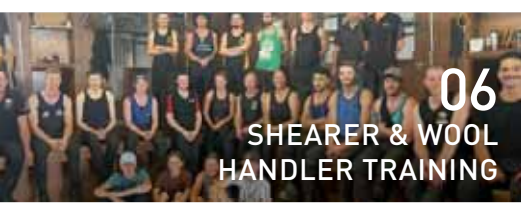


Beyond the bale

ISSUE 99 JUNE 2024
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INVESTING IN R&D AND MARKETING OF AUSTRALIAN WOOL



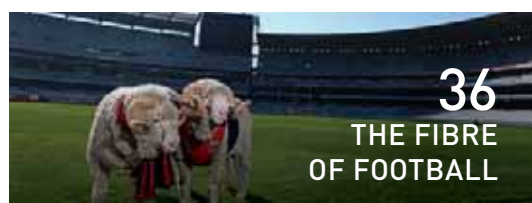
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THE FIBRE
OF FOOTBALL

Beyond the bale

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Beyond the Bale is published by Australian Wool Innovation Ltd (AWI), a company funded by Australian woolgrowers and the Australian Government.

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



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AWI WORKING FOR WOOLGROWERS



John Roberts
Chief Executive Officer
Australian Wool Innovation

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.

AWI will next month embark on the last financial year that the company will operate under its current three-year Strategic Plan for 2022/23 to 2024/25. In this coming year, the level of expenditure by AWI on R&D and marketing will be reduced compared to previous years. This is a result of not only AWI's continuing low revenue but also, importantly, the diminishing financial reserves of the company. Going forward, AWI is in a financial situation in which it must largely rely only on what it receives in revenue each year.

AWI already operates in a lean and efficient manner, so just like any business with a reduced income, the company has had to make tough choices about what projects to invest in. While AWI will continue to invest in those areas that woolgrowers have told us are most important to them, our limited financial resources will negatively impact the company's ability to invest in projects to address all the challenges and opportunities faced by the Australian wool industry.

Looking ahead 12 months, AWI's next three-year Strategic Plan, effective from 1 July 2025, will be framed by the result of the WoolPoll 2024 vote, which is being held later this year, as well as the broader financial challenges that the company faces.

This is one of the more critical moments in the company's history and woolgrowers have some big decisions to make about their collective funding of wool industry R&D and marketing. I encourage woolgrowers to talk to the other stakeholders in their industry – their families, farm managers, wool brokers and staff, and especially the younger stakeholders whose future is most at stake – and get their views on what level of investment in R&D and marketing they want in the industry.

I believe that, just like an individual wool-growing business has to invest to increase efficiency, profits and growth, the industry collectively also has to invest in research and innovation to succeed. For instance, in order to attract and retain wool harvesting staff in the industry, AWI invests woolgrower funds in shearer and wool handler training and technology-based opportunities such as biological wool harvesting. Other key on-farm R&D areas in which AWI invests include projects to increase sheep health, welfare and reproductive efficiency, and projects to ensure environmental sustainability in the face of an increasingly variable climate. AWI also delivers practical training programs through its extension networks to increase growers' adoption of best practice on-farm management.

In a commodity-based industry such as ours, I believe it is especially vital that there is collective investment in the marketing of Australian wool. AWI and its subsidiary The Woolmark Company work on behalf of woolgrowers in key markets across the world to support the use of Australian wool by processors, manufacturers and brands. As well as promoting the fibre's premium qualities, the company is increasingly focussed on showcasing the eco-credentials of the fibre to take advantage of the mega-trend towards sustainability, while also defending the fibre against adverse regulatory proposals such as in the European Union's Product Environmental Footprint (PEF) project. The company also explores new and diverse product and processing opportunities for wool.

The WoolPoll 2024 vote will take place from 20 September until 1 November. In early September, every woolgrower who has paid \$100 or more in wool levy over the past three years will receive voting papers and a Voter Information Memorandum containing details about how AWI proposes to invest levy funds at each of several levy rate options. The voting process will be very quick and easy.

It's important to note that voting at WoolPoll to continue the wool levy at the current 1.5% level doesn't mean there will be the same amount of dollar investment in R&D and marketing by AWI as there has been during the past five years. This is because AWI no longer has the amount of financial reserves to call on that it once did. In terms of dollars invested by AWI, a 1.5% vote would therefore not be a vote for the status quo.

Given the considerable opportunities and threats now facing the industry, I encourage all woolgrowers – whether you're a specialist Merino woolgrower or a mixed farmer – over the next few months to carefully consider what level of investment you want the industry to make and then vote at WoolPoll 2024 when the time comes later this year. Remember, WoolPoll happens every three years, so the next vote following this year's WoolPoll will not be until 2027. WoolPoll 2024 is a critical time to have your say.

I acknowledge that woolgrowers are experiencing a range of particular challenges at the moment, including subdued global economic conditions and geopolitical instability that is adversely affecting wool prices and production costs, and unseasonably dry weather in some regions is impacting feed availability and stocking levels. However, despite these and other challenges, I am aware of many woolgrowers who still have a healthy optimism about the future of the wool industry and are investing in their businesses. I too share that optimism and look forward to AWI providing a valuable contribution to that future.

INVESTING IN INDUSTRY R&D AND MARKETING

WoolPoll
2024

WoolPoll will be held later this year. It is woolgrowers' opportunity to have their say on the level of collective investment in research, development (R&D) and marketing to take advantage of the opportunities and address the threats faced by the Australian wool industry.

Established by the Australian Government in 2001, Australian Wool Innovation (AWI) is the research, development (R&D) and marketing organisation for the Australian wool industry. AWI invests along the global supply chain for Australian wool – from woolgrowers through to retailers.

AWI's marketing arm is The Woolmark Company, so woolgrowers own one of the world's most recognised and trusted fashion logos which is celebrating its 60th birthday this year.

AWI investments are funded primarily through a wool levy paid by Australian woolgrowers.

of your voting entitlement in August. If you believe your voting entitlement has been miscalculated, you will be able to contact a voter assistance hotline; the cut-off date for this will be 6 September.

When is WoolPoll?

September: Eligible wool levy payers will receive their voting papers and a Voter Information Memorandum containing details about how AWI proposes to invest the levy funds at each of the levy rate options and AWI's recommendation.

Monday 20 September: Voting opens. Voting will be by mail, fax or online – as per the instructions that will be sent with the voting papers.

Friday 1 November: Voting closes at 5pm (AEDT).

Friday 15 November: The WoolPoll result will be announced at AWI's Annual General Meeting. The levy rate takes effect from 1 July 2025.

More information:
www.wool.com/woolpoll



"WoolPoll 2024 is extremely important for all woolgrowers as it gives them the opportunity to have their say on how much levy they pay to AWI to invest in research, development and marketing."

Rich Keniry, WoolPoll Panel Chair

What is WoolPoll?

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

At WoolPoll, eligible woolgrowers are asked to consider up to five levy rate options. They can vote for one or more levy rates in order of preference.

The levy rate that receives the highest number of votes will be paid by all woolgrowers for the next three years (2025/26 – 2027/28). The levy rate takes effect from 1 July 2025.

Why vote?

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

Who can vote?

If you have paid \$100 or more in wool levies over the previous three financial years, you will be eligible to vote in WoolPoll. For each \$100 of levy paid, you are entitled to one vote.

Your voting entitlement is determined from records of your wool sales. You will be notified

CHECK your contact details are up to date

You are advised to check now that your contact details held by AWI are correct and up to date. This will ensure you receive your WoolPoll voting entitlement letter, voting papers and Voter Information Memorandum.

"Voting this year will be available online and via mail, so I encourage everyone to make sure their contact details are correct and up to date so you receive the Voter Information Memorandum which will outline what the different levy rates will allow AWI to work on."

Rich Keniry, WoolPoll Panel Chair

You should inform AWI if your contact details (name, postal address, email address or phone number) are incorrect or have changed. You can contact AWI on (02) 8295 3100 or feedback@wool.com.

Alternatively, if you have received this *Beyond the Bale* magazine as a paper copy in the post, you can also use the 'Update contact details form' on the address sheet that accompanied the magazine.

Wool levy payers are advised to inform AWI about any contact detail changes ASAP, to ensure that correspondence about WoolPoll is sent to the correct email and/or postal address.



The WoolPoll vote later this year enables Australian woolgrowers to determine the wool levy percentage rate paid to AWI for the industry's R&D and marketing. To ensure you receive your WoolPoll-related correspondence and voting papers, inform AWI now if your contact details need updating.

2024 WoolPoll Panel

Under the *Wool Services Privatisation (Wool Levy Poll) Regulations 2003*, AWI must form an industry panel, known as the WoolPoll Panel, comprising eligible levy payer representatives. The role of the WoolPoll Panel is to confirm that the draft forms and the process for conducting the WoolPoll ballot have been examined and assessed as appropriate. Its role is not to tell woolgrowers what rate to support.

The members of the 2024 WoolPoll Panel are:

- Rich Keniry (Cumnock, NSW), Panel Chair

- Alexander Lewis (Redesdale, Vic)
- Marcus Sounness (Amelup, WA)
- Dr Luke Rapley (Ross, Tas)
- Tom Moxham (Nyngan, NSW)
- Chris Kemp (Merriwa, NSW)
- Di Martin (Baratta, SA)
- David Young (Bookham, NSW)
- Jo Harris, Department of Agriculture, Fisheries and Forestry (DAFF)
- Neil Jackson, AWI Board member.

The membership of the WoolPoll Panel was selected by the WoolPoll Panel Selection

Committee, from 11 nominations provided by Woolgrower Industry Consultation Panel (WICP) representatives. The WoolPoll Panel Selection Committee comprised Nick Turner, WICP Independent Chair; Paul Maisey, DAFF; and Neil Jackson, AWI Board Director.

The composition of the WoolPoll Panel was selected to be reflective of the diversity of levy payers. Importance was placed on the nominee's production experience and industry engagement, as well as ensuring representation across varying wool sectors, diverse production systems and different geographic areas.

At the WoolPoll Panel's first meeting, on 23 February, the Panel elected Rich Keniry as the Panel Chair.



The wool levies paid by Australian woolgrowers fund R&D and marketing projects that help ensure the sustainability of wool-growing enterprises.

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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, build the capacity and longevity of existing staff, and increase returns to woolgrowers through improved clip preparation practices.



Harden, NSW



Bothwell, Tas



Marrabel, SA



Pandurra, SA



Hamilton, Vic



Balmoral, Vic

AWI regularly 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.

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

Pictured above is a small selection of AWI-funded courses recently run across the country.

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.

More information: 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.

NEW GEAR TO ATTRACT AND RETAIN LEARNER SHEARERS

In an initiative launched in 2021 to help attract and retain new shearers in the Australian wool industry, AWI is presenting learner shearers with a handpiece and other shearing gear, subject to the shearer passing certain criteria.

The AWI project enables new and committed entrants in the shearing industry to be equipped with effective tools for the trade, at no cost to the shearer.

The gear in the 'AWI Learner Shearer Toolbox' comprises a Heiniger handpiece with cutter and comb, hollow grinding check stone and pendulum, oil can and comb brush, needle and cotton, as well as a singlet and gear bag to store it all.

"The AWI toolbox provides an extra incentive for budding shearers to build up their skills and stay in the industry," said AWI National Manager, Wool Harvesting Training & Careers Development, Craig French.

"The gear is not a simple handout; the shearer must first pass certain strict criteria, consistent across all states. But, if successful, they will own the tools at the end of their training in 6-12 months' time."

In a similar initiative, the South Australian Wool Training Advisory Group (WoolTAG) helps support and retain new participants in the wool harvesting industry through the provision of WoolTAG Tool Box vouchers to new trainees. The vouchers enable them to purchase equipment to use as they begin their career in the industry and build their speed and earning potential. The vouchers are valued up to \$500 for shearers and \$200 for wool handlers.



Seth Green and Robert Schramell holding their AWI Learner Shearer Toolboxes, after in-shed coaching with trainer Paul Oster and woolgrower Steve Eckert at Langhorne Creek, South Australia.



Benjamin Rolph and Ashley Raymond holding their WoolTag vouchers, with trainer Rick Chilcott at an improver school at 'Teetulpa' at Yunta, South Australia. The vouchers are provided courtesy of AWI, Heiniger, Livestock SA, Willoway Pastoral, and Bruce Nutt and family.



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YOUNG GUN SHARES HER ENTHUSIASM FOR WOOL

Growing up on her parents' farm near Parkes in NSW, Marites (Tess) Woods always had a keen interest in wool harvesting. Now 20 years old, Tess is a talented young shearer whose enthusiasm for the industry very much continues. Through AWI's Wool Ambassadors Program, she gets to share this passion to help attract and retain staff in the industry.



Tess competing at the 2024 Yass Show Sports Shear in March. PHOTO: Rachael Ward

Tess grew up in Parkes on the farm of her parents, Lynn and Barry Woods, who run a sheep, cattle and cropping business. Her father Barry, who did some wool handling and shearing in his youth and continues to class his own wool, taught Tess all the shed skills that he knew.

"Over the years, I became obsessed with learning all about wool harvesting. Every time our contractor came to do our shearing I would try and convince my dad to let me stay home from school to work in our shed," Tess said.

"By the time I was in Year 12 at school, the same contractor who had done our shearing for years offered me a wool handling job which I took straight away and did for a couple of months, during which I also learnt from the crew some more about shearing.

"Originally, I was planning to become a wool classer like my dad, but there was just something that had me mesmerised by shearing. Dad had suggested that I was too small to be a shearer, so I was determined to prove him wrong!"

Training proves its worth

After graduating from Parkes High School in December 2021, Tess went straight to Dubbo TAFE to do a week-long novice shearing course with trainer Wayne Hosie.

"This was where I learnt all my basic skills – from shearing pattern, foot position and grinding, to lifestyle tips, mentality and mindset skills, and the outline of respect for wool harvesting. I came back from the school and showed my new skills to my boss, and then in a couple of weeks I got my own stand," Tess said.

"Once I got my stand, I wanted to continue learning so I had a few in-shed training sessions with trainers Elliot Learmonth, Mike Poirer and Grant Lester. These trainers helped me tweak little things to assist me with the diverse patterns and techniques required for the different sheep that were in my area and the different competition styles.

"Elliot Learmonth has been a huge mentor to me. He introduced me to my first sport and speed shear and unlocked a whole new side of shearing, the sport side.

"I've always loved sports and been a very competitive person. I like that you get to present your talent and skills and always learn something different at each competition. I aim to move up the grades to opens and go to the Nationals."

About five months into her shearing career, Tess attended an improver shearing school at Dubbo TAFE.

"I always keep my eyes peeled for new opportunities, schools and courses because you never know what type of new information or tips you could adopt to improve your skills and benefit your career in the long run," she said.

Last year, Tess attended a shearing gear and health course in Crookwell with trainers Josh Clayton, Klynt Correll and Rocky Wegner.

"This course covered things such as healthy habits and advice, grinding techniques and extensive knowledge on comb work. I absorbed a lot through that course and started to take health and comb work more seriously which has definitely had a huge positive effect on my everyday life."

Shearing as a career

Tess got her stand with local contractor Drew Calton of Calton Shearing in February 2022 and works around the Parkes region. She recommends shearing to anyone that enjoys highly physical jobs and working in team environments.

"Shearing provides plenty of positives, including a good income, teamwork, personal skills development, great fitness, and a diversity in the range of work environments, such as different breeds of sheep, places, sheds and people," she said.

"I love the competitive nature of shearing whether it's racing your mate in the shed, sport shears or speed shears. The teamwork involved in shearing is something I respect, as well as the objective to do a neat job, quick, and then get to the next shed.

"Shearing as an occupation suits my lifestyle. I like having five days' work with optional weekend work, which shearing provides very easily. I also like to travel and have a few holidays throughout the year and shearing is flexible and makes holiday planning stress free.

"I am choosing to build my future on shearing as a career. My goals include going to as many shows as I can, win a speed shear or a sport shear, represent Australia and do as much as I can for the industry such as become a trainer or support in any way."

With a focus on using the best shearing technique as well as strength, Tess is amongst the increasing number of young women taking up a career in shearing.



Tess competing in the senior shearing final at the 2023 New Zealand Merino Shears in October, in which she was runner-up. PHOTO: NZ Merino Shearing

"I have worked with a few women and I believe it is becoming more common for women to choose shearing as an occupation. Shearing is very physically and mentally challenging. I respect all the women who have joined the industry and it makes me happy to work alongside them and be a part of the diversity in the shearing culture."

NSW wool harvesting ambassador



Tess pictured with students from her old school, Parkes High School, at last year's NSW School Merino Wether Challenge in Dubbo, at which the NSW wool harvesting ambassadors did the shearing.

In recognition of her talent and potential to excel, great work ethic and good conduct in shearing sheds, Tess was last year appointed as a NSW representative in AWI's new Wool Ambassadors Program. There are shearing and wool handling ambassadors in all states across the country, each tasked with promoting the wool harvesting industry. The Program is another AWI initiative to attract and retain wool harvesting staff.

"I am extremely grateful that AWI chose me to be a young representative. I've always had a passion for wool harvesting. I was an enthusiastic wool handler before I started shearing and was invested into the technical aspects of wool classing," she said.

"I enjoy learning and taking on board as much as I can about every part of the industry, from pressing, penning, wool handling, classing, wool broking and of course shearing. It's fantastic how wool comes from the paddocks and onto our skin as clothing or beneath our feet as carpet. As an ambassador, I feel fortunate that I get to share this passion and influence others about the industry.

"I hope to achieve as much personal growth to be able to eventually teach and provide some guidance for the next generation of young shearers, and I want to support the wool handlers by encouraging more competitions and having more training opportunities. I also want to be involved in the competitions and help improve and support Sports Shear NSW."

Trans-Tasman training



Tess in New Zealand in January with other Australian wool ambassadors refining their skills of how best to shear crossbred and composite sheep.

Earlier this year, Tess and other wool ambassadors from across Australia visited New Zealand on an extended trip, beginning with a two-day induction workshop hosted by New Zealand's Elite Wool Industry Training, with a focus on harvesting wool from crossbred and composite sheep.

This is part of an exchange program between Australian shearer and wool handler training providers (including AWI) and their New Zealand counterparts to ensure consistency of shearing and wool handler training across the Tasman and to help alleviate the shortage of shearers and wool handlers.

"It was an unreal experience and I absorbed a lot of information which has boosted my confidence in crossbred shearing," Tess said.

After their induction, the ambassadors were disbursed to six approved contractors in the South Island to get further experience during paid work.

The group attended another two-day training workshop at the end of February, prior to the Golden Shears shearing and wool handling championship in Masterton at which they had the opportunity to compete. Tess competed well and reached the semi-final of the intermediate shearing competition.

QUALIFICATIONS UNDER REVIEW: HAVE YOUR SAY

A Skills Insight project, with AWI and industry input, is reviewing the national qualifications for wool harvesting so that they better reflect industry requirements. You are invited to have your say.



As part of Skills Insight's initial consultation activities, the project team visited a wool-growing property in Ballan, Victoria

Skills Insight is working with industry, training providers and other interested stakeholders on a project to improve skills and training related to shearing, wool handling and wool classing. Skills Insight is the Australian Government-funded Jobs and Skills Council (JSC) for the agribusiness, fibre, furnishing, food, animal and environment care industries.

The project is reviewing six national qualifications and 34 units of competency that support the skills of shearers, wool handlers and wool classers so that they better reflect current work methods and skill needs. The review is focussed on technological advances, work health and safety, animal behaviour and handling techniques within the sector.

This project will also address any duplication issues across units, by deleting or merging unused or non-current units that are not relevant to industry.

A technical committee has been established to guide the initial development of draft units, skill sets and qualifications. While six qualifications and 34 units have been identified for review in this project, the technical committee has identified opportunities to develop a new wool harvesting skill set to support introduction to the shearing and wool sector. They have also identified the need to incorporate the skills associated for working with traceability and integrity schemes and to strengthen health and wellbeing in existing units of competency.

Webinars and consultation workshops at locations in every state across Australia took place during May to collect feedback.

The draft qualifications, skill sets and units are available on the Skills Insight website for broad stakeholder consultation and feedback until the end of June.

More information: Access the draft documents and contact details for the project manager at www.skillsinsight.com.au/project/shearing-and-wool-classing

PROTECTING YOUR LIVELIHOOD

KNOW YOUR MICRON - ANYTIME, ANYWHERE

Adelaide-based technology company Woven Optics has developed a hand-held device that will provide woolgrowers with a reliable tool to measure wool micron on-farm in real-time.



The Woven Optics team of Tom Ashby (North Ashrose Merino) and co-founders Vicky Alexandrou and Ben Pullen at the recent IWTO Congress in Adelaide.



Ben Pullen of Woven Optics demonstrating the portable fibre micron testing device to IWTO Congress delegates on-farm at Collinsville Stud Merinos.

Woven Optics co-founders Ben Pullen and Vicky Alexandrou, together with their team, have been working on the hand-held micron testing device for the past six years. Talking to farmers and other stakeholders within the wool industry, it became clear to them that on-farm micron testing was costly, time consuming and often impractical. Leveraging their expertise in medical science, Vicky and Ben set about building technology to change this – and established Woven Optics.

In 2018 the team was joined by Tom Ashby of North Ashrose Merino, who continues his family's more than 100-year tradition in wool as a Merino stud breeder based a few hours north of Adelaide. Together, the team grew the idea before partnering with Heiniger Australia to develop the technology from concept to reality.

How to operate the device

The device can be used on or off the animal and with almost any length of raw wool. The technology was developed for Australian farms, with no need for cloud or off-site connectivity during use and a rechargeable battery delivering at least eight hours of use before needing to be charged.

To operate the device, the user first scans the eID tag of the sheep using the machine's inbuilt eID scanner before using the machine's hand-held unit to capture an image of the animal's wool staple. Within 10 seconds the device automatically generates a micron measurement, as well as associated statistics such as standard deviation, coefficient of variation and comfort factor, all linked to the sheep's eID number. This allows the data to

be downloaded for record keeping or further analysis by the farmer.

Depending on the grower's needs, they can take multiple measurements from the same staple, or from different locations on the animal – as a predictor of the average micron on the mid-side, or a test of the difference in micron between areas on the same animal. It all depends on what the user wants to know and can be tailored accordingly.

