It is worth noting that many sourcing requests focused on more innovative and functional forms of the Merino fabric, such as four-way stretch, naturally dyed, wool denim, seamless and high-strength weaves. This is an encouraging sign of the trend towards high performance fabrics and environmentally friendly processes, and signals more opportunities in the sportswear, activewear and casualwear space, fortified with a sustainability slant.

A prime example of the above is the upcoming strategic alliance between heritage brand Nanjiren and Woolmark licensee, Jiangsu Lugang Science & Technology Co., LTD. The Nanjiren brand is undergoing restructuring and is looking to inject fresh life into its brand as well as diversify its product offering, which was previously rooted in thermal underwear. For the year ahead, off the back of CNY40 billion in sales revenue, the brand has laid out ambitious plans to develop a series of cutting-edge wool products, and have decided to partner with Lugang, in a bid to better consolidate and quality control their supply chain. The plan is to open over 30 physical stores across China for 2024, with wool usage estimates at 2 million metres of wool knit fabrics and 500 tons of knitted yarn.

Lugang, with over 30 years of establishment, is well-versed in providing top quality yarn for clients across the globe, from retail behemoths Uniqlo, Muji and H&M, to local heavyweights MM, Goelia and Peacebird. Working closely with Lugang – which imports 95% of its wool tops from Australia – will be pivotal in bringing Nanjiren's projected growth to fruition. Considering these facts and figures, as well as Nanjiren's significant influence and resonance with Chinese consumers, Woolmark China has decided to present the brand with an official Woolmark brand licensee status. A modest strategic cooperation signing ceremony will take place in Sydney to commemorate the partnership, with AWI/Woolmark acting as the signing witness, as well as awarding the licensee certification onsite. The event will be attended by representatives from both parties, alongside a small media delegation, illustrating the importance placed on such a partnership.

All in all, amidst a slow yet steady recovery, China is emerging as a victor and sole contender when it comes to driving demand of and consciously consuming Australian wool. It is no longer a straightforward question of when the appetite will arise, but rather, how, the desire will evolve.

Prepared by: Jeff Ma, China Head of Country

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