Results presented at IWTO Congress

At the recent International Wool Textile Organisation Congress (IWTO) held in Adelaide, Woven Optics presented its results of testing calibrated wool top samples with the device.

The device was tested using industry standard methods, to identify how it performed alongside existing testing technologies, such as the Laserscan.

As outlined in a scientific paper submitted to the Congress, the Woven Optics device achieved more than 99 per cent accuracy against the gold standard samples, easily meeting the IWTO-0 standards and hitting greater than 99 per cent accuracy when compared to a Laserscan machine.

The Woven Optics team is building on this breakthrough by leveraging their science backgrounds to run on-farm studies nationally to further validate the performance of the device using greasy wool.

Having proven the fundamentals, woolgrowers will soon have access to this exciting new

portable tool as the Heiniger team takes the lead on the next phase of on-farm field tests in the second half of this year.

Benefits of the device

Some of the key benefits of this exciting technology identified by growers include reducing flock feeding costs by making quicker decisions on which animals to keep or cull, the ability to test their whole flock with less labour costs and even having greater confidence in buying rams if a buyer uses the device on sale day. There is also the ability to grade sheep into micron classes for shearing, or testing wool at shearing in real time to assist the classer to more accurately class the wool clip in terms of fibre diameter.

Furthermore, the ability to track micron fibre diameter data on individual animals over their lifetime will allow producers to better manage flock genetics.

"It's taken us longer than we initially expected, but the key message we received from growers and industry was to ensure the technology is ready for market, easy to use and accurate, before launching," said Woven Optics Managing Director, Dr Pullen.

"We are now in the last phase of in-field testing with our distribution partner, Heiniger Australia, to ensure we have everything right and we can deliver a game-changing product for the sheep industry."

If you would like to know more or get involved in the Woven Optics Early Adopter program, please visit their website for more information.

More information: www.wovenoetics.com

TAP INTO BEST PRACTICE PARASITE MANAGEMENT

In a landscape where effective parasite management is crucial, ParaBoss has proved to be a pivotal ally for woolgrowers seeking sustainable solutions.



The ParaBoss websites provide detailed management information and regional programs to assist woolgrowers across Australia manage worms, lice and flies on their properties.

A free **Boss Bulletin** e-newsletter from ParaBoss provides monthly updates and articles (subscribe at www.paraboss.com.au/register). There is a **ParaBoss Facebook** channel at www.facebook.com/paraboss.com.au.

The ParaBoss team hosts **webinars** specifically tailored to address the parasite challenges faced by producers – see www.paraboss.com.au/webinars-videos-podcasts. The webinars are recorded and are available to view on demand. Recent topics have included 'Proactive management for sustainable parasite control' and 'Effective flystrike management in sheep'.

In a new move, beginning last year, ParaBoss hosted its pilot series of **face-to-face workshops** for producers on the ground, focusing on worm and other parasite management. The custom-designed one-day workshops aim to empower producers by improving on-farm productivity and enhancing overall skills and confidence in internal and external parasite management.

As well as containing information for sheep producers, ParaBoss contains information for cattle and goat producers. The ParaBoss suite also includes TickBoss which contains information for cattle producers about ticks.



The ParaBoss extension team at Naracoorte in South Australia in March delivering the fourth pilot WormBoss worm management in sheep workshop.

ParaBoss provides woolgrowers with relevant and timely communications, a producer-centric website and interactive advisors, as well as a national network of extension activities and accredited advisors.

Collectively, the **three Boss sheep websites** – WormBoss, LiceBoss and FlyBoss – promote best practice for the management of sheep parasites at the farm level. ParaBoss provides access to the three websites at www.paraboss.com.au. The websites have been developed by a community of veterinary experts and parasitologists from across Australia and supported by the sheep industry.

Find a ParaBoss-certified advisor and WEC provider

Certified Sheep Advisor ✓

ParaBoss Certified Sheep Advisors: These advisors have completed the ParaBoss Certificate in Sheep Parasite Management and therefore have the skills and knowledge to apply and provide advice about effective, integrated parasite management of sheep. The advisors are listed on the ParaBoss website at www.paraboss.com.au/find-an-advisor

Certified WEC Provider ✓

ParaBoss Certified WEC Providers: These providers have demonstrated the accuracy and precision of their worm egg count (WEC) services through the ParaBoss WEC QA program, so producers can be certain their worm control decisions are based on accurate results. A list of providers is available on the ParaBoss website at www.paraboss.com.au/find-an-advisor

More information: www.paraboss.com.au



AUSTRALIAN WOOL TRACEABILITY HUB

The Australian Wool Traceability Hub is a new and essential tool for the Australian wool industry to get ahead of the curve when it comes to Australian wool's Emergency Animal Disease (EAD) response plan as well as end-to-end commercial traceability from farm to first stage processor.

An industry owned and led initiative, the Australian Wool Traceability Hub (the Hub) is scheduled to be officially launched by mid-year.

The Hub is being developed with whole of industry cooperation and input from Australian wool industry organisations: Wool Industries Australia (WIA), Australian Wool Testing Authority (AWTA), Australian Wool Innovation (AWI), Australian Wool Exchange (AWEX), National Council of Wool Selling Brokers of Australia (NCWSBA), Australian Council of Wool Exporters and Processors (ACWEP) and WoolProducers Australia (WPA).

The nation's wool testing authority AWTA will manage and operate the Hub on behalf of the industry, overseen by WIA.

The purpose of the Hub is to strengthen the confidence in, reliability and efficiency of the transfer of key information within the Australian wool supply chain from woolgrowers to first stage processors.

Brands and consumers are increasingly interested in the provenance of products, and traceability is now an essential part of producing a raw material to be consumed by a market worldwide. By collecting key information along the wool supply chain, the Hub aims to achieve traceability in the Australian wool industry and ultimately be able to help respond to provenance requests from the market. The platform will be available to woolgrowers, sellers and buyers who wish to use it to manage wool traceability.



Traceability is now an essential part of producing a raw material to be consumed by a market worldwide.

The Hub will initially focus on helping the industry respond to potential biosecurity threats. A vital part of managing any EAD outbreak is being able to track and locate any wool which may have come from contaminated sites, ranging from the farm to the wool store, wool dump or shipping containers and all the way to processing locations.

It is anticipated that more than 90% of bales will be able to be traced using the Hub by July 2025.

Property Identification Code

The woolgrower's Property Identification Code (PIC) will be an essential part of the Hub. A PIC is an eight-character alphanumeric code allocated by state/territory authorities to livestock producing properties. If you own sheep, you require a PIC.

The Hub will coordinate PICs, matching Test Certificates, Combinations and Delivery orders, enabling a rapid and thorough response and quarantine should an outbreak happen, with the goal of re-establishing trade in the shortest possible timeframe.

Brokers and merchants started voluntarily transmitting PIC details to AWTA via its Electronic Data Interchange (EDI) system for central storage approximately 18 months ago. The proportion of lots with a declared PIC grew very quickly initially, but has recently plateaued. As at March 2024 the national PIC adoption rate is about 50%, which is significantly lower than what is required to adequately deal with an EAD event. In some states this figure is still critically low.

Moving forward, the goal is to receive a 100% adoption rate which will enable a rapid response to help minimise the inevitable trade disruptions that would follow in the event of an EAD incursion.

Woolgrowers are strongly encouraged to make sure they include their PIC on their Wool Classer's Specification and National Wool Declaration.

"The PIC is the starting point for the whole traceability pathway: where was this wool produced? The wool industry is competing for market share, and to be a viable competitor in that market, we must confidently be able to start the whole process by proudly declaring

The space for the property's eight-character Property Identification Code (PIC) on the Wool Classer's Specification and National Wool Declaration.

where the wool came from. The PIC does that," said President of the NCWSBA, Rowan Woods.

"For the Australian Wool Traceability Hub to be a success, it needs all producers to advise their PIC. There is a lot to gain, and even more to lose. This is no longer an option. This should be a requirement."

Check your PIC details are up to date: Over the years, many landholders might not have updated their contact details for their PIC, such as for changes in business partner, parents no longer farming and farm succession. Some addresses still show as RSD which means mail may not be delivered and the PIC could be disbanded without the landholder knowing. Many people have not added mobile phone details or email addresses to their PIC information.

You can update your contact details or apply for a PIC by contacting your state authority or Department of Agriculture.

It is important to note that sellers' (brokers/ woolgrowers) information is protected under the existing AWTA data sharing agreement. Sellers can opt in or out of sharing test information (which includes PIC) to the Hub, and once launched, can also request a data purge from the Hub at any time.

More information: www.awth.com.au

R&D INTO BACTERIA THAT INFECTS SHEEP BLOWFLY

PHOTO: Scott O'Neill

New AWI-funded research has demonstrated proof of concept that the Australian sheep blowfly *Lucilia cuprina* can be transfected with a natural bacterium, *Wolbachia*, which could potentially spread itself through and suppress sheep blowfly populations. However, infection rates in the recently completed project were variable and relatively low, and a long-term project would be needed to establish infection success.



An AWI-funded study has demonstrated a proof of concept for a new approach to flystrike control that directly targets Australian sheep blowfly populations.

Wolbachia are maternally transmitted bacteria that infect a wide range of insect species. The bacteria have many and varied effects on the host's biology, such as reduced life span, mortality of eggs, slowed larval development, and reduced overall fitness.

Australia has been a world leader in *Wolbachia* research, exemplified by the much-publicised success during the past decade of using *Wolbachia* in mosquitoes to suppress dengue in northern Queensland and overseas.

Most *Wolbachia* research to date has focused on medical and horticultural pests. However, in a recent AWI-funded project, researchers from the University of Melbourne and University of Queensland investigated the potential for *Wolbachia* to be used in the control of the Australian sheep blowfly *Lucilia cuprina*.

"This approach to flystrike control directly targets sheep blowfly populations rather than relying on sheep producers treating individual animals such as by insecticide application which is not always sufficiently effective and can be expensive and labour intensive," said AWI Program Manager, Animal Wellbeing and Industry Resilience, Carolina Diaz.

Lucilia fly population survey

The first stage of the project involved researching whether the sheep blowfly population in Australia already has any *Wolbachia* infection. Approximately 500 *Lucilia* flies were collected from more than 70 populations across Australia, mainly from sheep farms, and were analysed by the researchers for the presence of *Wolbachia* using molecular diagnostic screening.

The screening found no occurrences of *Wolbachia* in the collected samples, with researchers therefore concluding that the bacteria is absent or extremely rare in Australian *Lucilia* species. This result indicates that the release of factory reared *Lucilia cuprina* cultures transfected with *Wolbachia* are unlikely to encounter wild populations that already carry related strains.

Transinfection of Wolbachia

The second stage of the project aimed to successfully develop *Lucilia cuprina* lines infected with suitable *Wolbachia* strains.

The *Wolbachia* strains were obtained from the ovaries of *Drosophila melanogaster* fruit flies, *Aedes* mosquitoes and fly parasitoids (*Spalangia* sp.) and then microinjected into the (1) embryos, (2) pupae, or (3) adult female flies of *Lucilia cuprina*.

The results of the study clearly showed that *Lucilia cuprina* can be successfully transfected with *Wolbachia* and that the bacterium can be subsequently transmitted through three generations of the flies. This was regardless of whether the initial transinfection was by microinjection of embryos, pupae or adult flies.

Importantly however, the numbers of positive tests for *Wolbachia* in the selection lines were low and infection was lost completely in a number of instances.

Although this particular project did not develop stable and sustaining, infected lines of *Lucilia cuprina*, the researchers noted that instances of transinfection in other insect species have often had similar results in the early stages of research before reaching a successful conclusion.

"The proof of concept that *Wolbachia* can infect *Lucilia cuprina* tissues and can be transferred between generations in this species are significant outcomes from this project, but the need to develop sustainably infected blowflies remains," Carolina said.

"From the results to date and the researchers experience with work in other insect species, this might be an achievable objective. However, a future project to this end would require significant resources."

BREEDING FOR NATURAL FLYSTRIKE RESISTANT MERINOS - PUBLICATIONS

AWI makes available publications about breeding for flystrike resistant Merinos on its website at www.wool.com/flystrikelatest/#breeding

Here is a selection of the available publications:



PLANNING FOR A NON-MULESED MERINO ENTERPRISE

(March 2018)

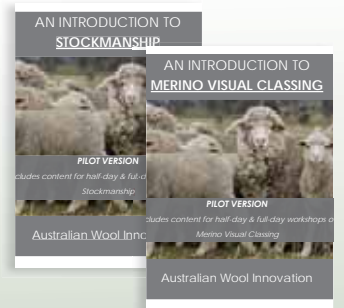
This 16-page report outlines the key learnings from a number of wool-growing enterprises, from a diverse range of environments and Merino types, that have moved to a non-mulesed enterprise.



VISUAL SHEEP SCORES – PRODUCER VERSION

(Newly released Version 4 - May 2024)

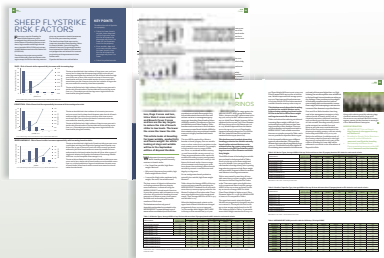
This 92-page pocket guide for commercial and stud breeders provides a standardised framework for assessing and scoring visual sheep traits, including new udder depth, teat size, teat placement and updated maternal behaviour, lambing ease and feet scores.



AN INTRODUCTION TO MERINO VISUAL CLASSING & AN INTRODUCTION TO STOCKMANSHIP

(2015)

Two workshop packages comprising theory and practical activities that aim to develop participants' core skills.



SHEEP FLYSTRIKE RISK FACTORS

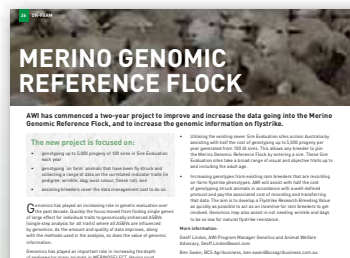
(March 2020)

BREEDING NATURALLY BREECH RESISTANT MERINOS

PART 1 – June 2020
PART 2 – September 2020

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

Plus an update in the June 2021 edition.

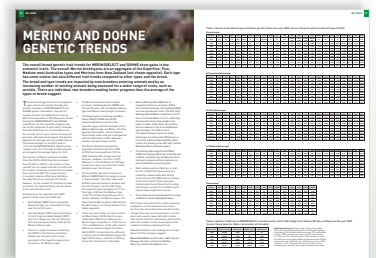


MERINO GENOMIC REFERENCE FLOCK

(June 2023)

One-page article from *Beyond the Bale*.

If you are a ram breeder and would like to be involved in the project (phenotyping and genotyping for flystrike), contact Ben Swain at ben.swain@bcsagribusiness.com.au



MERINO AND DOHNE GENETIC TRENDS

(Sept 2023)

Two-page article from *Beyond the Bale*.

The overall breed genetic trait trends for MERINOSELECT and DOHNE show gains in key economic traits..

WHY, WHEN & HOW TO SUPPLEMENT FOR SUCCESS

In a recent AWI Extension NSW webinar, livestock nutritionist and producer Nicole Logg from NSW provided woolgrowers with advice on the effective use of supplements to improve sheep productivity.

Nicole Logg is a qualified livestock nutritionist with more than 20 years' experience. Her passion lies in product innovation and using scientific research to improve feed rations for achieving optimal health and performance of livestock.

As well as running her livestock consulting business, The Livestock Coach, Nicole and her husband run a mixed farming operation near West Wyalong in the northern Riverina of NSW producing wool, prime lambs and cattle. She is also an accredited trainer for the AWI co-owned and supported Lifetime Ewe Management course and AWI's Winning With Weaners workshops.

Nicole was awarded a 2023 Nuffield Scholarship supported by AWI to research how sheep producers can strategically use supplements to not only provide energy and protein, but also enable their sheep to utilise the nutrients in their feed more effectively, thereby improving productivity.

In February, just prior to heading off to Italy, France and Spain for a month to visit some sheep properties as part of her Nuffield study tour, Nicole presented an hour-long 'Supplements for Success' webinar hosted by AWI Extension NSW.

Although the webinar focussed on macro minerals, trace minerals and vitamins, Nicole also advised woolgrowers of the primary importance of ensuring their livestock's requirements for energy and protein are met.

Why supplement?

"Remember Liebig's law of the minimum, which states that growth is not dictated by the total resources available, but by the scarcest resource."

Nicole Logg

Supplements can be used to firstly, improve the reproductive success of ewe and rams, and secondly optimise the performance of their lambs going forward.

(1) Reproductive health

The aim with reproduction is to improve conception rates, hold onto the pregnancies, get a viable lamb or hopefully twins on the ground, and make sure they survive and thrive.

"**Rams** could really do with a bit more zinc, selenium and manganese to help with sperm development and viability, ideally about seven weeks before joining," Nicole said.

"For **ewes**, calcium is really important throughout pregnancy, lambing and lactation. It helps provide bone health, muscle and nerve transmission. However, **magnesium** and **vitamin D** are also important because they help the calcium be absorbed from the intestine.

"**Manganese** and **selenium** help the ewe express oestrus through joining time which can lead to better conception rates and also helps with embryo survival.

"**Magnesium** is really important for the ewe's muscle contractions along with lots of enzymes in her body.

"**Phosphorus** and **copper** can also support fertility in the ewe, although in NSW we don't tend to see the big phosphorous type deficiencies that they do further north into Queensland, for example.

"The other important one is **cobalt** which is required for the rumen microbes to make vitamin B12 that is involved with energy metabolism for lambing and lactation.

"For **lambs**, right when they're born, **selenium** and **iodine** are important because they support the thyroid hormones and brown fat metabolism which is a little turbo heater that keeps the lambs warm for a little while so they can get up and go and get a drink."

Lambing is an obvious stress on the ewe. However, other physical stresses on the body, such as mustering and yarding, and environmental stresses, such as heat stress, can impact reproductive health throughout the year.

"All those little stresses can add up, so look at some antioxidants, **selenium** and **vitamin E**, to help at these times," Nicole said.

While sheep have a requirement for potassium, it is particularly high in green pasture and far in excess of what ewes actually need. Whilst you can't reduce the potassium available from the pasture, you can balance it out by ensuring they have enough **sodium** available through supplying salt, especially at lambing time.

(2) Growing & finishing stock

Supplements can also be used to optimise the performance of ewe and wether lambs that producers want to grow and finish.

"For replacement ewes, we obviously want you to try and enhance their fertility moving forward, and in wetter years focus on hoof health because we need to make sure they can get around and eat," Nicole said.

Nicole said there are some minerals that are particularly important for **optimum wool quality**.

"One is **sulphur**, which helps the crimp in wool, and incidentally also helps with hoof health. **Copper** is also important for crimp, but you need to be careful because copper can be toxic to sheep," she said.

"**Zinc** is really good for wool follicle development and skin health, and **selenium** has also been shown to help with the growth of wool."

For **meat production**, Nicole said there needs to be a balance of **calcium** and **phosphorus**, as well as **zinc**, **selenium** and **copper** for a good frame and muscle development.

"A good appetite is also important to keep them eating and growing, which is stimulated by a healthy rumen environment but certainly B12 (derived from **cobalt**) will help do that, and **zinc** and **sodium** (salt) are important too," she added.

When to supplement

When supplementing, it's important to take into account the season and what the plants in the pasture are doing.

"As plants grow, they move from their vegetative state – small plants with small leaves – into their reproductive phase. As they get bigger their root system develops and that really helps them increase their nutrient absorption out of the soil," Nicole said.

"Improved soil health and biodiversity of plant species will reduce mineral deficiencies. A long-term approach is to work with your agronomist to get your soils up to scratch and try and get lots of different plant species in there to help reduce mineral and vitamin deficiencies."

“The better we can support growth for a range of plants, the more nutrients and minerals the sheep will be able to utilise.”

Nicole Logg

“We have to look at what green feed is available or whether there is just dry feed. Green feed will supply vitamins A and E. A nice healthy rumen will provide a whole range of B vitamins and vitamins K and C, so that’s why you never see extra requirements for those vitamins.

“As feed dries off, they lose their vitamin A and E content. Sheep can store vitamins A and E for 3–4 months so deficiencies only kick in through the end of summer or during a drought.

“During cloudy winters, there can be a lack of sun to activate the vitamin D in the skin. In wetter winters, we always see more deficiencies due to more leeching out of the soil. Also if you’ve got a good supply of feed coming on, the sheep are actually ingesting less soil that can be a source of minerals for them.

“Due to Australia’s old soils, selenium tends to be deficient year-round for areas with more than 450 mm rain and on granite/coastal/sandy and legume-based pastures.”



Supplements can not only improve reproductive success, but can also help lambs thrive going forward.

How to supplement

Long term options (that last more than 12 months):

Options include **fertiliser application** to improve your pasture growth or grazing crops; **foliar application** in which the leaves are directly sprayed; adding supplements to **water troughs**; **rumen bolus**, which is like a large pill that sits in the rumen and slowly releases selenium and/or cobalt for three years; and **selenium injections** which will last up to 18 months.

Medium term options:

There are **multi-mineral injectables** that last for 3-4 months that are suitable for a season or coming up to lambing or pre-joining or weaning time. There are also **injectables that last 6-8 weeks**, such as a B12 injection for spring at lamb marking or pre-lambing; or vitamins A and E injections in late summer or drought. Although injectables require a bit of labour, at least you know that all the animals receive the right dose.

Short term options:

There are a lot of **commercially formulated mineral licks and blocks** available. Nicole advises that if you are feeding blocks and licks, check how many sheep you are giving them to and how long they are taking to eat it, and work back to see if they are consuming the required amount. Another of Nicole’s tips is to first put out some loose salt, so the sheep can get their sodium craving out of the way and only then give them the commercially formulated licks or blocks. This ensures the sheep don’t get three or four times the dose of the minerals when initially trying to satisfy their sodium needs.

Other short-term options include **home mixing minerals or blocks** such as limestone (for calcium), magnesium, and dolomite (for calcium and magnesium); **free choice minerals** in which the sheep self-select from a range of say 20 minerals (although Nicole cautions there has not been much research on this); and some **vaccines and drenches** contain selenium and vitamin B12 which last for about two weeks.

More information: The webinar recording is available on: www.awiextensionnsw.com/webinars



Livestock nutritionist and producer Nicole Logg from West Wyalong, NSW.

Table 1: Sample seasonal plan based on plant growth

<p>SUMMER – dry feed</p> <ul style="list-style-type: none"> • More soil ingested. Cobalt and copper tend to be OK • Low vitamins A and E • Lack protein ▶ Protein based supplement for lamb growth and ram preparation for joining 	<p>AUTUMN – short green feed</p> <ul style="list-style-type: none"> • High moisture, rapid movement through gut • Plant roots young and developing, low uptake of minerals • Sheep rely on liver storage, cobalt depletes quickly ▶ Start supplementing minerals for pre-joining or lambing/lactation and lamb growth
<p>WINTER – green feed, slow growth</p> <ul style="list-style-type: none"> • Potentially lack vitamin D • Less nutrient absorption due to slowed growth ▶ Supplement grazing crops or grass-based pasture due to high potassium, low magnesium issues. ▶ Use calcium, magnesium, sodium (and iodine) based product. • Late winter, roots develop for improved uptake 	<p>SPRING</p> <ul style="list-style-type: none"> • Warmer soils, improved root growth • Legume growth • Low B12 (cobalt) due to less soil ingested ▶ Supplement lambing/lactating ewes, they will pass any deficiencies onto lambs

Note: Plans are dependent on location (e.g. high/low rainfall and season length), soil type and plant type (e.g. legumes vs grasses vs forbs/herbs).

To identify deficiencies, there are several options for testing.

“Obviously soil testing is a big one; so what have our plants actually got to utilise, what might be locked up and what can we access? If you use bore water, then water testing can also be useful because bores can be a source of minerals. Other less common options include plant tissue testing, blood testing and a liver biopsy,” Nicole said.

“Obtain professional advice, such as from an agronomist for your soil and pasture, or an LLS or supplier vet that you can work with through your local rural retailer.”

HOW WELL DOES EARLY PERFORMANCE PREDICT LIFETIME PERFORMANCE OF MLP SIREs?

This article examines the effectiveness of current selection indexes in predicting lifetime sire performance at a young age and explores potential improvements to enhance their prediction accuracy.



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

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

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

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

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

One of the key focusses of the MLP project is to generate data that can be used to identify ways to better predict lifetime performance from an early age. Selection at an early age has many benefits from both a cost management and genetic progress perspective, but are they accurate enough? Industry utilises a range of tools to support breeding and selection decisions to make them as accurate as possible, so how can we best utilise them? In this article, we examine the effectiveness of current selection indexes in predicting lifetime sire performance at a young age and explore potential improvements to enhance their prediction accuracy.

This investigation features the Balmoral MLP site and explores the change in predicted sire performance over time using the Merino Production (MP), and the Merino Production Plus (MP+) indexes. Note that this study is exploring estimates of sire lifetime productivity via assessment of their progeny, which differs to looking at individual animal estimates of lifetime productivity. The use of the 2015 and 2016 drops allows us to investigate the impact of the age of assessment and volume of data on the prediction of sire lifetime performance. The indexes were generated from an analysis that included only the Balmoral data and is referred to as a 'within flock' analysis. Each drop was also analysed separately to each other, and without the inclusion of any genomic information.

In the project, the 2015 drop was shorn seven times and joined five times, while the 2016 drop was shorn six times and joined four times. To allow both drops to be directly compared, the 2015 drop's sixth adult assessment and fifth reproduction event is not included in this investigation.

Through the life of the MLP project the analysis has undergone enhancements, including a change to the reproduction analysis. To allow the sire performance from each age stage to be directly compared, the Balmoral data was completely re-run using the latest analysis process as of February 2024.

Looking at the data that made up the estimates of sire performance from the 2015 and 2016 drops (Tables 1 and 2 below), there were three key differences between the two drops:

1. The 2016 drop had on average 20 more progeny per sire evaluated.
2. There was more data available from wethers in the 2016 drop (shorn twice).
3. The 25 sires in each drop were genetically different (except for the four link sires that are used in both drops).

At each year of assessment, animals had wool, growth, carcase, and worm egg count recorded (where possible), and from two years of age (Adult 2) reproduction performance was assessed.

Table 1: 2015 Drop data recorded – with an average of 25 ewe and 24 wether progeny per sire

	Post Weaning (P) - 8 months	Yearling (Y)	Hogget (H)	Adult 2 (A2)	Adult 3 (A3)	Adult 4 (A4)	Adult 5 (A5)
Ewe	Wool + Weight		Wool + Weight				
Wether	Weight	Wool + Weight					

Table 2: 2016 Drop data recorded – with an average of 32 ewe and 36 wether progeny per sire

	Post Weaning (P) - 9 months	Yearling (Y)	Hogget (H)	Adult 2 (A2)	Adult 3 (A3)	Adult 4 (A4)	Adult 5 (A5)
Ewe	Wool + Weight		Wool + Weight				
Wether	Weight	Wool + Weight		Wool + Weight			

In charts 1 to 4 we compare the 25 sires within flock index values progressively at each age stage, with the final or lifetime index value. We need to recognise that the MLP dataset is extensive, and has a highly diverse mix of sires, so the results shown are the best-case data recording and will exhibit a range in performance that you might not expect on your farm. Artificial insemination was used to generate the progeny of these sires, which means that age differences between animals in the flock are minimal, unlike differences seen in studs with a 5-week joining. It's good to also keep in mind that generally breeding value and index users are using across flock breeding values (ASBVs) which often have the benefit of information from genomics at early ages.

The charts show sire index performance at each age stage using the following abbreviations:

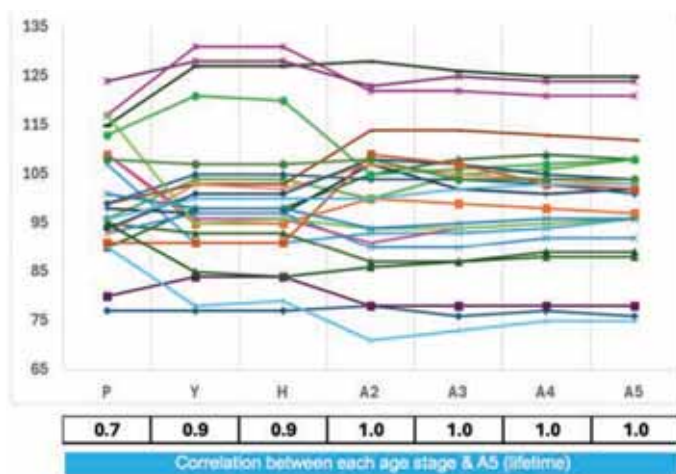
P=Post Weaning, H=Hogget, A2=Adult2 (first adult shearing at approximately 2 years of age), A3=Adult3 (second adult shearing at approximately 3 years of age), A4=Adult4 (third adult shearing at approximately 4 years of age) and A5=Adult5 (fourth adult shearing at approximately 5 years of age).

Each age stage uses all the data prior to that point to generate the index performance, so for example the A2 value combines data from Y, H and A2, etc. We are reporting correlations between sires' indexes at the different age stages and their lifetime performance (all data from P to A5). Correlations describe the level of relationship between attributes and range from 0 to 1, where 0 is no relationship and 1 is a perfect relationship.

Chart 1 shows the MP within flock index values for sires used in the 2015 drop, comparing each age of assessment. The MP index is a balance of wool and surplus sheep sales with approximately equal emphasis on improvement in fleece weight and micron **but does not include staple strength or reproduction**.

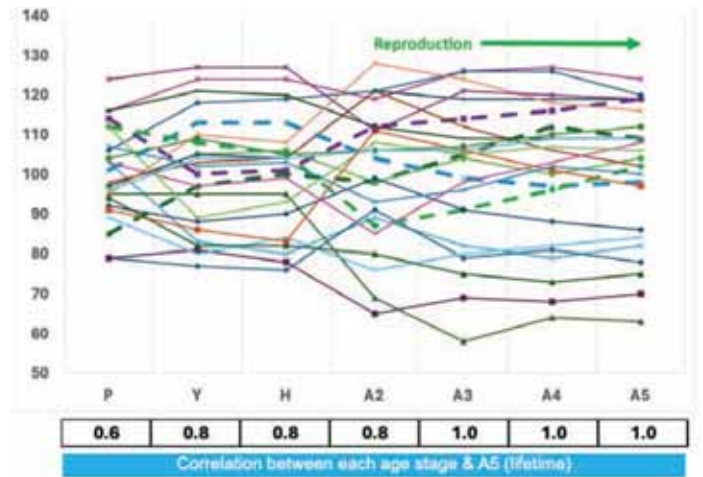
When the sire's performance was assessed based on the 2015 drop ewe progeny at Post Weaning age stage (P) there was a 0.7 correlation with the sires' final MP lifetime index at A5. But once we added the wether data at yearling stage, the index correlation was 0.9 with the sires lifetime index value. It's not until one adult fleece measurement (the third fleece assessment) was recorded at A2 that the index value predicted lifetime performance accurately (correlation of 1). We see some reranking in sire performance from P through to A2, but from A2 onwards, the sire's rankings change minimally (i.e. the sire lines on the chart are less likely to cross).

Chart 1: Balmoral 2015 sires Merino Production index values by age stage



If we bring reproduction and staple strength measurements into the index calculation, which is the case in the MP+ index, we see a slightly different story (Chart 2). Like the MP index, sires on the MP+ index showed some reranking early on, but the introduction of one reproduction event had a significant effect on the sire rankings. The relationship between the age stage and the lifetime value was high at 0.8 but not 1 until we had two reproduction records at A3.

Chart 2: Balmoral 2015 sires Merino Production + index values by age stage (includes reproduction and staple strength)



Looking at the 2016 drop, we see a similar story, although stronger correlations were estimated (chart 3 and 4). The extra progeny per sire and the increased number of assessments on the wethers helped with the predictions.

Chart 3: Balmoral 2016 sires Merino Production index values by age stage

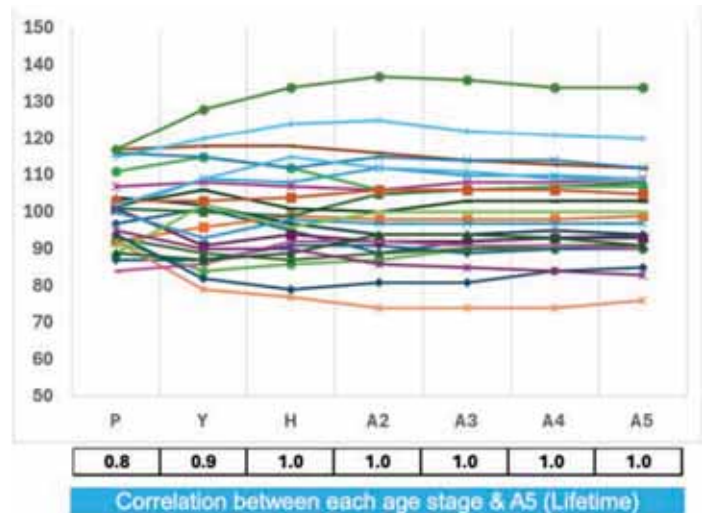
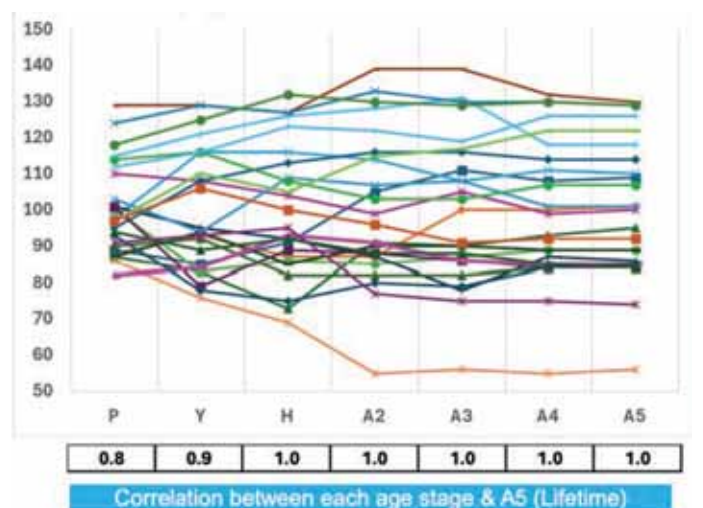


Chart 4: Balmoral 2016 Sires Merino Production + index values by age stage (includes reproduction and staple strength)



The correlations for individual animals followed a similar trend across the two drops, but were slightly lower than what was estimated for sires across all the ages (0.54 – 0.99).

<< CONTINUED FROM PREVIOUS PAGE

As a team, the correlations between each age stage show that the sires from each drop had reasonable prediction of lifetime performance from early measurements, but certainly benefited from later stage fleece measurements and two reproduction events. This is comforting for commercial breeders who are using ram teams for joining.

If you were following sire performance (the lines over time) you will see that although overall the average relationship between performance at each age stage was good, there were individual sires that changed in rank over time. In Chart 2 in the 2015 drop, one sire ranked 14 out of 25 sires (purple dash line) at yearling and moved to rank 3 by the final index. Another was initially ranked 23 at yearling and moved to rank 8 (dark green dash line) by the final index. While in contrast, two other sires start at rank 5 and 8 (at yearling) and dropped to rank 17 and 14 (light blue and light green dash lines), respectively. Ram breeders should note that as they look closely at individuals to select potential sires, most will perform as predicted at a hogget age but a few won't. It is why progeny testing with reasonable progeny numbers is important.

When we look at these four sires in more detail, the change in rank mostly relates to their performance for reproduction getting better or worse over time, although one sire's performance decline was

associated with a reduction in fleece production over time. The project will explore further the value of incorporating changes in fleece production over time (whether they increase or decrease) into genetic selection programs.

What we take away from this investigation using the MP and MP+ indexes is that measuring both ewes and ram progeny of a sire at an early age gives us a reasonable prediction of lifetime wool and growth performance, however, one additional hogget or adult measurement greatly improves a prediction of a sire's lifetime performance. We also see that when more progeny are available for evaluation, and are evaluated more than once, the accuracy of prediction is better at an earlier age. For highly accurate predictions of a sire's lifetime reproduction performance, generally two adult records are needed.

This work focuses on the index accuracy of sires involved in progeny testing. Following the recommendations from this investigation would result in sire breeding values reaching high accuracy once the sire himself is about 5 years of age. The next step for the MLP project is to look at what is needed to select sires more accurately for the progeny testing process. This research will be highlighted in upcoming editions of *Beyond the Bale*, along with an exploration of how accurately early sire breeding values predict later values at other MLP project sites.



The Balmoral 2015 drop MLP ewes just prior to their final classing, February 2022.

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WOOLGROWERS, WE NEED YOU!

Are you interested in industry research? Do you want to get the most out of your levy dollars? Would you like early access and input to R&D outputs? If so, read on for six opportunities for you to get involved in AWI projects and be at the forefront of cutting edge research.

Supplementary feeding strategies for lamb survival

This AWI and MLA funded project will develop best practice recommendations for supplementary feeding ewes during lambing. The first stage of the project will assess whether self-feeders or trail feeding lead to better lamb survival.

What's involved? Participation in an on-farm research trial investigating the effect of supplementary feeding method on lamb survival.

Why participate? Receive property-specific information to help improve productivity and increase lamb survival.

Requirements for participation: 300+ single-bearing ewes and 160+ multiple-bearing ewes. Access to a self-feeder. Supplementary feeding during lambing. Located in NSW, SA, VIC or WA.

Further information:

Serina Hancock, Murdoch University, 0403 570 823, s.hancock@murdoch.edu.au



Developing new blowfly lure technology

By better understanding key factors, like the attractant compounds in fleece rot, that attract the fly to vulnerable sheep, this project is aiming to develop a highly targeted new fly lure technology to reduce the build-up of sheep blowfly populations.

What's involved? Participation in a series of questionnaires. Non-invasive sampling of breech areas of flystruck sheep with fleece rot, including skin swabs, wool samples and collection of maggots/flies over three flystrike seasons. Fly traps set up on your property.

Why participate? A written summary on the flystrike trends specific to your property and sheep provided each season and the opportunity to discuss these findings with the project team.

Requirements for participation: Fleece rot issues. Located in NSW, SA, TAS, VIC or WA.

Further information: Michelle Harvey, Deakin University, michelle.harvey@deakin.edu.au



Informed modelling of sheep blowfly chemical resistance

This project will develop updated, consistent, and reliable resistance management advice to woolgrowers. This advice will help prolong the effectiveness of existing chemical products, whilst avoiding or delaying the development of resistance of flies to them.

What's involved? Collection of 60+ maggots from flystruck sheep to submit for laboratory testing. Completion of a submission sheet, including your recent history of fly and lice treatments.

Why participate? Free chemical resistance testing and explanation of your results from the lead researcher.

Requirements for participation: Flystruck sheep. Good records of recent history of fly and lice treatment use.

Further information:

Narelle Sales, NSW DPI, narelle.sales@dpi.nsw.gov.au



AWI Flystrike Genomics Reference Flock

This project is to collect and analyse DNA and on-farm data related to breech and body flystrike to inform the development of a genomically enhanced Flystrike ASBV.

What's involved? Collection of flystrike data from genotyped animals from now until June 2025.

Why participate? 100% rebate on the cost of genotyping flystruck animals and cost of supplying data (funding will be allocated on a competitive basis). Access to Flystrike research breeding value (RBV), prior to the release of the ASBV.

Requirements for participation: Ram breeders who currently, or plan to, record flystrike occurrence within their flock and genotype a portion of each drop.

Further information: Ben Swain, BCS Agribusiness, 0427 100 542, ben.swain@bcsagribusiness.com.au



Genetics of foot health

The project aims to release a research breeding value and eventually an Australian ASBV for resistance to footrot and inform the Australian Merino industry on appropriate selection strategies for each of the foot conditions examined.

What's involved? Entry of a semen sire into the central progeny test where progeny will be evaluated for foot traits and footrot. Contribution of eight cull rams per sire to be challenged to ovine interdigital dermatitis (OID) and footrot. The project will use progeny born in 2023, 2024 and 2025 at each site, with at least 8 progeny per sire per year required for assessment; the progeny will be monitored for OID and foot abscesses between 100 and 300 days of age.

Why participate? Gain early access to the footrot resistance research breeding value (RBV), for benchmarking and selection, prior to the release of the ASBV. Gain early phenotypic data on feet scores and correlations with production data.

Requirements for participation: Ram breeder. Provision of semen and delivery free of charge. Entrance fee. Transport costs to research site.

Further information:

Amy Lockwood, neXtgen Agri, amy@nextgenagri.com or Jarryd Krog, Murdoch University, jarryd.krog@murdoch.edu.au



Australian Merino Sire Evaluation

Eight site committees join sires over an even line of commercial ewes to evaluate sire's progeny up to two years of age.

What's involved? Sires are evaluated for a broad range of visual and objective measures.

Why participate? Breeders can independently and publicly evaluate within and across flock, a sire in a specific environment, increase linkage with MERINOSELECT and the Merino Genomic Reference Flock.

Requirements for participation: Ram breeder. Located in NSW, SA, VIC or WA.

Further information: Ben Swain, BCS Agribusiness, 0427 100 542, ben.swain@bcsagribusiness.com.au



SOLAR GRAZING PROVIDES FIBRE, FOOD AND ENERGY

More than 6,000 Merino and crossbred sheep now graze at one of Australia's newest solar farms, with early indications pointing to a win-win for wool-growing and renewable energy production.



Some of the 6,500 sheep that graze the New England Solar site, one of Australia's newest and largest solar farms, near Uralla.

Solar grazing is the practice of livestock (usually sheep, due to their lower height) grazing the land on which solar farms are located. It is an example of dual land use, one that provides fibre and meat from the sheep, but also renewable energy. Both activities can coexist harmoniously.

Furthermore, the use of solar panels will likely ensure the land is net positive for greenhouse gas emissions, which could open up new marketing opportunities for the wool from sheep that graze there.

The advantage of solar grazing for the energy companies operating a solar farm is that the sheep reduce vegetation growth under the solar panels, thereby reducing on-site fire risks and the need for (and cost of) mechanical or chemical removal.

Solar grazing is relatively new and not without its critics, some of whom have argued against solar farms for aesthetic reasons, while others have been sceptical about the number of sheep able to be run on the farms. However, reports from farmers who have been involved in solar grazing, in Australia and other countries, generally seem to be positive.

The panels provide the sheep with protection from the sun and shelter from rain. The panels can also improve pasture growth by providing shade and facilitating more moisture, which could lead to increased carrying capacity.

Sheep producers leasing their land to electricity generation companies can receive an extra, lucrative and guaranteed source of revenue for decades, and they can still graze the land.

In addition to the existing solar farms that incorporate solar grazing in Australia, there are several others solar farms currently proposed or being commercially developed by renewable energy companies.

Solar grazing at New England Solar

One of Australia's newest and largest solar farms, New England Solar, 6km east of Uralla in NSW, is designed specifically to incorporate solar grazing.

The solar farm is being developed, constructed and operated by ACEN Australia in two stages across 2,000 hectares of cleared grazing land leased from local landholders. Once completed, ACEN Australia estimates it will provide enough clean renewable power for around 300,000 homes. Construction of the first stage was completed last year, with about one million solar panels installed.

Sheep and lambs have been grazing the 1,200 hectare site since Christmas, with extra mobs introduced gradually during that time to help them transition to their new feeding ground. There is currently a flock of about 6,500 Merinos and crossbreds grazing the site.

They spend six weeks on the site, before being mustered back to the yards for health checks, and then they move on to other paddocks or straight back to their green solar pastures.

Drinking water for the sheep is provided by natural dams on part of the site, while in other locations pipes bring water to the site from bores on neighbouring farms.

The panels rotate east-west throughout the day, as they track the sun to maximise the amount of energy produced, thereby providing a balance between light and shade for the pasture and the sheep.

As part of the development of the solar farm, New England Solar has also contributed to the wider Uralla community by supporting local businesses, and sporting and community organisations.



Superfine woolgrower **Cameron Wood** says his sheep adjusted very quickly to grazing on the New England Solar site.

Positive woolgrower feedback

It will take a few seasons and shearings to properly assess the productivity of the Merino and crossbred sheep, as well as the full benefits of running them on the solar farm at Uralla. However, the landholders running sheep there say the early signs look positive.

Superfine woolgrower Cameron Wood is the fifth generation of his family to run sheep on the land, which has been in the family for about 140 years. The Woods run a Merino, fat lamb and cattle business, with a focus on wool produced from Saxon Merinos. Cameron Wood says the fleece from his solar grazing Saxon Merinos is bound for the export market in Italy, where it will be turned into high end fashion.

"It's been really exciting for us to first see the solar panels on the land to help us drought proof our operations, and then to bring the sheep back to the land to feed under the panels," Cameron said.

"The fresh grass and shade are a great combination – the sheep just look really happy. We're looking forward to getting them in the sheds this winter for shearing, and their wool baled up for market."

Fifth-generation woolgrower Richard Munsie is another of several local producers that graze sheep at the New England Solar project.

Richard says the panels create their own microclimate, which is an ideal environment for the ewes.

"They shade the early morning pastures which prolongs the effects of the dew. That helps the grass grow. And the panels also give shade to sheep and protection from frosts," he said.

"We might even be able to run more sheep due to the climate created by the panels, but we'll see."

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APPLY BEST PRACTICE IPM FOR RABBIT CONTROL

PHOTO: John Schilling

An analysis of rabbit control in Australia has revealed that only 39% of land managers undertook integrated pest management (IPM) when managing rabbits, whilst 61% used just one control technique. In light of these results, woolgrowers are urged to rigorously apply best-practice IPM when controlling invasive rabbits and not regard RHDV biocide release as a 'silver bullet' solution.

Fast facts

- An analysis of rabbit control reports in Australia indicates that most land managers (61%) used only one rabbit control technique, rather than a combination of control methods ('integrated pest management') which is best practice.
- The analysis indicates land managers incorrectly perceive RHDV biocide release to be a 'silver bullet' control method.
- More effective pest management could result if integration principles were more rigorously applied.

European rabbits are Australia's most widespread and destructive agricultural and environmental vertebrate pest.

Infesting two-thirds of Australia, and almost all wool-growing regions, rabbits cost Australia on average \$217 million a year in lost farm productivity. They affect wool-growing productivity due to lower stocking rates and/or reduced sheep weight gains, wool cuts and birth rates. Rabbits are also the single biggest menace to threatened native species.

Effective management of rabbits is essential to protect agriculture and the environment. Since the early 1970s, integrated pest management (IPM) has been recommended as a means to not only efficiently reduce rabbit numbers, but also achieve their complete elimination at local scale, reducing the need and cost to frequently reapply control. IPM is not just about applying multiple controls; they must be applied in a sequence and at a time of the year that makes economic and ecological sense.

However, a recent analysis of 7,415 rabbit control records voluntarily submitted to RabbitScan by land managers between 2009–2021 found evidence of IPM in only 39% of the reports. In other words, most managers (61%) used only one control technique, rather than applying a well-considered sequence of integrated methods, as is recommended.

The extent to which integration occurred depended on the control method applied. Two of the four major rabbit control methods were frequently integrated with at least one other method; **73% of warren ripping** and **55% of poison baiting** records were associated with another different control method.

In contrast, only **15% of rabbit haemorrhagic disease virus (RHDV) releases** and **35% of warren fumigations** were integrated with another different control method.

Lead researcher Dr Pat Taggart of Bush Heritage Australia says the analysis, which was published in January in the *Journal of Pest Science*, confirmed anecdotal reports that land managers incorrectly view RHDV biocide release as a 'silver bullet' and release it to avoid applying more expensive but more effective control methods.

"Land managers should apply additional mechanical or chemical control methods, including the destruction of rabbit warrens and their above-ground harbour, or directly killing the rabbits by poisoning, fumigation of burrows, or shooting," Dr Taggart said.

"RHDV is not a silver bullet and we need private and public land managers to be vigilant in not taking their foot off the pedal when it comes to regular mechanical or chemical rabbit control."

Dr Pat Taggart, Bush Heritage Australia

Furthermore, the researchers identified rabbit control sequences being applied that were neither biologically appropriate nor cost-efficient.

"A greater level of rabbit control and at a proportionally lower cost could result if IPM principles are more rigorously applied, for instance, by focusing on the strategic application of control methods in sequences known to be highly effective and cost-efficient," Dr Taggart said.

Apply control methods in sequence

The sequence of control methods is critical for achieving a high level of rabbit management.

Furthermore, the control methods should be applied in as short a time sequence as feasibly possible, although sufficient time must be given for the first applied control method to have impact before the second control method is applied.

1. Population knockdown



A rabbit eating oats laced with RHDV. PHOTO: CISS

The first step is to reduce the rabbit population from medium–high densities down to a manageable level. This is usually done by **biological control** (via natural outbreak or deliberate release) and/or **chemical control** (eg a **poison baiting** program) during the non-breeding season.

Myxoma virus is no longer produced commercially. RHDV is the current biological control and can be deliberately released in some areas (subject to state and territory legislation). RHDV is one of the more humane methods of controlling wild rabbits.

If RHD or myxomatosis are already present, then poison baiting should be delayed to allow the disease to reduce rabbit numbers. If rabbit density is low then extensive control can be started straight away

2. Extensive control



Rabbit warren ripping (the image is from an AWI video available at www.wool.com/rabbits).

The next part of the control program should destroy all source areas (where rabbits are living) and reduce rabbits to very low numbers. Control activities include **warren ripping and destruction/removal of harbours** which provide rabbits with shelter, such as fallen logs, building debris or dense vegetation. Where the use of heavy machinery is not an option for warren ripping, alternative techniques such as explosives may be used.

Extensive control ensures that the rabbit population cannot recover quickly but it must be done thoroughly to ensure success. If any warrens or harbour are not destroyed, rabbit numbers will simply build up again. Sometimes rabbits can also dig back in and 're-open' warrens if ripping is not done thoroughly (deep or wide enough) and the collapse of the warren structure is inadequate.

3. Mop-up activities



Rabbit warren fumigation (the image is from an AWI video available at www.wool.com/rabbits).

There are usually small numbers of rabbits that survive extensive control, so advanced control is necessary for long-term management. This is where follow-up techniques such as **warren fumigation, shooting and trapping** are used in rabbit-active areas.

Timing is crucial!

Applying control activities at the right time of the year is as important as the sequence through which controls are applied.

The implementation of integrated rabbit management in **late summer-autumn (February-May)**, immediately prior to breeding and before winter rains begin, is a well-established recommendation for rabbit control.

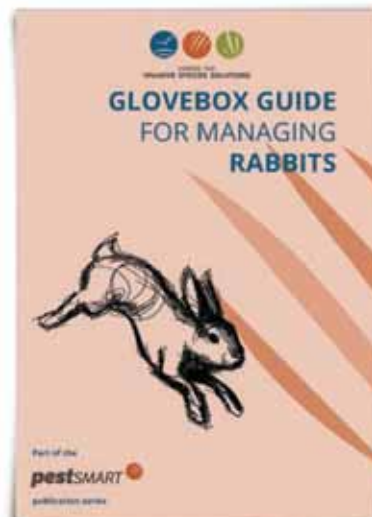
This is consistent with when rabbit numbers are naturally at their lowest in their annual cycle and food is short, making rabbits more likely to consume baits treated with RHDV, pindone or 1080. This timing also facilitates effective warren ripping in light soils by improving the flow of soil into burrows to ensure their collapse.

It is important to note that RHDV should only be released when young rabbits are not present. This is because they do not develop acute disease and are immunised rather than killed by RHDV infection, thereby exacerbating Australia's rabbit problem.

Therefore, **RHDV should not be released across southern agricultural Australia between July and December** (ie when young rabbits are likely to be present) unless land managers are confident rabbits are not breeding and young rabbits are not present. The optimal time of release is generally considered to be the end of summer or start of autumn (February, March, April), before any major autumn rainfall that might kickstart rabbit breeding.

More information:

- The *Journal of Pest Science* article is available (behind a paywall) at <https://doi.org/10.1007/s10340-023-01720-7>
- www.wool.com/rabbits
- The AWI co-funded, 36-page *Glovebox Guide for Managing Rabbits* provides useful information on best practice rabbit management for farmers and other land managers. Access the guide and other rabbit control related information on the PestSmart website www.pestsmart.org.au.



Monitoring rabbits using RabbitScan

RabbitScan is a free digital resource that Australian sheep and wool producers, plus other landholders and stakeholders, can use to record and access information about rabbit populations in their local area.

What to record:

- Rabbit activity (such as sightings and warrens)
- Damage, such as soil erosion
- Control activities
- Disease in rabbit populations (such as RHDV).

Benefits of using RabbitScan

- Develop a property or local area map of rabbit activity to guide control efforts
- Work together with your neighbours to undertake coordinated control
- Notify your local community or landholder group about rabbit activity and disease presence
- Send alerts to nominated people, such as neighbours or biosecurity authorities.

RabbitScan is available as an interactive website and mobile phone app, both of which have been designed to be simple to use.

AWI Program Manager Vertebrate Pests, Ian Evans, says RabbitScan is a collaboration tool that can help woolgrowers and other local stakeholders monitor and stay informed about rabbits in their area, thereby assisting them to apply best practice control.

"Used effectively, RabbitScan can provide woolgrowers and other community decision makers with accurate and timely information about the distribution and problems associated with rabbits. This information is very valuable for guiding local management decisions on how and when to control the pest animals," Ian said.

"AWI encourages all landholders to monitor their rabbit populations and report through RabbitScan rabbit sightings, activity and deaths. The more people in a local area that use RabbitScan, the more useful it becomes."

RabbitScan is part of the FeralScan™ suite of tools for monitoring pest animals. It receives funding from AWI, the Department of Agriculture, Fisheries & Forestry and NSW DPI through the Centre for Invasive Species Solutions (CISS).

More information: www.rabbitscan.org.au

FERAL PIG CONTROL: TIPS, ADVICE & BUSTED MYTHS

PHOTOS: JohnCarnemolla

The population of feral pigs in Australia has increased dramatically during the past few years due to good seasonal conditions that have provided feral pigs with plenty of feed and water. In a recent AWI Extension NSW webinar, two experts provided woolgrowers with some best practice feral pig control tips and also busted some myths.

The rapid rise in numbers of feral pigs is causing significant concerns for farmers and other landholders across Australia.

The wool and sheep industries are directly affected by feral pigs, largely via predation of lambs, but also by damage to fences. Furthermore, feral pigs create environmental damage by wallowing and fouling water sources, turning over vast areas of soil when rooting for food, and facilitating the spread of weeds. There are about 150 species of threatened flora and fauna impacted by feral pigs.

Feral pigs are also carriers and spreaders of at least 45 known serious diseases and parasites including brucellosis and leptospirosis. They can also host Foot-and-mouth disease and African swine fever, that have the potential to devastate wool and livestock operations if the highly contagious diseases ever get into Australia. Of note to livestock producers, feral pigs wallow in water troughs, into which they transmit diseases that livestock can contract.

In March, AWI Extension NSW hosted a webinar to inform woolgrowers about best practice feral pig control. Presenting on the webinar were feral animal expert Dave Worsley of the Centre for Invasive Species Solutions (CISS) and community engagement specialist Darren Marshall who has been working with feral pigs for 20 years. Both are members of the Implementation Committee of the National Feral Pig Action Plan 2021-2031.

Why the increase in feral pig numbers?

Feral pigs don't have an annual breeding cycle. If the conditions are good, which they have been during the past few years, feral pigs will just keep breeding, resulting in a high reproduction rate.

"Sows become sexually mature at 25 kilos, that's under six months of age, and can be down to three months of age depending on food supply. They can turn off two litters every 12 to 15 months under ideal conditions, and those litter sizes will generally range between four and 10 piglets, 10 piglets in the better times," Dave said.

"Critically, feral pigs need a crude protein percentage of 15% in order to breed at maximum functionality. Due to three years of La Niña, conditions have been good, providing feral pigs with plenty of quality food, so Australia has had an explosion in feral pig numbers.

"Although control programs do reduce population numbers, the programs haven't been taking out enough feral pigs to get in front of the curve, meaning any reduction is only temporary and the medium- and long-term numbers are going up."

In a 'normal' season, unless at least 75% of feral pigs are destroyed in a short period of time, there is no long-term effect on their population.

"But in 'good' seasons, like we have had across much of Australia, that percentage rises to at least 85%," Darren said.

"There are a lot of myths about feral pigs; for example you often hear 'they don't mix 1080 like they used to', 'the feral pigs all live in the National Park', 'this doesn't work, that doesn't work', but the reality is that we are just not killing enough feral pigs. We are not taking enough of them out of the landscape to have the impact that we need to."

"In good seasons, like we have been having, unless at least 85% of feral pigs are destroyed in a short period of time, there is no long-term effect on their population."

Darren Marshall

Evidence of predation

Feral pigs are an extreme generalist forager, eating a large volume and a wide variety of foods. Their main focus is on vegetation, however they will eat anything, including animals, be it worms, frogs, lizards or... lambs.

"If you're not seeing the expected number lambs in the paddock, then you could very likely have a feral pig problem. The feral pigs might not be foraging, digging, rubbing etc where your animals actually are, so you need to be alert to all signs of feral pigs not just the more obvious ones. Monitoring and getting some cameras out is really important," Dave said.

"Sometimes sheep producers will find that 'an absence of evidence is evidence of feral pigs' because the feral pigs will eat everything of the animal – they have extremely strong jaws and just completely crush the animal."

Control principles and methods

The principles of a successful feral pig control program are very similar to the principles of control for other vertebrate pests such as a wild dogs and foxes. Success relies on a broadscale, co-ordinated effort of all landholders in a given area working co-operatively.

"It really worries me when land managers do feral pig control independently on their own property, because they are targeting only a small percentage of the feral pig population in the area. Feral pigs move across boundaries, so land managers need to work on a bigger scale than one property to have any impact at all," Darren said.

It's also critical that this approach includes monitoring and communication components.

"If land managers are not communicating with their neighbours, working together, the control program will always fail," Dave added.

A combination of control tools used as part of a coordinated effort by landholders is essential for effective feral pig control, because no single technique will provide adequate long-term results.

Control methods include ground and aerial baiting (the options are 1080 and HOGGONE®), aerial and ground shooting (possibly including the use of 'Judas' radio-collared feral pigs), trapping and exclusion fencing. Note: bounties do not work, they ultimately increase the feral pig population.

"For landscape scale control rather than individual property control, baiting and aerial shooting are the two control methods that I've seen as most effective across that larger area. The other control methods do have a place though so that we expose all the feral pigs to a control method that is best suited to them," Darren said.

Dave said that if only one control program is undertaken each year, it is very unlikely to achieve the required 85% knockdown.

"What we really need to do in our feral pig control to be effective is what I call a 'double tap' which is two control programs within one life cycle which is about a four month period," he said.

The suite of feral pig control techniques can be incorporated with control programs for other pest animals, such as wild dogs and foxes, to form an integrated pest management program. However, it is important to consider the impacts of the program on all target pest animals.

"If you are also trying to undertake a wild dog and a fox control program, feral pigs will vacuum up baits and there is not enough poison in them to have any impact so it's really just free feeding the feral pigs. If there is shooting of deer in your area, again it's feeding feral pigs with an alternative to what we want them to eat," Dave explained.

"What we really need to do in our feral pig control to be effective is what I call a 'double tap' which is two control programs within one life cycle which is about a four month period."

Dave Worsley

Aim to be the best restaurant in town

Feral pigs are gregarious which means they like to live in family groups; so mothers, sisters, nieces etc live together in a group. The boars will leave the mob when they are sexually mature and go off into bachelor herds.

Dave said it's important to ensure family groups of feral pigs feel *comfortable* to keep coming to a location where control methods such as baiting and trapping are to be carried out.

"If we train feral pigs to think that they're our friends then it makes a big difference to the way that we can control them."

Dave Worsley

"It's all about low stress feral pig handling. If we train feral pigs to think that they're our friends then it makes a big difference to the way that we can control them, than if we chase them around with dogs and knives and guns etc," he said.

"The goal is to create the 'best restaurant in town', to give the feral pigs the best food so that their whole family group feels comfortable coming back for more – and then we can bait them, or trap them etc."

Dave said feral pig control is a process and not an event.

"You need at least a week to go through the process of free feeding. Anyone can trap or poison a feral pig or two, but to be effective you need to get them to be comfortable feeding at a location of their choice, not our choice. So take the feed to the feral pigs," he said.

"Put out the pile of grain in a likely location as a 'sunder', to see if the feral pigs want to feed there. If they want to feed there, proceed on. Don't put out a trap or plan a poisoning station without making sure that the feral pigs actually want to eat there first.

"Soak the grain and pile it up in a heap so it stays moist and the feral pigs have got time to come on to it – and give them a full meal not a Mars bar so they don't need to go anywhere else to feed. If feral pigs are not familiar with your food source, it will take them time to learn that it is a food source and they can eat it.

"If you're trying to trap or poison, you'll be more effective if you feed at the time of the year when there is less competition from other good food sources out there. So for instance, on the Northern Tablelands of NSW, winter is a tight time for food so you can very easily be the best restaurant in town. But further south, it would be better to open the best restaurant in town during the hot and dry summer."

For trapping, when you've found a location where the feral pigs feel safe, set the trap with plenty of feed in it and the feral pigs will come. Free feed for at least a week to get the feral pigs comfortable before setting the gate, ensuring that they have ample feed for all.

"If you arrive on your trapping site and you've got a mob of feral pigs outside, don't be tempted to shoot two out of eight because you'll be training six that you're not their friend, and they'll never come back," Dave said.

"You can potentially put two traps side by side. Don't leave feral pigs in a trap for any great length of time, just long enough to draw other ones in."

Feral pig movements explained

The season and time of year affects not only when to implement your control program, but also where to implement your program.

"Feral pigs can cluster in different parts of the landscape depending on the season, so you need to target your control efforts accordingly," Darren said.

"For example, in an area that I've studied, the feral pigs clustered in autumn in one place, in winter in another place, and summer in another place, while in spring there was a lot of movement. So if you ran a successful baiting campaign in autumn, running another campaign in the same location might sound like a good idea, but if it is in summer the feral pigs might be across the other side of the valley."

Darren said that feral pigs travel much smaller distances than people often think and they cover the country quickly.

"A sow's 'core home range' can be down to the size of a football field and its 'home range' can be up to 4–5 km². A boar's 'core home range' can be down to 4 km² and its 'home range' up to up to 50 km². In research using collaring data at Westmar in southern Queensland, a feral pig covered its entire home range every 15 hours which is much quicker than many people would have thought," he said.

"In all the data we've analysed, neither the amount of rain nor the temperature has made any difference to feral pigs' movement pattern."

"When we base feral pig control techniques on facts rather than myth, we get much better results."

Darren Marshall

Darren says that people often believe feral pigs live in the National Park and they travel great distances to feed and then go back to the National Park to rest and to shelter.

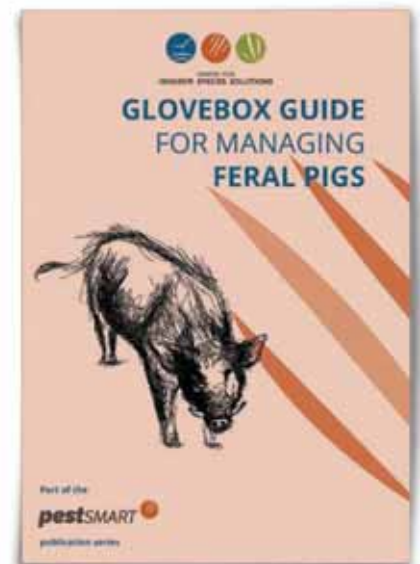
"However, our research shows that feral pigs don't really go into the National Park much at all. The 15% crude protein that they need to get for optimum breeding is in productive areas, not in the National Park. It's important to get rid of the myth that they live in scrubby areas and the myth that they travel long distances," he said.

Dave added that feral pigs lack sweat glands so they need to go to water twice a day and access shade to cool down in hot weather.

"The need for water limits how far they can travel from water. In a good season, they can spread out significantly, but when we get into extremely dry times it pulls them back and makes them more concentrated, which makes them easier to control."

More information:

- The webinar recording is available on: www.awiextensionnsw.com/webinars
- PestSmart resources: www.pestsmart.org.au/toolkits/feral-pigs
- National Feral Pig Action Plan: www.feralpigs.com.au



The CISS's 32-page best practice management guide 'Glovebox Guide for Managing Feral Pigs', available on the PestSmart website, was co-funded by AWI.

<< CONTINUED FROM PREVIOUS PAGE

Monitoring feral pigs using FeralPigScan



FeralPigScan is a free digital resource that Australian sheep and wool producers, plus other landholders and stakeholders, can use to record and access information about feral pig populations in their local area.

What to record:

- Feral pig activity and sightings
- Damage, such as predation, crop damage or soil disturbance
- Control activities
- Photos from monitoring cameras.

Benefits of using FeralPigScan:

- Develop a property or local area map of feral pig activity to guide control efforts
- Work together with your neighbours to undertake coordinated control
- Notify your local community or landholder group about feral pig activity
- Send alerts to nominated people, such as neighbours or biosecurity authorities.



FeralPigScan is a purpose-built community resource for mapping and monitoring feral pigs in your local area.

FeralPigScan is available as an interactive website and mobile phone app, both of which have been designed to be simple to use.

FeralPigScan is part of the FeralScan™ suite of tools for monitoring pest animals. It receives funding from AWI, the Department of Agriculture, Fisheries & Forestry and NSW Department of Primary Industries through CISS.

More information: www.feralpigscan.org.au

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With foxes on the rise again and taking up to 30% of lambs born, it is easy to increase profits by adopting effective fox control.

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PAPPUTTY LETHAL PASTE FOR WILD CANIDS

PHOTO: indianoceanimagery

A new lethal control tool for the management of wild dogs and foxes is now available. The toxin based paste, PAPPutty, is applied to the jaw of a soft-jaw foot-hold trap. When ingested by the trapped predator, they lose consciousness and then die.



Application of PAPPutty to a soft-jaw foot-hold trap.

The new lethal control tool is a para-aminopropiophenone (PAPP) toxin based paste which is applied to one jaw of a soft-jaw foot-hold trap via cloth wraps. When caught in the trap, wild dogs and foxes tend to bite at the trap and thereby ingest the toxin applied to the cloth.

The dose of PAPP prevents the transport of oxygen in blood, causing the trapped animal to become lethargic before becoming unconscious and quietly dying.

PAPPutty is an alternative to substances which have been applied to foot-hold traps in the past, including strychnine. The current APVMA permit for the use of strychnine impregnated cloths on foot-hold traps will expire on 30 June 2024. After this date the use of strychnine will not be approved.

PAPPutty was developed by the Centre for Invasive Species Solutions (CISS) in collaboration with the NSW Department of Primary Industries (DPI), Connovation in New Zealand, and Animal Control Technologies Australia (ACTA).

Dr Paul Meek and colleagues from NSW DPI conducted large field trials to test PAPPutty. These trials showed that PAPPutty wrapped in cloth attached to the trap jaw resulted in 87%

of captured wild dogs accessing the toxin and dying. The average time from trap-to-death was 68 minutes for PAPP-cloths.

Other animals are less susceptible than canids as they metabolise PAPP in a different way, and the delivery of PAPPutty is largely target specific.

A training video of Dr Meek explaining the use and safety precautions for PAPPutty is available on the PestSmart website www.pestsmart.org.au. In the video, he demonstrates how to apply the product to the jaw of a trap using a cloth. PAPPutty can be applied to either the active or lazy jaw of the trap, but not both jaws on the same trap.

As with any form of control, the use of PAPPutty is highly regulated. Similar conditions to other toxin control tools are applicable, including users of PAPPutty must notify neighbours 72 hours before traps are put in the ground and must erect signage to alert visitors that PAPPutty is being used on the property.

A veterinarian-only antidote is available to treat domestic dogs that have accidentally ingested PAPP products, when treated promptly. If you believe your domestic dog has ingested PAPP, seek immediate veterinarian care.

PAPPutty available now

ACTA has been licensed to manufacture and distribute the PAPPutty lethal paste and has formulated the product into 3mL syringes (25 per carton) to allow easy administration to a cloth wrapped around either jaw of a trap (but not both jaws). The registered name for the new product is PAPPutty Lethal Paste for Wild Canids. The product is stable for long periods at room temperature storage.

The most efficient way to purchase the product is to contact your local rural merchant store. For products that contain PAPP (such as PAPPutty), regulations vary between States & Territories. If you are in NSW, contact your regional Local Land Services (LLS). If you are in South Australia, contact your regional Landscape Boards. For all other areas, you should be able to access the product directly from your local rural merchant store.

PAPP is also available in wild dog and fox baits, DOGABAIT and FOXECUTE. These were developed by ACTA and the former Invasive Animals CRC (now Centre for Invasive Animal Solutions) with funding support from AWI and have been available since 2016.

More information: www.animalcontrol.com.au/products/papputty-lethal-paste-for-wild-canids

www.pestsmart.org.au

Integrated pest management

AWI Vertebrate Pests Program Manager Ian Evans says all available control methods (baiting, trapping, shooting, exclusion fencing, guardian animals) should be considered when planning control activities for wild dogs and foxes.

"The best pest animal control outcomes are usually achieved when an integrated pest management approach is undertaken that combines the use of all suitable control tools," Ian said.

"The success of wild dog and fox control also relies on a coordinated effort of all landholders working cooperatively with private and government controllers. This cooperative approach is important because individual animals move across multiple properties."

MORE STUDENTS RISE TO THE MERINO CHALLENGE

PHOTO: Macquarie Anglican Grammar School, Dubbo.

Students from schools in every state of Australia are this year gaining practical hands-on sheep management experience by looking after teams of Merino wethers as part of state-based School Merino Wether Challenges.

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

For the first time, students in Victoria were this year given the chance to take part in their own state competition. The inclusion of schools in Victoria means that students from every state in Australia this year have had the opportunity to take part in a School Merino Wether Challenge.

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. Each school team then shows their wethers during a competition later in the year and are judged according to their meat and wool quality.

By attending training and the judging events, and by looking after their wethers, the students gain:

- 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.

A special set of learning resources has been made available on AWI's Learn About Wool website to help teachers 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 14 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 last year held their first state competitions, with the numbers of schools involved increasing this year. Eleven schools in Victoria have signed up for their first ever state competition in 2024.

All the competitions are supported by AWI, as well as Stud Merino Breeders Associations, individual studs, schools, teachers and students.



Students at Goroke P-12 College in the Wimmera region of Victoria with some of their wethers.



Students at Manangatang P-12 College in the Mallee region of Victoria.

NSW competition expands to 70 schools

This year's NSW School Merino Wether Challenge is set to be the biggest year to date, with 70 schools from throughout NSW having signed up and more than 1,500 students involved at a school level. 500 of those students will converge on the Dubbo Showground on 27-28 August to present their wethers for judging on commercial value, before the wethers are sent to Fletchers International Exports.

The NSW challenge is organised in partnership with the NSW Stud Merino Breeders Association, the Dubbo National Ram Sale Association and AWI, with coordination and logistics provided by Bralca.

The challenge involves each school being allocated six wethers from the same age drop from Egelabra Merino Stud. Their allocated wethers were collected by each participating school in March from three locations: Narromine Saleyards, Armidale Saleyards, and Charles Sturt University's campus at Wagga Wagga.

Training days are being held throughout the course of the six-month challenge to provide ongoing assistance to school staff and students in caring for their team of wethers, as well as helping to develop industry skills and knowledge. 200 students will attend CSU Wagga Wagga campus on 19 June for a hands-on mid-challenge workshop.

While in Dubbo for the competition judging in August, the students will also have the opportunity to participate in activities to learn more about sheep handling, scanning and nutrition, and wool harvesting, while also hearing from a careers panel about the wide range of opportunities in the industry.

A young judges' competition will also enable the students to put their skills to the test, with entries available through the Dubbo National Ram Show and Sale Association.

More information: www.facebook.com/dubboschoolwetherchallenge

Students from several of the 70 schools that are taking part this year in the NSW School Merino Wether Challenge.



PLC Armidale



Parkes High School. PHOTO: Grace Wright



Hennessy Catholic College, Young



Bourke High School PHOTO: Claire Burgess



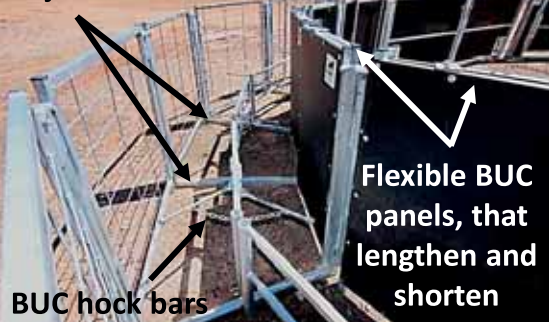
Boorowa Central School



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New strap panels

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, Adelaide SA



More than 120 students from across Australia attended the SA Sheep Expo in April at the Adelaide Showground, during which the students developed a better understanding of the sheep and wool industry and the opportunities it offers them.

Established in 2016, the three-day SA Sheep Expo is an educational initiative for young sheep enthusiasts aged 12 to 23 years. AWI is a Foundation Sponsor of the event and has supported it in each of the seven years it has been held.

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 focus was on 'lambs and technology', 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.

There were a range of other sessions, including a talk from the University of Adelaide's Dr Sarah Weaver who is part of the team of researchers on AWI's biological wool harvesting project.

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 a raft of prizes, and other awards and scholarships 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," said AWI National Extension Manager, Emily King.

"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: www.sasheepexpo.com.au

Peter Westblade Scholarship training weekend, Carrathool NSW



Now in its twelfth year, the Peter Westblade Scholarship delivers practical, hands-on training and mentoring to young people pursuing a career in the sheep and wool industry.

As one of the sponsors of the Peter Westblade Scholarship, AWI is supporting the next generation of leaders in the Australian sheep and wool industry. The Scholarship aims to identify, train and develop young people aged 18 to 30 who are enthusiastic about the industry and want to make a difference.

Established in 2010, the annual scholarship honours the late Peter Westblade, the 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 Peter Westblade Scholarship program is the running of an annual training weekend, established to encourage, educate and mentor young enthusiasts with practical training for the sheep and wool industry.

The training is held at the state-of-the-art facilities of 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 Peter Westblade Scholarship and generously hosted the event again in 2024 which was attended by 30 keen youngsters aged 18 to 30.

The weekend in February 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.

There were 12 industry guest speakers, in addition to previous Peter Westblade Scholarship winners and committee members, in attendance to pass on their invaluable knowledge to the next generation. Topics covered included sheep selection, stockmanship, business skills, animal health and professional development.

More information: www.pwscholarship.com.au

Southern Tablelands Flock Ewe Championship, Crookwell NSW



To boost their knowledge about sheep selection, more than 60 school agricultural students and teachers attended the AWI-sponsored Southern Tablelands Flock Ewe Championship held in the Crookwell region of NSW in March.

The students – from Boorowa Central School, Crookwell High School, Hennessy Catholic College (Young), 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.

Guide to careers in the wool industry



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

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.

"We are absolutely loving the 'Your future in wool' guide'. We are utilising it across the 70 schools participating in the NSW School Merino Wether Challenge (see page 30). The guide showcases a range of career options that meet students' strengths and interests," said Brooke Watts of Bralca who is helping organise the event.

The booklet is available at <https://info.wool.com/careers-booklet>

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2025 AWI GRADUATE TRAINING PROGRAM

PHOTO: skynesher

After another successful year for the AWI Graduate Training Program, applications for the 2025 program open on 1 August 2024.

The AWI Graduate Training Program provides successful applicants with a thorough understanding of the wool supply chain from fibre to fashion.

The 18-month program starts each year in March and is based primarily at the AWI office in Sydney, where the graduates gain exposure to many areas of the AWI business including on-farm and off-farm R&D through to marketing.

Graduates are also given the opportunity to gain global exposure to the wool supply chain through several international rotations based at offices of AWI subsidiary The Woolmark Company, in key markets overseas.

The program provides the graduates with ongoing professional training and development opportunities, to further enhance their career within the industry. It is aimed at graduates from a broad cross section of disciplines who have a background in or connection with the Australian wool industry.

AWI CEO John Roberts says the AWI Graduate Training Program has over the years unearthed some fantastic young talent who are now planning long careers in the wool industry.

"Having worked closely with the past and current graduates, I've seen firsthand the value of having such an all-encompassing program within the industry, covering the full supply chain, and the benefits it provides the successful graduates in enhancing their career within wool," John said.

"We continue to focus on attracting and retaining the top talent and the program is just one of the mechanisms we have in creating a talent pipeline and future proofing human resources in the industry."

More information: From 1 August, you can apply at www.wool.com/careers. Applications close 31 August.

Insights from the 2023 graduates

The graduates on the 2023 intake into the program, Kate Rice and Harrison Dunning, finished their Australian rotations at the end of the 2023, before heading overseas early in 2024 to undertake their international rotations.

Kate Rice



Kate on a visit to Nanshan Group's worsted wool mill, pictured here with Nanshan General Manager Wang Sheng who is explaining the stages of processing.

Kate, who is from a wool-growing family at Parkes in central NSW, is part-way through the international rotations, having started in China and then in Japan.

"My time in the AWI graduate program thus far has been a truly amazing experience. The program has presented me with various hands-on learning experiences to see what AWI does to support Australian growers and their wool," Kate said.

"The insights and knowledge the overseas rotations have presented have been invaluable in informing my understanding of the wool supply chain and market. I have been given the opportunity to visit various mills, processors, and designers – meeting the many people that play a valuable role in our supply chain.

"Seeing the international Woolmark teams in action, advocating for our fibre and advancing technological developments is beyond impressive and has certainly made me proud to be a part of our company and industry. I look forward to applying the knowledge and skills I have gained back into the company and the industry on behalf of our growers."

Harrison Dunning



Harrison (left) pictured with AWI Regional Manager Western Europe, Damien Pommeret, at an AWI supported seminar held in Paris.

Harrison Dunning who hails from Sydney began his international rotations in Europe, first in Milan, then in the UK and France.

"It has been a privilege to represent AWI and Australian woolgrowers in my time overseas. Directly engaging with the entire supply chain has been invaluable for my professional development in building an understanding of the key opportunities and threats our industry will face in the coming years," Harri said.

"A standout experience was participating in Pitti Filati, the largest Italian trade event for knitting yarns. Witnessing the depth of innovation and passion exhibited by all industry stakeholders was profoundly motivating. Interactions with fashion college students, designers and brand executives have underscored the imperative to continue advocating for our fibre and educating the decision-makers.

"This experience has not only broadened my perspective but also instilled a deep-seated optimism regarding the future of wool. I am grateful for the enduring relationships and insights gained throughout the global supply chain, and I am eager to contribute positively to the future of the wool industry."





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AWI WORKING TO INCREASE THE DEMAND FOR AUSTRALIAN WOOL

Australian brand Cable recently launched a new Woolmark-certified knitwear collection, which includes this jumper and long wrap cardigan, both of which are made from 100% Australian Merino wool – see pages 44-45 for details. This image to promote its winter 2024 High Country collection was shot by Cable at Mount Buller in eastern Victoria.

AUSSIE WOOL, THE FIBRE FOR AUSSIE RULES FOOTY

Through its Fibre of Football campaign, AWI is once again highlighting the rich heritage connecting the Australian wool industry and Australian Football – the latest ambassador of the campaign is Carlton captain Patrick Cripps. The campaign also involves placing wool into AFL supporter gear.

Launched by AWI a decade ago, the campaign continues to highlight the strong and enduring connections between Australian Football and the wool industry.

During the past ten years, some of the best AFL players who have connections to the Australian wool industry have joined the campaign to help promote the fibre.

These include Tom Hawkins (Geelong Cats) who was raised on a property at Finley in NSW, Nat Fyfe (Fremantle Dockers) who is from Lake Grace in WA, Bernie Vince (Melbourne Demons, now retired) who grew up at Stansbury in South Australia, Shannon Hern (West Coast Eagles, now retired) who was raised in the Barossa Valley of South Australia, and Luke Breust (Hawthorn) who hails from Temora in NSW.

This year, Carlton captain and 2022 Brownlow Medal winner Patrick Cripps, who was raised on a family property at Northampton in WA, joined the campaign.

The idea for the sport of Australian football was sparked on a sheep station in the 1850s when the son of a pastoralist was thinking of how cricketers could stay fit over the winter. From Tom Wills' idea grew a game now enjoyed by millions across Australia and the connection between the fibre and the football has stayed close.

AWI launched its Fibre of Football campaign in 2014 to celebrate this deep connection between the wool-growing community and football – and the campaign continues in 2024 with the promotion of 100% Australian wool AFL merchandise manufactured locally in Australia.

"The campaign highlights two Australian icons – wool and footy – that have supported each other throughout the evolution of our native game and our natural fibre. Both are central to the livelihoods and identities of many thousands of Australians," said AWI CEO John Roberts.

"Australian Football is still played where wool is grown. The local football team is still the centre of many wool-growing communities with signs from agents, contractors, sheep studs, transport companies and merchandise outlets around the ground."

"It has been a source of great pride to continue to support the inclusion of Australian wool into Australian Football where it belongs."

John Roberts, AWI CEO

100% Australian wool footy merchandise



Examples of the 100% Australian wool vintage jumper collection, for men, women and children.

AWI has worked with The Vintage Football Jumper Company to create 100% Australian Merino wool heritage jumpers for the AFL clubs, plus a special State Of Origin 'The Big V' jumper.

Available through the official store of the AFL and club stores nationally, the 19 micron supporter jumpers will keep you warm at the footy or on the farm.

As well as men's and women's long sleeve vintage jumpers, and men's sleeveless vintage jumpers, also available are kids vintage jumpers which are perfect for the smallest of fans and ensure they look the part with the rest of the family.

This official AFL merchandise is made from 100% Merino wool grown in Australia and knitted in Australia. The Vintage Football Jumper Company uses the same knitting machines and production processes that were used to make footy jumpers more than 70 years ago, which provides an assurance of authenticity and quality.

Patrick Cripps joins the campaign



Hugh Lyon of The Vintage Football Jumper Company with Carlton captain Patrick Cripps holding a special retro Northampton Rams wool jumper.



Patrick Cripps helping to make a retro Carlton wool jumper and the end result.

Earlier this year, Carlton captain Patrick Cripps joined the Fibre of Football campaign as an ambassador. Patrick grew up on his family's sheep and wheat farm at Northampton, 50 km north of Geraldton, in the Mid West region of WA.

"Life as an AFL player is very different to life back on the family farm at Northampton, but growing up there taught me a lot about hard work and resilience. It gives you a very good perspective on life," Patrick said.

"I always reflect now on the lessons I learned on the farm, whether that was mustering the sheep or throwing the fleece over the wool table – and I reckon shearers are fitter than me, my respect for them is through the roof!"

Patrick played junior football with the Northampton Football Club, known as the Northampton Rams, which competes in the Great Northern Football League.

"The Northampton Rams give the locals a lot of pride. From a town of about 800 people, over the years we've had 10 AFL players come from the town and the only medal as a town we haven't won is the Norm Smith Medal," Patrick said.

"I have really clear memories of the juniors on a Friday arvo training and then watching the older boys train. The club was sort of the heartbeat of the town. The older I get, the more I appreciate how special that environment was growing up."

Earlier this year as part of the Fibre of Football campaign, Patrick visited The Vintage Football Jumper Company at Footscray in Melbourne to witness the high quality of craftsmanship that the company uses when manufacturing the vintage wool jumpers. Patrick even had the chance to help out with making the jumpers. The visit was filmed by AWI and is available to view at www.fibreoffootball.com.au.

"I know what it's like to experience wool in the shearing shed, so to visit The Vintage Football Jumper Company and actually see the fibre getting made into a footy jumper is pretty cool."

Patrick Cripps

"It's been great to come into the factory and see how wool is transformed into such a good end product – and to see the connection between where I grew up on the farm and what I now do on the oval at Carlton's Ikon Park," Patrick said.

"The cool thing about these knitting machines is that some of them are 70 years old, so the vintage and the heritage has lasted and stood the test of time.

"Footy jumpers back in the day were made from wool so to have that connection, to show that wool is a fibre of footy and that still lives on is pretty special."

Tom Hawkins' enduring support for the campaign



Tom Hawkins with his wife Emma at Tom's 350th game for Geelong in March, with their three children who are all wearing vintage wool jumpers. PHOTO: Emma Hawkins' Instagram



Tom and his son Henry wearing a wool top during the Geelong Cats' Team Photo Day in February. This photo featured on the front page of the Geelong Advertiser. PHOTO: Brad Fleet

Geelong Cats' legend Tom Hawkins was born an AFL player. Son of Geelong's 'Jumping Jack' Hawkins there was never any doubt about Tom's destiny. He also has a long association with Australian wool, having grown up on a wool, cropping and rice property at Finley in the Riverina of NSW.

Tom joined the Fibre of Football campaign at its inception in 2014 because he wished to promote the importance of farming and wool-growing, along with supporting country football given it is at the heart of many communities.

"I am very proud to have grown up on a farm that produces wool," Tom said. "My fondest memories from my childhood are working with my father on the farm and playing junior football for my local Finley Football Club. So I feel very privileged to be involved in the Fibre of Football campaign that supports two of the industries that I am extremely passionate about."

Tom's wife, Emma, who was brought up in Deniliquin and is the granddaughter of legendary Boonoke studmaster Basil Clapham, is also a keen supporter of wool and the Fibre of Football campaign.

For Tom's celebratory 350th game for the Geelong Cats in March, Emma was keen to dress their three children Arabella, Primrose and Henry in the club's vintage wool jumpers.

"We have loved dressing out kids in the 100% wool Geelong jumpers. Every time the kids are wearing them, we always get asked about them," she said.

More information: www.fibreoffootball.com.au

WOOLMARK'S POSITIVE ECO-CAMPAIGN RESULTS

During the past two years, AWI's marketing arm The Woolmark Company has run a powerful and successful eco-campaign to reinforce to consumers the message that synthetic fibres are made from oil, and that consumers should instead choose wool because it is a natural, renewable and biodegradable fibre.



The global campaign urged consumers to consider the fibre composition of a clothing product – and choose wool – when they are thinking of making a purchase.

The Woolmark Company's eco-focused marketing campaign that ran during 2022 and 2023 has helped educate the public about the harmful impact of synthetic fibres on the environment, and that choosing a natural fibre such as wool can help reduce the fashion industry's impact on the planet.

The campaign was launched as a response to findings from research conducted by The Woolmark Company which showed that while more than one third of global consumers said they were willing to pay more for sustainable apparel, they did not consider a product's fibre composition when considering what garment to purchase. Furthermore, the research highlighted that consumers were not making the connection that synthetic fibres are made from fossil fuels. It is these problems that The Woolmark Company's campaign aimed to address.

In the initial year (2022), the eco-campaign focussed on delivering a series of powerful visual messages through the emotive 'Wear Wool, Not Fossil Fuel' video that highlights the link between fabrics made from synthetic fibres and the crude oil used in its manufacture. The amazing reception of the video in 2022 resulted in The Woolmark Company running this aspect of the campaign again in 2023.

In 2023, The Woolmark Company also launched the 'Filter by Fabric' aspect of the eco-campaign which urges fashion brands to commit to transparent, accurate product names that reflect fabric composition. The initiative also empowers consumers to prioritise fabric impact when making purchasing decisions.

Eco-campaigns vital to support demand

AWI CEO John Roberts says The Woolmark Company's recent eco-campaign has been aimed at helping reverse the rise of fast fashion, which is dominated by synthetic fibres such as polyester, and increase demand for long-lasting clothing made from wool.

"As a natural, renewable, biodegradable and the most recycled apparel fibre, wool is well placed to take advantage of the profound market shift towards environmentally friendly products – it is a great opportunity for wool. However, the market's rush towards sustainability also presents a threat to wool, due to the large amount of greenwashing that is being undertaken by those brands that are heavily reliant on synthetic fibres, to make synthetic fibres appear more sustainable," John said.

"AWI has been investing in research right across the supply chain to produce robust scientific evidence to counter this greenwashing and misinformation, and support the company's marketing initiatives to increase the demand for wool.

"It is vital that the wool industry continues to invest in marketing to address the opportunities and threats it faces, to promote wool's natural eco-credentials and ensure that consumers are not misled but make truly informed decision when purchasing products.

"Marketing campaigns such as our 'Wear Wool, Not Fossil Fuel' and 'Filter by Fabric' initiatives have been very successful, but the industry needs more campaigns like this in the future to continue to increase consumers' knowledge about the attributes of different fibre types and to promote the environmental benefits of wool."

"The company's campaign spotlight on the eco-credentials of our nation's fibre had an amazing reception with strong and positive results – it needs to continue to be a prominent and permanent feature of our marketing into the future as we become more proactive in driving our market's sustainability agenda."

John Roberts, AWI CEO

'Wear Wool, Not Fossil Fuel' initiative

HIGHLIGHT RESULTS FROM THE INITIATIVE

131 million
video views

850 million
impressions

75%
of viewers expressed intent to
purchase wool

The 'Wear Wool, Not Fossil Fuel' aspect of the campaign centred around a 60-second impactful film that shows people struggling to escape an oil-filled swimming pool, which is a dramatic visual based on the insight that every 25 minutes an Olympic pool's worth of crude oil is used to produce *synthetic* clothing (which amounts to almost 350 million barrels a year). The video then sees the people wearing *wool* clothes, wandering with freedom through forests, streams and meadows – a natural paradise – which emphasises the natural attributes of the wool they are now wearing.



Screenshots from the campaign film showing people 'clothed' in oil (wearing synthetic garments), top, which starkly contrasts with them later wearing wool garments in nature, bottom.

In 2022, 'Wear Wool, Not Fossil Fuel' was promoted via digital and social media, accompanied by visually striking 3D digital advertising in iconic sites in London's Piccadilly Circus and New York's Times Square, along with other global outdoor advertising (such as on bus shelters and newsstands) in the US, UK and France, plus a partnership with popular computer file transfer company WeTransfer.

In 2023, 'Wear Wool, Not Fossil Fuel' was again promoted via digital and social media, including high attention video environments such as YouTube and connected TV (CTV) ie delivered to a smart TV via a streaming service, along with outdoor advertising in the US, UK and France such as at stations on the New York City Subway, London Underground and Paris Metro.



The 'Wear Wool, Not Fossil Fuel' campaign was rolled out via outdoor advertising as well as digital and social media. Pictured above is advertising on a bus shelter on Oxford Street in central London, a digital promotion in French, and giant 3D digital advertising in New York's Times Square.

In total, the 'Wear Wool, Not Fossil Fuel' campaign video has been watched an incredible 131 million times. The digital campaign has received 850 million impressions (which is the number of times the campaign advert was seen online or on outdoor advertising).

Research shows that 'Wear Wool, Not Fossil Fuel' has been very successful, surpassing industry benchmarks, with surveyed consumers saying that it was very impactful:

- 75% expressed purchase intent for wool.
- 78% have reconsidered the environmental impact of their clothing choices.
- 80% acknowledged wool as environmentally friendly.
- 77% take fabric/materials into account when making clothing purchases.

More information: www.woolmark.com/wear-wool

'Filter by Fabric' initiative

As part of its eco-campaign, The Woolmark Company in 2023 also launched its 'Filter by Fabric' initiative that aims to help shoppers easily identify authentic wool products.

The initiative was launched in response to a YouGov survey that showed that ambiguous terms – such as 'fleece' and 'silky' – confuse clothing consumers and make it difficult for them to readily identify what a fabric is really made from, especially when synthetic materials are used to mimic natural fibres in clothing.



IT'S NOT FLEECE
MESH
SILKY

Ambiguous terms, such as 'fleece' and 'silky', applied to product descriptions by brands and retailers can make it difficult for consumers to understand what fibre the product is actually made from.

The aim of 'Filter by Fabric' is to help end this confusion. It urges fashion brands to take a pledge at www.filterbyfabric.com to commit to clear, honest product names that accurately communicate fabric composition. The initiative also encourages them to modify the functionality of their online stores so that consumers can search for apparel by fabric type (eg wool) when shopping. Consumers are also encouraged to support the initiative by taking a pledge.

To date, the 'Filter by Fabric' initiative has amassed 330+ media clippings, four million impressions, and more than 9,000 pledges from consumers and brand partners.

These include notable names such global fashion giant Benetton, Reformation, Cubus and Maggie Marilyn; leading Australian brands Iris & Wool, Merino Country and Albus Lumen; as well as industry bodies including IWTO, Copenhagen Fashion Week and No More Plastic.

More information: www.filterbyfabric.com

THE WOOLMARK BRAND'S DIAMOND ANNIVERSARY

The world famous Woolmark brand – owned by Australian woolgrowers – is this year marking its 60th anniversary. The Woolmark logo's enduring appeal continues to deliver significant returns to Australian woolgrowers through its use in the Woolmark Licensing Program as well as marketing campaigns.

When AWI acquired The Woolmark Company in 2007, AWI and the woolgrowers that own the company became the owners of the Woolmark brand, the world's best known textile fibre quality brand.

The Woolmark brand and its iconic logo have now been in operation for six decades. It was launched in 1964 by the International Wool Secretariat (IWS) as a symbol of the universal appeal and quality of wool, and in response to the major threat to the global wool industry posed by the rise of synthetic fibres in the post-war period.

Sixty years later, Australian woolgrowers continue to benefit from its use by AWI and its subsidiary The Woolmark Company in promoting wool globally.

"The core values of the Woolmark brand – quality, innovation and respect for the environment – are very much aligned to the needs and desires of contemporary consumers looking for a new idea of luxury which is both more authentic and eco-conscious," said AWI CEO, John Roberts.

"Our network of offices in key markets across the world use the Woolmark brand to promote these core values that represent Australian wool, for the benefit of Australian woolgrowers who own the iconic logo."

"The Woolmark logo has proved to be a great asset for promoting wool during the past 60 years – and continues to provide solid value in building awareness of the benefits of Australian wool and supporting demand for the fibre."

John Roberts, AWI CEO



Woolmark Licensing Program



The Woolmark logo attached to a wool product provides customers with an assurance of quality for the product, thereby helping persuade shoppers to purchase it.

The value of the brand is well established and highly regarded across the world in the apparel, interior textiles and home laundry sectors. Since the logo was created in 1964, more than six billion wool and wool care products have been certified for quality through the Woolmark Licensing Program.

When attached to a product, such as on a sewn-in label or a swing ticket, the logo provides customers with guaranteed wool fibre content and an assurance of quality for the product. To ensure quality standards are maintained, The Woolmark Company has a comprehensive set of specifications that products must meet or exceed to gain the Woolmark quality certification.

The Woolmark Licensing Program covers clothing, fabrics and yarns, as well as bedding, carpets, accessories, sheepskin, furnishing fabrics and footwear. In addition, The Woolmark Company certifies products for apparel and home care such as wool detergents and cycles on washing machines, dryers and irons.

By providing quality assurance to customers, the Woolmark Licensing Program is helping to support and increase the demand for wool. The Program also provides AWI with a source of revenue.

Woolmark logo adds value to marketing programs



The iconic Woolmark logo is used in marketing campaigns by The Woolmark Company and its brand partners to build awareness of wool's benefits and drive wool purchases at retail.

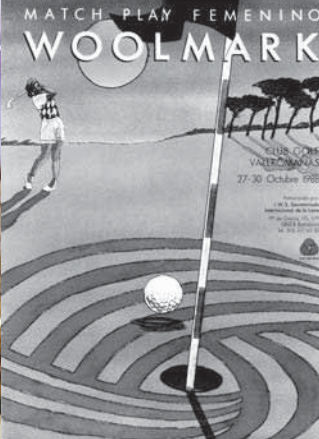
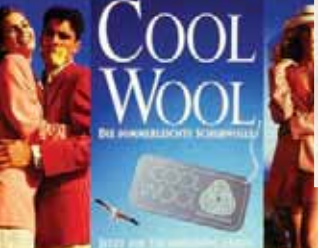
As well as being essential to the Woolmark Licensing Program and the marketing of Woolmark-certified products by licensees across the world, the Woolmark logo is pivotal to much of the marketing that The Woolmark Company undertakes to build awareness of the benefits of Australian wool and increase purchases of wool products by consumers.

This includes the use of the Woolmark logo in joint marketing campaigns with brands and retailers, such as those included in this edition of *Beyond the Bale* – for example, see the article on page 42 about Australian brand Sportscraft.

The logo is also used in The Woolmark Company's own marketing and education programs such as the International Woolmark Prize, the Woolmark Performance Challenge, and the Woolmark Learning Centre, plus campaigns like the 'Wear Wool, Not Fossil Fuel' eco-campaign – see pages 38-39.

AWI and its subsidiary The Woolmark Company are marking the 60th anniversary through its digital and social media channels. See opposite for examples of how the Woolmark logo has been used to promote wool during the past 60 years.

More information: www.woolmark.com



SPORTSCRAFT'S 60-YEAR WOOLMARK PARTNERSHIP

Still kicking goals for Australian wool after 60 years, the successful partnership between iconic Australian brands Sportscraft and the Woolmark grows stronger with the launch last month by Sportscraft of a large collection of Woolmark-certified garments.



Imagery from the latest Sportscraft marketing campaign that promotes the new collection.

In recognition of a successful partnership spanning 60 years, leading Australian fashion brand Sportscraft has partnered with AWI's marketing arm The Woolmark Company to launch an autumn/winter collection of garments that highlight the timeless and natural beauty of Australian Merino wool.

Sportscraft was the first Australian company to become a Woolmark licensee back in 1964. Six decades later, both Sportscraft and The Woolmark Company continue their partnership to promote and deliver high quality wool apparel.

"Our valued partnership with Woolmark has fostered a mutual inspiration that has spanned 60 years, said Elisha Hopkinson, CEO of APG & Co, which owns Sportscraft.

"Even as our brand continues to evolve, and fashion naturally shifts, our relationship with Woolmark stands the test of time to create quality Australian fashion made to love for years to come."

"To celebrate our 60-year anniversary with Woolmark, we've launched an extra-special Merino wool collection. This collection celebrates Woolmark's illustrious 60-year journey while honouring our very own 110-year legacy."

Sportscraft website



Billboard advertising in Sydney's number one shopping destination for clothing, Pitt Street Mall (above) and the collection being promoted in the window of David Jones (below).

The new joint marketing campaign, titled 'Together for 60 Years', aims to drive sales of Sportscraft's latest 43-piece Woolmark-certified collection made from Australian wool. From slightly oversized roll neck sweaters to cable knit cardigans, 100% Merino wool jackets for women and men, as well as a lush Melton coat, the collection has been made with a built-for-life mentality, embodying a fusion of timeless appeal and contemporary versatility.

AWI CEO John Roberts says this year's campaign aims to emphasise the dedication of The Woolmark Company and Sportscraft in bringing the finest Australian Merino wool to market.

"We are proud to continue our long-standing partnership with Sportscraft, marking 60 years of craftsmanship connected by Australian Merino wool. Our commitment to promoting timeless quality makes this collaboration a natural choice, taking Australian Merino wool confidently into the future as a steadfast and enduring symbol of sustainability and excellence," John said.

"The strong relationship with Sportscraft is an endorsement of not only the Woolmark certification scheme but also Australian woolgrowers, who own the Woolmark logo."

John Roberts, AWI CEO



This year's joint marketing campaign builds on a successful campaign last year in which Sportscraft promoted its 2023 autumn/winter Woolmark-certified collection. That year's campaign received 5.6 million impressions (the number of times the campaign was seen), with resultant wool sales 26% higher than the previous year.

The garments in the new 2024 autumn/winter collection are available to purchase online on the Sportscraft website, in its brick-and-mortar stores across Australia, and also in David Jones stores.

Throughout the May-July period, campaign imagery and messaging is being pushed out across Sportscraft channels including digital, social, e-newsletter and storefront. David Jones will also be promoting the campaign, including in several of its prominent store window displays across Australia.

More information: www.sportscraft.com.au

IRIS & WOOL'S PERENNIAL TRIBUTE TO MUMS

South Australian farm-to-fashion brand Iris & Wool has partnered with AWI's marketing arm The Woolmark Company to launch its Autumn Winter 2024 'Perennial' collection of Merino wool garments which celebrates mothers across Australia.



The 100% Merino wool Petrisse Cardigan from Iris & Wool's new Woolmark-certified 'Perennial' collection.



South Australian-based Emily Riggs, founder of Iris & Wool, is a big advocate of Australian wool.

Emily Riggs and her husband, fifth generation woolgrower Tom, live at Burra in the mid-north of South Australia where the family farms more than 30,000 hectares of mainly pastoral country and runs about 15,000 Merinos.

Emily launched her Iris & Wool knitwear brand in 2019. Since then, the brand has grown from strength to strength to become well known across the country for producing timeless Merino wool designs of the highest quality for women, men and children.

"We have always been a purpose-led brand, and we're focused on helping consumers understand that fashion is more than the clothes you wear. It's knowing how they got there, who made them, and where they'll end up," Emily said.

Emily found fashion at just nine-years-old when she was diagnosed with Non-Hodgkin's Lymphoma while her mother was also battling cancer. While her mother sadly lost her battle with cancer a year into her treatment at the age of 43, Emily discovered that fashion afforded her an outlet for creative freedom. Years later when Emily found love with Tom, she merged her love of fashion with Merino wool.

The Perennial collection

Iris & Wool's latest Woolmark-certified collection – named 'Perennial' – draws inspiration from the everlasting beauty of the iris flower, which blooms year after year, and was her mother's favourite flower.

The new Perennial collection is Iris & Wool's tribute to mothers everywhere. In addition, Iris & Wool is donating beanies to all newly diagnosed children in South Australia in partnership with the Childhood Cancer Association, plus \$1 from each sale to be donated to Childhood Cancer Association.

"I know how tough it is losing a mum or a mother figure in your life, and as a mum myself now, I am so thankful we can give back to charities helping prevent this from happening to others. This initiative is also a reminder to pause and reflect on the incredible work mums and motherhood figures of all forms, shapes, and sizes do day-in and day-out to help those around them," Emily said.

The new Woolmark-certified collection is quality tested and soft next-to-skin, and includes an array of dresses, skirts, trousers, jumpers and vests which can be mixed and matched for a wool wardrobe that can be cherished for years to come.

"Iris & Wool embodies the spirit of Australian woolgrowers through an unwavering commitment to quality and community. This collaboration between AWI and Iris & Wool underscores a mutual appreciation for Merino wool's unique attributes and benefits," said AWI CEO John Roberts.

"The collaboration with AWI and Iris & Wool is to be celebrated and makes a Merino wool producer proud to be associated with this industry."

Woolgrower Anthea Sutherland, 'Pooginook'

Woolgrower endorsement at launch

The collection was launched at an intimate event in Sydney in the lead up to Mother's Day, hosted by Australian fashion icon and mother-of-two, Kate Waterhouse, daughter of Gai and Robbie Waterhouse. The event was attended by Sydney's fashion world – from David Jones to *Vogue* – and woolgrowers. It offered an intimate moment for guests to touch, feel, and immerse themselves in the intricate details and textures that define the collection.

Woolgrower Angela Field of the family-owned company T.A. Field Estates says the event was a fantastic launch of the Iris & Wool collection.

"Seeing top fashion figures celebrate Emily, her brand, and Merino wool was special for me as a woolgrower. I wish Emily all the best as she continues to celebrate the farm-to-fashion journey with beautiful Merino wool garments," Angela said.

Fellow NSW woolgrower Anthea Sutherland of 'Pooginook' said, "It was a wonderful event showcasing a stunning collection by a young Australian designer who is truly dedicated to producing garments from Australian Merino wool. The collaboration with AWI and Iris & Wool is to be celebrated and makes a Merino wool producer proud to be associated with this industry."

The Woolmark Company is providing marketing support across its digital and social media channels to help promote the new Iris & Wool collection. It also featured in AWI's *In the Shops* brochure.

More information: www.irisandwool.com

NEW CABLE CAMPAIGN 'FOR THE LOVE OF WOOL'

In the lead up to this year's Mother's Day, luxury Australian womenswear brand Cable launched a marketing campaign titled 'For The Love of Wool' that celebrates three remarkable women bound by their love for Australian Merino wool.

Since its launch in 2007, Cable has emerged as a preeminent Australian womenswear brand and a revered specialist in the art of knitwear. In addition to its online store, Cable is about to open its 18th brick-and-mortar store and has more than 80 independent stockists across Australia / New Zealand, plus a concession in David Jones on Elizabeth St in Sydney.

Founder and Creative Director Georgina Austin has a long family history that is intertwined with the wool industry. Her great-grandfather founded Thomas S. Beaumont & Sons, a leading buyer of Australian superfine Merino wool and the starting point of four generations of wool buyers. This legacy continues with the knitwear of Cable, which is centred around high-quality Merino wool.



Cable Founder and Creative Director, Georgina Austin.

Georgina says Cable has an unwavering dedication to crafting luxurious, enduring wardrobe essentials with a focus on exceptional fabrics.

"In the world of textiles, few materials match the versatility, comfort, and sustainability of 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.

A key element of the brand's new Autumn/Winter 2024 collection is a range of Australian

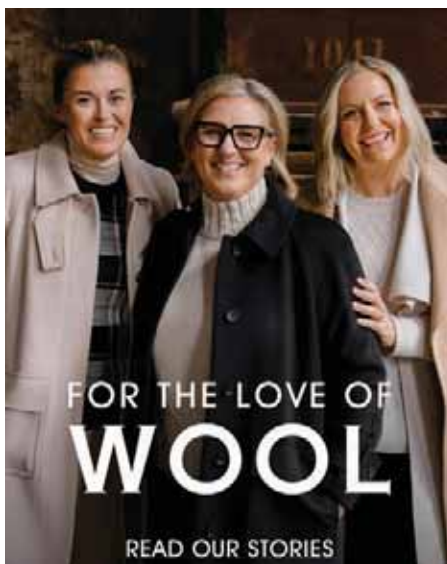
Merino wool knitwear that has been certified by The Woolmark Company. The Woolmark logo on these garments indicates that the products contain 100% pure new wool and meet a range of performance measures.

"In an era where consumers are increasingly discerning about the products they buy, Woolmark accreditation 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," Georgina said.

"We take pride in our approach to everything we do, in particular our ongoing support of the Australian wool industry and our longstanding certification with Woolmark."

Georgina Austin, Founder of Cable

Cementing Cable's commitment to 100% Australian Merino wool products, the brand will launch a new Cable Heritage Year Round 100% Australian Merino wool collection in Autumn/Winter 2025. This Woolmark-certified knitwear collection will feature iconic Cable styles and will be shoppable 365 days a year for the global customer.



Sarah Houston, Victoria Watson and Anna Byrne, who feature in Cable's online and in-store campaign promoting Woolmark-certified Australian Merino wool apparel.

For The Love of Wool

To promote its latest range of Australian Merino wool apparel, Cable launched a marketing campaign in the lead up to Mother's Day to celebrate three remarkable women – woolgrower Sarah Houston, wool trader Victoria Watson and fashion writer Anna Byrne – who are connected by their unwavering passion to preserving the heritage of Australian wool.

The campaign, titled 'For The Love of Wool', which featured the three women wearing Australian Merino wool garments from the Autumn/Winter 2024 Cable collection, was rolled out online and in Cable's fleet of stores across Australia.

As part of the campaign, Sarah, Victoria and Anna were each featured in instalments of the 'Cable Conversations' series, during which the three women opened up about the unique opportunities and challenges they've encountered in the wool industry, and detailed the driving force behind their passion for wool.

See opposite for extracts from each of the women's conversations. Head to www.cablemelbourne.com/blogs/news/for-the-love-of-wool to read the full conversations.

More information: www.cablemelbourne.com/collections/australian-woolmark-certified



Woolgrower Sarah Houston



Sarah is pictured wearing Cable's Stone Oxford Wool Coat and Merino Check Jumper.

Sarah Houston is a third-generation woolgrower and mother of four living on a remote sheep station in Hay, NSW. With a family history spanning more than a century in the wool industry, Sarah's connection to wool runs deep. Growing up on her family's property, she learned the ins and outs of wool production from a young age, fostering cherished memories of shearing sheds and farm life.

"My family has grown fine Merino wool on our family property, 'Jimembuen', south of Cooma, NSW, for over 100 years," Sarah said.

"Sheep is what I knew as a young girl. We grew wool and wore wool because it's so cold there. My brother and I helped Dad in any way we could. Fast forward a few years, and I married my husband Rowan, whose family have also produced wool in Hay, for over a century. We have four boys: Jim, 17; Archie, 15; Harry, 12; and Bill, 11. They are re-living our childhoods surrounded by wool-growing sheep.

"I am really proud that both our families have contributed to the Australian wool industry for so many years. It can be a tough way to make a living, but it is a wonderful way to live.

"It is a testament to both our families that they have ridden out the tough times, which has meant enjoying the good times when they roll around.

"Wool is the most incredible product! It is natural, renewable, sustainable, and beautiful. It keeps you warm, cool, and safe from fire, not to mention that wool products never seem to go out of fashion!"

Wool trader Victoria Watson



Victoria is pictured wearing Cable's Black Oxford Wool Coat and Lucerne Merino Jumper.

Victoria Watson is a mother of three from Melbourne. When Victoria's husband James passed away from leukaemia last year, she found herself navigating life as a single mother and as the new director of her husband's second-generation wool trading business, Watswool. With determination and resilience, she continues her late husband's legacy, while championing the Australian wool industry.

"Being involved in the business keeps me connected to James and gives me great purpose in an industry I am passionate about. I am so proud to be able to continue his legacy with a great team behind me, and I am excited for the future," Victoria said.

"I get goosebumps when I walk into the wool store. The smell of greasy sheep's wool is unique and, for those involved in the trade, it holds a significance that reflects our connection to the land, our heritage, and our contributions to the agricultural industry.

"My three daughters are all very passionate about the industry, so maybe one day I can hand the Watswool flag over to them so they can continue their family's legacy in wool.

"Despite the challenges, there are many opportunities in this incredible industry and different pathways for women to consider.

"As one of the only female business operators, I would love to contribute to the success and advancement of the wool industry while breaking down barriers for future generations of women entrepreneurs."

Fashion writer Anna Byrne



Anna is pictured wearing Cable's Evans Wool Coat, Merino Long Wrap Cardigan and Merino Diamond Crew Jumper.

Anna Byrne is a mum of two living in Geelong, Victoria. Anna's connection to wool is woven with memories of childhood sheep shows in Bendigo and more than a decade with the *Herald Sun* reporting on fashion's finest. As a mother, freelancer, and advocate for sustainability, she is passionate about showcasing the heritage and innovation of Australian wool to modern consumers.

"Growing up in Bendigo, I have many memories of attending the Australian Sheep & Wool Show as a child and even modelled in one of their runways as a teenager," Anna said.

"As a fashion journalist, I've also had the opportunity to cover various stories that highlight the significance and innovation within the wool industry. These include reporting on events like the International Woolmark Prize and exhibitions that celebrate the use of wool in fashion.

"Through storytelling, we can capture the rich history, traditions, and cultural significance of wool production in Australia, ensuring that these narratives are passed down to future generations.

"Storytelling also serves as a powerful promotional tool, allowing us to showcase wool's unique qualities and versatility. By sharing stories of innovative designers, skilled artisans, and iconic moments in fashion history, we can highlight the beauty and value of wool as a fabric. These stories not only educate consumers but also inspire them to appreciate and support the Australian wool industry."

NEW AIRCRAFT SEATING CONCEPT USING WOOL

In a forward-thinking collaboration, The Woolmark Company and Sydney-based Caon Design Office have created a revolutionary aircraft seat design that reimagines the future of premium cabin travel and features a 3D knitted wool blend membrane.



The Modulo Aircraft Seat Concept, developed in collaboration between Caon Design Office and The Woolmark Company.

The innovative design concept, Modulo, challenges the status quo of aircraft cabin interiors by addressing key issues such as weight reduction, sustainability, and the need for frequent cabin refreshes. It utilises a 3D knitted wool blend membrane that also provides a unique tactile and visual passenger experience.

AWI CEO John Roberts says the collaboration between AWI subsidiary The Woolmark Company and Caon Design Office demonstrates a shared commitment to drive innovative solutions with eco-conscious design principles.

“By harnessing the benefits of Merino wool, such as breathability, moisture-wicking properties, and luxurious softness, Modulo demonstrates how Merino wool is uniquely positioned to elevate the future of travel through unparalleled comfort and enhanced sustainability,” John said.

“This initiative is an example of how AWI and The Woolmark Company explore and develop new applications for wool, for the benefit of Australian woolgrowers.”

Caon Design Office is a multi-disciplinary design practice based in Sydney. The studio has worked for a wide range of companies including Qantas.

What is Modulo?

Modulo comprises a distinctive fabric membrane fastened to a lightweight yet robust framework of titanium, aluminium, and carbon fibre. The semi-transparent skin, shaped by advanced 3D knitting techniques, forms a wool blend that is structural yet pliable. Carbon

and elastic polymers integrated into the fabric grant dynamic flexibility, enabling the seat to transition smoothly from an open space to a private enclosure.

“This initiative is an example of how AWI and The Woolmark Company explore and develop new applications for wool, for the benefit of Australian woolgrowers.”

John Roberts, AWI CEO

Aided by a sophisticated quick-release mechanism, the wool membrane skin can be interchanged as effortlessly as a standard seat cover. This allows airlines to not only adapt their cabin aesthetics with minimal effort and downtime, it also enables airlines to easily adapt the cabin’s ambiance to reflect seasonal themes, ensuring that the cabin environment remains contemporary and engaging throughout the year.

“In exploring how to expand the capability of the wool fibre within the airline industry we address a major bugbear of airlines in that they have to spend huge sums of money and time in changing the feel of their cabin interiors,” said the head Caon Design Office, industrial designer David Caon.

“Passengers benefit too by having more of this wonderful material which breathes and allows us to play with light and opacity to create new scenarios for privacy and relaxation.”

The knitting technology employed in Modulo also allows for the strategic integration of

wadding within specific sections of the fabric. This design choice significantly diminishes the reliance on traditional foam, leading to a seating solution that is both lighter in weight and more considerate of environmental impacts.

In addition, Modulo’s design is smartly integrated with sensors and technology to elevate the comfort and safety of passengers. These sensors actively monitor and regulate seat temperature for optimal comfort. They also prompt passengers to move periodically, mitigating health risks associated with prolonged immobility such as deep vein thrombosis (DVT).

Other potential applications

As the transport industry moves towards more sustainable and technologically advanced options, Modulo’s adaptability ensures that it can be seamlessly integrated across various other travel ecosystems beyond aviation.

The visionary design could also extend to future modes of transportation, with its lightweight structure and modular nature ideal for the evolving landscapes of hyperloops, autonomous vehicles and electric aircraft.

Modulo is not merely a design study; it represents a leap forward in interior design, focusing on passenger experience, environmental impact, and operational efficiency.

More information: www.woolmark.com/modulo

RETAIL PARTNERSHIP WITH SAKS IN THE USA

The Woolmark Company recently ran a joint marketing campaign with Saks, the premier ecommerce platform for luxury fashion in North America, to promote Merino wool apparel, building on the success of the previous year's campaign.



CAMPAIGN HIGHLIGHT RESULTS

+125%

increase in Saks.com wool sales
(compared to previous 6-week period)

+61%

above overall target campaign impressions

75,000

"wool" and "Merino" searches
(during the campaign period)

Saks is the premier ecommerce platform for luxury fashion in North America. Driven by a mission to help customers express themselves through relevant and inspiring fashion, Saks serves as a destination to explore and discover the latest from established and emerging designers.

For six weeks in November and December 2023, Saks partnered with The Woolmark Company on a fully integrated digital and social media campaign to further generate awareness and knowledge of Merino wool amongst its customers, thereby encouraging purchases of wool products on Saks.com during the peak wool buying 2023 holiday season.

The campaign leveraged imagery and assets from a custom photoshoot produced by Saks with a notable New York-based influencer, wearing leading Merino wool products sold at Saks and key Woolmark brand partners.

The partnership included a dedicated editorial landing page and aggregated wool store featuring 591 products. Total Saks.com wool sales during the six-week campaign were 125% higher than the six-week period prior to launch.

The editorial storytelling educated the Saks customer on the many benefits of Merino wool and included influencer commentary that reinforced the versatility of the fibre ranging from formal to athletic wear. This messaging was further shared with the Saks customer by a dedicated email, email banners, and social media.

"At Saks, we are focused on inspiring customers through compelling content across all of our channels," said Chief Marketing Officer of Saks, Emily Essner.

"Through our partnership with The Woolmark Company, we are excited to bring the benefits of Merino wool to life in a way that is engaging and relevant to today's luxury consumer, while also highlighting our incredible assortment of Merino wool designer picks for every occasion."

Saks

HUCKBERRY'S 72-HOUR AUSTRALIAN ADVENTURE

The Woolmark Company is running a joint marketing campaign with renowned American lifestyle and outdoor brand, Huckberry, to increase demand for the brand's Merino wool products. Featuring a 72-hour adventure Downunder, the content-rich, digital campaign highlights Australia as the source of the fibre used in the brand's high-performance products.

CAMPAIGN HIGHLIGHT RESULTS

30%
year-over-year growth in overall wool sales

7 million
total impressions
(14% above target)

118,000
video views

Launched in 2010, American brand Huckberry describes itself as "the one stop men's shop for everyday adventure", sitting between the traditional outdoor and fashion categories. Huckberry retails its own house brands, including Proof which features Merino wool as the key ingredient fibre, alongside the best third-party clothing and home goods.

Its key customers are USA-based, affluent and adventurous, younger males who love to shop online, and buy on quality not price. The Woolmark Company's own research shows that this an ideal demographic to target with the aim to build awareness and purchase of Merino wool products.

Consumer marketing campaign

In October 2023, Huckberry launched a joint marketing campaign with AWI subsidiary The Woolmark Company that runs through to June. The initial stage of the campaign was the creation of a Woolmark-branded store 'The Merino Shop' on the Huckberry website huckberry.com to drive sales of Merino wool products. The Merino Shop also includes a link to a special webpage that details how to launder and care for Merino wool products.

Left: The entrance to The Merino Shop on the Huckberry website.

Highlighted in The Merino Shop are garments from the bestselling '72-Hour Collection' of Huckberry's Proof brand. The 72-Hour Collection includes long and short sleeved T-shirts, Henley tops, polo shirts, hoodies, long pants and boxer briefs.

The Woolmark Company assisted Huckberry with sourcing for much of the collection using Woolmark-certified suppliers. Some of the wool-rich products in the collection have been quality tested to receive Woolmark Blend/Merino Perform certification.

72-hour Australian adventure video

Huckberry has garnered widespread media attention for its successful business model of providing an exceptional online experience for its customers, connecting content and commerce. The brand has mastered the art of great content marketing, engaging its audience through interesting and eye-catching storytelling.

Reflecting these strengths, the highlight of the joint marketing campaign was the production and airing of a 25-minute video of the Huckberry team visiting Tasmania to, firstly, learn about the origins of the Merino wool, and then spend 72 hours adventuring in the outdoors wearing Proof brand apparel. The video is a dedicated episode of the brand's popular 'Huckberry Presents - 72 Hours' series of videos.

Hosted by Huckberry's Chief Brand Officer Ben O'Meara and Senior Apparel Designer Sunny Chang, the episode opens with a farm tour of the 'Kelvedon Estate' family property with sixth-generation woolgrower Anna Cotton. Ben and Sunny learn about the wool fibre's on-farm origins – from breeding and selecting Merino sheep, to grazing and pasture management, shearing, skirting and sorting wool.



Huckberry's Ben O'Meara and Sunny Chang at 'Kelvedon Estate' on Tasmania with woolgrower Anna Cotton.

"We met what could easily be the happiest flock of sheep on the planet before getting our hands on some freshly sheared wool..."

True to legend, it was just as smooth, strong and itch-free from the get-go."

Huckberry website

The episode then centres around Ben and Sunny as they hike, run, kayak and cycle their way through the Tasmanian wilderness wearing the brand's Proof apparel. The apparel is put to the ultimate test by the forces of both Mother Nature and the adventurers pushing the limits. In particular, the duo wear the same Proof T-shirt for 72 hours straight to test and prove its performance benefits, including its natural temperature regulation and odour resistance.

"After 72 hours of non-stop wear through sun, wind, and sea spray, let's just say it over-delivered at every turn."

Huckberry website

"There is no product – and more specifically fabric – I've worn more during my 10 years at Huckberry than our Proof 72-Hour Merino shirts," said Ben O'Meara. "We've travelled around the world putting this Merino to the test, making sure when we tell our community it's the best on the market – it performs."





Keen to put Merino wool's capabilities to the test, Huckberry's Chief Brand Officer **Ben O'Meara** and Senior Apparel Designer **Sunny Chang** wore Huckberry's Proof garments while hiking, running, cycling and kayaking around Tasmania, thereby showcasing the brand's Merino wool activewear for a joint marketing campaign rolled out in the US.

The video episode was launched on 20 March and had been viewed more than 100,000 times in its first month on the brand's YouTube channel.

Utilising its trademark content management skills, Huckberry leveraged the video and imagery from the trip across its website to engage its wide audience and drive sales of its Merino wool apparel. For example, content was used on hub pages for its Proof brand and also the 72 Hour Collection, plus in online journal articles covering behind-the-scenes stories and outfits inspired by the trip.

Content from the trip was also used across its social media platforms and electronic direct mail.

"The joint marketing campaign has succeeded in its objective to increase target market awareness of the versatility and suitability of Merino wool in adventure and performance apparel," said AWI Business Development (Sports & Performance) & Sustainability Manager, Americas, Monica Ebert.

"By creating highly engaging content and promoting Merino wool as an intelligent investment option for performance and

adventure applications, The Woolmark Company is helping to drive growth in Merino wool purchases amongst a key target audience within the US market."

The Woolmark Company will continue to provide support to Huckberry to help and inspire it to develop and expand its Merino wool offering.

More information:

www.huckberry.com/merino-wool

www.huckberry.com/store/shop/proof-72-hours-in-tasmania

INITIAL AWI INVESTMENT STILL MAKING WAVES

Following the commercial success of its first Merino wool swim shorts launched two years ago in collaboration with The Woolmark Company, iconic French swimwear brand Vilebrequin has continued to expand its range. This proves the triumph of not only Merino wool's versatility but also The Woolmark Company's brand partnership strategy.

Vilebrequin is a French luxury brand specialising in swimwear and ready-to-wear for men and women. The brand opened its first store in 1971 and today has a global presence in more than 60 countries.

In its pursuit of finding new markets for Australian wool, AWI subsidiary The Woolmark Company in 2022 teamed up with Vilebrequin to launch a set of Woolmark-certified swim shorts. So pleased was Vilebrequin with the retail sales that the brand expanded its range the following year – and it has continued to expand the range further this year.

Vilebrequin's Merino wool collection now features swim shorts in a range of Merino wool fabrics, colours and styles. To complement the swim shorts, Vilebrequin has also launched a collection of 100% Merino wool summer shirts, ideal for the beach and casual gatherings. More wool products are under development.

"Our collaboration with Vilebrequin is a real success story for Australian wool," said AWI Regional Manager Western Europe, Damien Pommeret.

"The Woolmark Company's investment with Vilebrequin in 2022 introduced the brand to the versatility and benefits of Merino wool which resulted in buoyant sales of its initial range of wool swim shorts. Since then, the brand has subsequently invested in expanding its wool range year after year, with no further financial outlay from The Woolmark Company."

"This is an example of how a one-off investment by The Woolmark Company in a brand partnership continues to build demand for wool in future years, providing long-term benefits for Australian woolgrowers."

Damien Pommeret, AWI Regional Manager Western Europe

While driven by innovation and drawn to Merino wool's performance qualities, Vilebrequin also prioritises sustainability and is attracted to the natural, renewable and biodegradable properties of wool. Being a swimwear company, Vilebrequin is particularly impressed that wool does not contribute to microplastic pollution of the oceans.

More information: www.vilebrequin.com



Soft next to the skin but resistant enough to handle the ocean and the beach, Vilebrequin's Merino wool swim shorts highlight the true versatility of Merino wool.



Advertising by French swimwear brand Vilebrequin of its 2024 collection of Merino wool swim shorts and beach shirts.

Students create womenswear swimwear collection



In an educational initiative supported by The Woolmark Company and Vilebrequin, students from the Institut Français de la Mode (IFM), the highly prestigious French Institute of Fashion, have worked on a practical six-month project to create a range of elegant wool bathing suits for women.

The project, known as 'Woolen Waves', was part of the 2024 IFM-Kering Sustainability Certificate program. During the six months of intensive work, the students championed the natural eco-credentials of wool as an alternative to synthetic fibres and their polluting microplastics.

In March, the swimwear was presented at a unique event held at the Palais du Luxembourg (Senate) attended by a diverse audience of fashion professionals and a prestigious jury.

FACT: WOOL BIODEGRADES IN MARINE ENVIRONMENTS

PHOTO: Mitchell Pettigrew

The results of recent AWI-funded research into the biodegradability in marine environments of different fibre types were published in April in a peer-reviewed journal, adding extra scientific credibility to the positive research results for wool.

As previously reported in *Beyond the Bale*, AWI-funded research has shown that machine-washable wool fibres as well as untreated wool fibres readily biodegrade in the marine environment, in contrast to synthetic fibres that do not. The research also found no evidence to support the idea that the Hercosett resin used as part of the machine-washable wool treatment forms microplastic pollution.

The results of the research, undertaken by AgResearch, were published in April in a peer-reviewed journal, adding extra credibility and access to the research results.

The samples used in the study were sourced from comparable lightweight base-layer fabrics, each made from the six fibre types being studied: two types of Merino wool (machine washable wool and untreated wool), viscose rayon, and three synthetic fibres: polyester, nylon and polypropylene.

The study showed that both types of wool biodegraded to a high degree, as did the cellulose-based viscose rayon. Synthetic fibres showed little or no biodegradation. Significantly, the scientists did not detect any formation of microplastic polyamide fragments resulting from the biodegradation of machine-washable wool. The Hercosett resin used in the machine-wash treatment for wool is very different from common commercial polyamides.

The results of the research were published in April in an open access paper (available free on the internet) titled *Marine Biodegradation Behavior of Wool and Other Textile Fibers* in the international journal of environmental pollution *Water, Air, & Soil Pollution*.

"The publishing of this research helps demonstrate the eco-credentials of wool in a world where there is increasing concern about the seemingly ubiquitous contamination of the environment by synthetic textiles," said AWI Program Manager, Fibre Advocacy & Eco Credentials, Angus Ireland.

"The study adds to the growing body of scientific evidence that recommends an increased use of natural, non-synthetic materials, such as wool, in global textile markets."

Angus Ireland, AWI Program Manager

The research is part of a larger body of work by AWI towards better accounting for the use phase in Life Cycle Assessment (LCA) of apparel, such as that proposed in the European Union's Product Environmental Footprint (PEF) project.

"Natural fibres such as wool readily biodegrade and consequently don't amass in the environment. This important difference between natural and synthetic fibres needs to be

accounted for in the PEF methodology for it to be credible and scientifically defensible," Angus added.

"AWI's research results are being used by the Make the Label Count campaign to urge the European Commission to create a level playing field by including microplastic emissions in its PEF methodology."

Raising consumer awareness about microplastics



World free-diving champion Alice Modolo and influencer Azza Slimene in Marseille learning about microplastic pollution (left), and a screenshot of Alice Modolo from the video on GenZ channel Brut (right).

As part of the roll out of its Filter by Fabric campaign (see page 39) in France, The Woolmark Company last year organised a two-day press trip to Marseille to highlight and explain to a group of influencers in the fashion industry the impact of microplastic pollution from textiles on the world's marine ecosystems.

The trip was organised in collaboration with the No More Plastic foundation and sportswear brand MOVER. Free diving world champion Alice Modolo also attended the trip and demonstrated the prevalence of plastic waste she encounters in the ocean.

The influencers, who have more than four million followers on Instagram, also learnt how wool readily biodegrades in a marine environment and does not contribute to microplastic pollution, which is good news for the planet and the wool industry.

The trip resulted in 94 social media posts that received nearly three-quarters of a million impressions (the number of times that the posts were seen).



"The trip to Marseille was eye-opening and impactful! Surrounded by the beauty of the Mediterranean Sea, it was sobering to witness firsthand the severe microplastic pollution affecting such a stunning environment," posted influencer Azza Slimene, who has 1.8 million followers.

"Standing against textile microplastic fibres in a region deeply affected by this pollution was a powerful statement of our commitment to a cleaner, more sustainable future for fashion and our planet."

Azza Slimene, influencer

The Woolmark Company in France also collaborated with Brut, a news outlet producing short videos popular with GenZ in France, to educate its viewers about microplastic pollution. The video received nearly one million views and strong engagement from the BRUT community.

JAPANESE NIKKE BACKS AUSSIE WOOL SUPPLY

High profile decision makers from Japan's largest wool spinner and fabric manufacturer Nikke visited Australia in March to research a stable supply of wool from Australia and explore ways to revitalise the global wool industry.



AWI Product, Education Extension & Trade Licensing Manager, Japan, Tomohiro Nishizawa; AWI Program Manager, Woolmark Certification & Traceability, Mark Scott; Nikke President and CEO Mr Yutaka Nagaoka; AWI CEO John Roberts; Nikke Director, Managing Executive Officer, Apparel & Textile Division, Mr Yoshiyasu Kaneda; Nikke Executive Officer, Manufacturing Department, Apparel & Textile Division, Mr Akira Okada.

Established in 1896 at the dawn of the wool textile industry in Japan when western style clothing was starting to become popular, Nikke has defined the history and evolution of Japanese wool textiles for 128 years, and continues to produce high-quality products.

The company consumes 2,300 tons of Australian Merino wool each year to manufacture yarns and fabrics for use in a full range of products including menswear, womenswear, childrenswear, plus school, corporate and police uniforms.

Nikke's clients include apparel brands, retailers, fabric wholesalers and designers. It has annual sales worth more than A\$1.1 billion.

Nikke visit to Australia

The top three decision makers of the Nikke Clothing & Textile division visited Australia in March to research the scoured wool supply chain in Australia.

Hosted by AWI, the Nikke delegation visited three scouring facilities: Michell Wool in Adelaide, E.P. Robinson in Geelong and Victoria Wool Processors in Melbourne to examine their scouring capacities and the potential for simplifying its supply chain.

Nikke President and CEO, Mr Yutaka Nagaoka, says Australian wool is indispensable for the global wool industry.

"Australia is vital to ensure a stable supply of wool to the world. Although wool production has been stable over the past few years, there was a period when the number of sheep decreased dramatically which was a cause for concern," Mr Nagaoka said.

"At Nikke, we want to not only see a stable supply of Australian greasy wool, but also see a buoyant early stage processing industry in Australia that comprises scouring and carbonising. Stable procurement is very important for us.

"We believe that protecting the early stage processing industry in Australia will avoid geopolitical risks."

"We ask for Australia to provide a stable supply of both greasy wool and early processed wool."

Mr Yutaka Nagaoka, Nikke President and CEO

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.

Continuing its long-standing relationship with the Woolmark brand, Nikke works with AWI and its subsidiary The Woolmark Company to co-develop fabric innovations and promote wool – see opposite page for an example.

"The Woolmark Company has introduced us to several notable brands for business development and has also helped us to develop new product innovations and applications," Mr Nagaoka said.

Global expansion

Mr Nagaoka says that although wool consumption in Japan faces the challenge of a declining population, the global outlook is promising.

"We will strengthen our efforts to focus not only on Japan but also on the world. In Japan, wool consumption has declined due in part to a decrease in population since 2010. However, on a global scale, the population is increasing, and we believe that the textile industry is a growth industry. We are therefore moving forward with initiatives aimed at maximising overseas growth," Mr Nagaoka said.

"Wool is a natural fibre and has the potential to capitalise on the global trend towards sustainability.

"As well as continuing to defend our traditional markets such as school and business uniforms, we are currently focussed on expanding our knitted products."

More information: www.nikke.co.jp



Nikke President and CEO Mr Yutaka Nagaoka (right) at the Melbourne Wool Selling Centre, with Nikke executive Mr Akira Okada.

DESCENTE EXPANDS INTO WOOL OUTERWEAR

The premium brand of the third biggest sportswear group in Japan has introduced its first mid/outerwear wool collection, which is being marketed in collaboration with The Woolmark Company.



The Hard Shell Hooded Wool Coat from the latest DESCENTE ALLTERRAIN wool collection, which is certified by The Woolmark Company as Wool Rich Blend.



Keiji Tsubouchi of Descente's garment development section examining the new wool collection during a workshop with The Woolmark Company.

Descente Japan is the third largest Japanese sportswear group with annual sales of about A\$1.3 billion. It is an affiliated company of Itochu, one of the largest trading houses in Japan, which recently became a Woolmark licensee. Descente Japan operates several major outdoor sports' brands.

In September 2023, AWI subsidiary The Woolmark Company launched an autumn/winter marketing campaign with DESCENTE ALLTERRAIN, the premium line of Descente Japan which is one of the most popular Japanese sportswear brands. The brand is well positioned and renowned for incorporating high-end sportswear functionality into contemporary lifestyle wear.

The autumn/winter marketing campaign was followed up with a spring/summer marketing campaign launched in February of this year.

Wool range broadens into outerwear

The two-season campaign promoted the brand's first wool collection outside of base-layers, which included coats, jackets and trousers. The products are made from an innovative waterproof three-layer wool blended fabric from Japanese licensee Nikke (see opposite page) using 17.5 and 18.5 micron wool.

The new DESCENTE ALLTERRAIN wool collection is available in stores and online across Japan.

The marketing collaboration was focussed on raising awareness of Merino wool's benefits for premium urban wear, and on maximising sales of the collection.

The campaign used website banners, social media, email marketing and running paid advertisements to drive online traffic to a dedicated landing page on the DESCENTE ALLTERRAIN e-commerce platform that showcased the campaign's products. There was also an advertorial about the collection on digital fashion magazine *POPEYE Web*, which is one of the most popular young men's fashion magazines in Japan.

Result of long-standing relationship

The Woolmark Company has built a long-standing relationship with Descente Japan that began in 2018 when AWI organised an inspiring tour of several Australian wool-growing properties for representatives of several brands of Descente Japan.

Prior to the trip, Descente had used only a small amount of wool, however it subsequently decided to expand its use of wool. The Woolmark Company has subsequently undertaken joint marketing collaborations with several Descente brands including Musingwear and Lanvin Sport.

The new collaboration with the DESCENTE ALLTERRAIN collection is the latest positive

outcome of the ongoing successful business relationship with Descente Japan. Its new collection is the result of workshops provided by The Woolmark Company to the Descente product development team.

Keiji Tsubouchi of Descente's garment development section, who has worked at Descente for 35 years, says the company is increasingly looking at natural fibres to address how sportswear can best handle sweat, heat and other issues that synthetics struggle with.

"By understanding how natural fibres work, we have developed new materials for sportswear. For us, Merino wool is a special fibre. Its moisture-wicking and thermal control properties are very attractive qualities for sportswear. The soft feel of the wool also gives a certain elevated quality to the wool products," Mr Tsubouchi said.

"Connecting with The Woolmark Company has given our product development team a better understanding of wool's attributes and benefits. The certification from The Woolmark Company also provides our customers with extra reassurance that they are buying a quality product. Consumers are increasingly looking at how products can benefit their wellbeing – and now is the right time for them to discover wool's charms."

It is anticipated that further campaigns with brands in Descente Japan will be undertaken in the future, with joint product development and retail of additional wool product lines.

JAPANESE TOYOSHIMA'S AUSSIE WOOL JOURNEY

AWI works closely with large Japanese trading house Toyoshima to help build the demand for Australian wool. The company recently visited Australia with the aim to source wool from specific properties and build its traceability credentials.



Woolgrower Jack Cotton of 'Kelvedon' near Swansea in Tasmania welcoming Mr Junya Nakai of Toyoshima.



Mr Junya Nakai examining the sheep at Tony and Natalie Hewitt's 'Galmara' property at Grabben Gullen in NSW.

Founded in 1841, Toyoshima is a Japanese trading house handling various textile products including wool, with annual sales worth A\$2.2 billion.

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 for a variety of uses, not only for general apparel, but also for military, police and school uniforms. Toyoshima also trades in other wool products including wool tops.

Toyoshima visit to Australia

In March, Mr Junya Nakai of Toyoshima, who is in charge of the company's greasy wool and wool tops business, visited Australia from Japan to visit several wool-growing properties.

Mr Nakai was introduced by AWI to Tasmanian wool broker Wool Solutions. He spent two days in the state to meet with the Wool Solutions team and visit several properties to learn more about the wool supply chain. The properties visited were: Jack Cotton's 'Kelvedon' near Swansea, John and Isobel Taylor's 'Winton' at Campbell Town, Will and Nina Bennett's 'Ashby' at Ross, and Antony Gunn's 'Forton' at Powranna.

"Toyoshima is interested in undertaking a single origin or single region traceability project involving the purchase of Tasmanian wool in the near future. Wool-growing in Tasmania has a great history and can provide a compelling provenance story," Mr Nakai said.

"People in the industry in Japan have a good image of Tasmania, and I think Australia as a whole has a very strong relationship with Japan and Japanese people.

"Australian wool is well regarded as the major supplier of high-quality wool to countries all across the world and it is expected that Australia will continue to produce a stable supply of high quality raw materials in the future. This is very important. Traceability is becoming an important issue for consumers, and brands and suppliers are responding to this demand for transparency of origin."

During his trip, Mr Nakai visited the AWI office in Sydney to meet with AWI staff. He was also accompanied on visits to the Sydney Wool Selling Centre at Yendorra and Lindner Quality Socks in Crookwell, as well as two NSW wool-growing properties: Tony and Natalie Hewitt's 'Galmara' at Grabben Gullen, and Anthony and Kristen Frost's 'Thalabah' at Laggan.

Building demand for Australian wool

Mr Nakai says he welcomed the energy and positivity for the wool industry he experienced during his visit to Australia.

"I hope to build on this energy when I return to Japan. Toyoshima already has regular meetings with AWI subsidiary The Woolmark Company, and we hope that we can continue to promote wool materials and sales activities, and thereby contribute to the development of the wool industry," he said.

"The Woolmark Company has helped us a lot and already introduced us to a number of domestic and overseas brands and factories, including in Korea and Vietnam, and new business opportunities and product developments are increasing.

"Furthermore, natural fibres are making a comeback with consumers which will benefit the demand for wool. If we are able to educate the younger generations in Japan about the natural and environmental benefits of wool, and increase this awareness to the same level as in Western countries, the use of wool will increase."

MARKETING PREMIUM SUIT BRAND IN JAPAN

AWI's marketing arm The Woolmark Company in November launched a marketing collaboration with one of the major premium suit brands in Japan, Paul Stuart, to increase sales of Merino wool business wear and thereby help defend a core market for Australian wool.



Window and in-store displays at a Paul Stuart store in Tokyo, Japan, promoting premium Merino wool apparel.

Paul Stuart is a major player in Japanese premium suiting products made from Merino wool, with annual sales of about A\$60 million.

AWI CEO John Roberts says, although many of AWI's marketing collaborations are aimed at taking advantage of the apparel trend towards casualisation, the company is also defending Australian wool's traditional, high-volume markets through collaborations such as this one with Paul Stuart.

"Japan has the world's oldest population, and the Japanese suiting market remains comparatively large, so it makes sense to develop collaborations with leaders in this apparel category," John said.

"By collaborating with brands selling high volumes of premium wool apparel, we are applying upward pressure on the market for Merino wool which is delivering real value to Australian woolgrowers.

"As the northern hemisphere went into its autumn and winter season, this was the perfect time to remind consumers in Japan of Merino wool's premium, natural benefits so that they keep wool front of mind when they are considering which garments to purchase."

Campaign exceeded targets

The joint marketing campaign, which launched in November 2023, promoted nearly 30,000 Merino wool pieces including suits, jackets and coats, worth A\$18.6 million in total retail value.

The two-month campaign exceeded expectations with sell-through 28% above target and sales value 12% above target.

The campaign, which had the theme 'Dressed genuine in wool', highlighted Merino wool's position as a premium fibre and the quality of the apparel's manufacture. It targeted affluent men and women mainly in their 40s and 50s through a combination of digital, social media and in-store marketing.

The campaign featured on the home page of the Paul Stuart website plus two dedicated landing pages where customers were guided through to Merino wool products on the brand's e-commerce store for purchase. It also gained additional visibility through displays in 81 brick-and-mortar stores across Japan.

Further potential collaboration

Paul Stuart is an American brand licensed in Japan to the Sanyo Shokai Group, which is the ninth largest Japanese apparel group. Sanyo Shokai owns 20 brands with more than 700 stores and has annual sales of A\$615 million.

It is anticipated that the success of the collaboration with Paul Stuart will lead to larger, multi-year promotions of Merino wool by some of Sanyo Shokai's other brands in the future.

General Manager of Paul Stuart Operational Headquarters, Mr Susumu Sakurai, said the joint

marketing campaign was a first for Paul Stuart.

"We had never conducted a sales promotion on the theme of wool before. It was a great opportunity for us to try out a wool sales promotion with The Woolmark Company's suggestions and support," Mr Sakurai said.

"We are once again grateful for The Woolmark Company's cooperation. We hope to expand this initiative to other brands within the company in the future and implement wool sales promotion with The Woolmark Company over the medium to long term, which we hope will lead to improved sales and image for each brand of Sanyo Shokai."

EC and Product Operation Manager of Paul Stuart, Mr Jun Takahashi, also said the company very much appreciated the wool promotion and contribution from The Woolmark Company.

"Paul Stuart is committed to high-quality wool fabrics from the historic weaving region of Bishu, mainly made from Australian wool, for both men's and women's wear, and has adopted it as a standard material. I believe we were able to strongly promote that recognition to consumers once again through this collaboration," Mr Takahashi said.

"We would like to continue to promote the quality of wool as a brand in the future, for example by using the tools created through this collaboration in our shops."

SNAPSHOT OF RECENT ACTIVITIES IN CHINA

PHOTO: owngarden

China is the largest and most important market for the Australian wool industry. The Woolmark Company team there undertakes a wide range of activities including technical R&D, Woolmark licensing, public relations and marketing. Here is a small selection of some of the company's recent activities there.

Information sessions with supply chain partners

In March this year, The Woolmark Company held its second, annual information sharing event for brand and supply chain partners. Held at the Wool Education Centre at Donghua University, Shanghai, the three-day event was attended by 128 participants, which is a 20 per cent growth from the previous event.

Aligning with the theme of The Woolmark Company's Autumn/Winter marketing campaign in China, 'When Merino Met Mother Nature' (reported in the March edition of *Beyond the Bale*), the event featured daily forums led by The Woolmark Company staff. In addition, industry experts presented on subjects including wool product design, seamless knitwear, and application of plant dyes.

Available for participants to view and touch were swatches and samples such as the Optim water and wind resistant fabric, lightweight woven fabrics, wool denim, digital printing, and seamless designs.

As a result of the event, attendees not only became more informed about the benefits and possibilities of wool, but they also expressed keen interest in sourcing wool innovations and there were several requests to become Woolmark licensees.



The Woolmark Company's brand and supply chain partners attending a three-day information sharing event in Shanghai.

Wool's biodegradability in soil applauded



Part of The Woolmark Company's exhibit showing the biodegradation of a Merino garment after three months buried in soil.

As reported in the June 2023 edition of *Beyond the Bale*, The Woolmark Company in China launched a marketing campaign on Earth Day in April 2023 that highlighted wool's biodegradability. As part of the campaign, The Woolmark Company created a two-minute video at the end of which three Merino wool garments were buried in soil to raise awareness of how wool returns to nature.

The wool garments have now been retrieved – having been buried for two months, three months, and six months respectively – and were exhibited by The Woolmark Company at the MODE trade show at Shanghai Fashion Week in March. The exhibit showcased wool's natural biodegradation in soil and highlighted that the fibre contributes to a sustainable circular model of textile production that minimises waste and pollution.

This was the first time The Woolmark Company had demonstrated the biodegradable properties of wool in a visual form in China. The exhibit was later displayed at the curated concept store R130 in Shanghai.

"This new exhibit aligns with The Woolmark Company's strategy to highlight to consumers the natural eco-credentials of wool and the importance of fibre consideration in consumers' purchasing decisions," said AWI Country Manager for China, Jeff Ma.

The Woolmark Company's 2023 Earth Day campaign won the Gold Award for 'Environmental Protection and Green Communication' at the 19th China Golden Awards for Excellence in Public Relations, underscoring The Woolmark Company's impactful creativity and execution of its marketing of wool's eco-credentials.

In addition, The Woolmark Company won the 'Sustainable Development Communication Value Award' at the 2023 Cailian Press ESG Awards for its commitment to sustainability, illustrated by its Earth Day campaign, its Autumn/Winter 'When Merino Met Mother Nature' campaign, and its co-branded traceable Merino wool collections.

"The awarding of these two prominent accolades received significant visibility in China and reinforced not only The Woolmark Company's positive reputation but also the role that wool can make in the global drive towards a more environmentally conscious future," Jeff added.

New Australian Consul-General visits Woolmark China office



Woolmark Technical Services Manager, Cary Cai; Australian Consul-General in Shanghai, John Williams; AWI Country Manager for China, Jeff Ma; Austrade Senior Trade and Investment Commissioner, Ms Liu Bing; AWI Senior Manager, Marketing Comms & Sustainability, Holly Ho.

In March, the new Australian Consul-General in Shanghai, Mr John Williams, and Austrade Senior Trade and Investment Commissioner, Ms Liu Bing, visited The Woolmark Company's office in Shanghai.

The Woolmark Company team provided them with overviews of local industry, consumer and sustainability insights; recent marketing campaigns by The Woolmark Company; traceable collections with local brands EDITION and NEIWAI; and the latest innovations with local supply chain partners including products that have been prototyped and commercialised.

More information: Listen to AWI Country Manager, Jeff Ma, in Episode 255 of AWI's The Yarn podcast at www.wool.com/podcast

DR ALLAN DE BOOS – A LIFETIME WITH WOOL

Recently retired, Dr Allan De Boos has worked in the wool industry for his whole career, including with AWI for more than 20 years. He has a lifetime of wool knowledge with expertise in fabric and garment manufacture, fibre science and tertiary education.



Dr Allan De Boos recently retired from AWI having spent more than 20 years with the company. He is highly regarded throughout the global wool industry for his in depth knowledge of wool – from the technical attributes of the wool fibre itself, through the textile manufacturing supply chain to the final garment.

While most of his career was spent in textiles, he was very mindful of the on-farm source of wool and the hard work that Australian woolgrowers put into growing their premium fibre.

Dr De Boos began his education in textiles at the University of NSW where he earned a Bachelor of Science degree in Textile Technology – Chemistry in 1967. At the beginning of 1968, he joined CSIRO as a research scientist where he was involved initially in research into the machine washability of wool garments and then the finishing of wool and blend fabrics. In his early years at CSIRO, he also completed a PhD at the Victoria University of Manchester (Department of Chemical Physics).

While employed at the CSIRO Division of Wool Technology, he worked closely with wool fabric and garment manufacturers, assisting them to use objective measurement in problem solving and to improve fabric quality. He contributed significantly to the exploitation of SiroFAST and other systems that measure the mechanical and dimensional properties of fabric that can be used to predict performance in garment manufacture and the appearance of the garments during wear.

During his time with CSIRO, Dr De Boos had three periods of secondment to work with research institutes and industry in Europe: at the Deutsches Wollforschungsinstitut (DWI) in Aachen, Germany; at the International Wool



Secretariat based at the Ilkley Development Centre in the UK; and at Consiglio Nazionale delle Ricerche, Istituto di Ricerche e Sperimentazione Laniera 'O. Rivetti' at Biella in Italy.

After 34 years at CSIRO, Dr De Boos in 2002 joined AWI where he worked as a project and program manager in various areas, including management of the fundamental wool research program and as Woolmark technical manager.

From 2014 until his retirement, Dr De Boos was responsible for the development and delivery of the Woolmark Wool Science and Technology program, courses from which he delivered on site at universities and colleges in China and India. In this role, he was appointed a 'Distinguished Professor' at Yantai-Nanshan university in Shandong province. With most Australian wool processed overseas, mainly in China, it is in the interest of Australian woolgrowers that the people who work with it there understand all about its attributes and the technology used to process it.

Dr De Boos also served for a number of years as chairman of the Technology and Standards Committee of the IWTO.

He is the author (or co-author) of more than 100 reviews, research and conference papers in the fields of wool fabric finishing and fabric objective measurement.

"Allan is highly respected amongst his colleagues and the wool supply chain for his knowledge and broad skill set that he has acquired during the past 60 years," said AWI CEO, John Roberts.

"He has always been a committed and conscientious professional, benefiting Australian woolgrowers and the whole industry.



"Despite Allan's decision to reduce his workload and retire from AWI, he has committed to remaining accessible in the background offering his expertise and advice as needed. This dedication stems from his lifelong passion for wool and his ongoing commitment to educating future generations.

"He has been a credit to the Australian wool industry, and I thank him for his long and productive career in wool."



RECENT HIGHLIGHTS OF STUDENT EDUCATION

AWI subsidiary The Woolmark Company continues to foster the education and development of tertiary students – inspiring them in the early stage of their careers about the properties and benefits of Merino wool, and encouraging them to continue to champion the fibre as they progress through their professional lives. Here is a selection of some of The Woolmark Company's recent work in this area.

US fashion students on Aussie wool tour



The US students with woolgrower *Lucy Fenton* (centre) at Vasey Farm near Balmoral in Victoria.

Students and their teachers from the Fashion Institute of Technology (FIT), part of the State University of New York and one of the most prestigious fashion schools in the world, received an eye-opening journey through Australia's wool supply chain when they visited the country in February.

The international trade and marketing students explored the 'Vasey Farm' and 'Glendemar' wool-growing properties in Victoria, received an inside look at Australia's quality assurance and testing facilities at AWTA, and gained insights into logistics at AWH in Melbourne.

In Sydney, the students experienced the wool auctions at Yennora and visited the AWI office to meet with staff and receive an induction in research, sustainability, Woolmark licensing, The Wool Lab sourcing guide, and the Australian market. The students also visited APG & Co (which owns iconic fashion brands Sportscraft, SABA and JAG) to meet with buyers, discuss marketing and trade logistics, and view past, current and future collections.



LVMH Master Classes in France



Founder and CEO of Swiss sports brand *MOVER*, *Nicolas Rochas*, discussing wool's versatility in sportswear with 38 students in Paris in February.

LVMH's Institute of Métiers d'Excellence (Professions of Excellence) organises educational Master Classes for students specialising in sales and fashion design. The students work part-time within the LVMH luxury goods group and benefit from Master Classes by learning about and discovering other segments within the industry. LVMH boasts such prestigious headline fashion brands as Christian Dior, Céline, Givenchy, Fendi, Marc Jacobs, Stella McCartney, Kenzo and more.

The Woolmark Company has been supporting the Master Classes for six years by organising five each year in Paris for the students. Through its involvement in the Master Classes, The Woolmark Company educates the students about wool and positions it as the ultimate sustainable luxury fibre.

The Woolmark Company has this year included some key partners that actively work on developing products with Merino wool as guest speakers in the Master Classes. The guest speakers have included Founder and CEO of Swiss sports brand *MOVER*, *Nicolas Rochas*; Founder and CEO of French luxury tailoring brand *17h10*, *Caroline Rey*; and textile consultant at French sports brand *Hopaal*, *Stéphanie Meigné*.

Forging future trends in Türkiye



Students from *Halic University* at an exhibition of their work in February, with *Gulay Gokbayrak* of *The Woolmark Company Turkey* (centre left).

Students in the Fashion Design Program of Halic University in Istanbul have used Australian sheepskins to create a collection of garments for a pioneering project in fashion innovation titled 'Forging Future Trends'.

The project was a collaboration between Halic University, The Woolmark Company and *DABBAGH Deri*, a leading supplier of quality and ethically produced sheepskin. *DABBAGH Deri* is a Woolmark licensee and a member of the *DABBAGH Group*, headquartered in Australia.

Under the mentorship of industry experts and seasoned designers, the students created a collection that embodies the ethos of modern fashion: innovative, timeless, and environmentally conscious. The collaboration underscores the importance of industry-academic partnerships in driving innovation and sustainability within the fashion sector.



NURTURING USE OF WOOL BY LOCAL DESIGNERS

AWI's marketing arm The Woolmark Company held a successful workshop for emerging Australian and New Zealand fashion designers in March, to upskill their knowledge of Merino wool and thereby help increase use of the fibre in their collections.



Designers that attended the Incubation Lab workshop held in March in Sydney. Pictured standing from the left: *Caroline Reznik, Eugene Leung of INJURY, Jillian Boustred, Henry Cousins of Charlton, Courtney Zheng, Ally May Carey of Tres Studios, Rory William Docherty, Liandra Gaykamangu of Liandra, Angelica Kilkolly, and Clementine Hurley, Business Development Manager – Fashion and Product for Australia and New Zealand at The Woolmark Company.* Seated from the left are *Tarek Kourhani of KOURH, Dan Tse of INJURY, Alvi Chung of SPEED, Ruby Pedder, and Xixi Wu of Xi Wu Studio.*



Attendees of the Incubation Lab workshop examining wool fabrics and garments.

In response to high demand following the successful pilot edition the Incubation Lab workshop held in November last year, The Woolmark Company held another edition of the Incubation Lab in Sydney in March, specifically tailored for aspiring designers from Australia and New Zealand.

The Incubation Lab workshop is a vital new platform from The Woolmark Company connecting up-and-coming fashion creatives with the versatility of Australian Merino wool. Through a comprehensive program featuring educational sessions and insights from industry leaders, participants gain valuable market knowledge and resources to enhance their design capabilities with wool.

“By providing in-depth information and inspiration about the properties and benefits of Merino wool. The Woolmark Company encourages the designers to use the fibre in their designs as they progress through their professional lives,” said Clementine Hurley, Business Development Manager – Fashion and Product for Australia and New Zealand at The Woolmark Company.

“The initiative further cements The Woolmark Company’s commitment to nurturing up-and-coming talent and propelling the future of the fashion industry in the region with a focus on wool.”

Attracting a diverse group of participating designers, the workshop in March covered key topics including sustainability practices,

circularity, traceability, global legislation, product innovation, brand marketing, social media storytelling and fashion forecasting.

The workshop enabled attendees to engage with experts from The Woolmark Company. In addition, Los Angeles-based designer Zoe Latta – co-founder and director of clothing brand Eckhaus Latta – provided via video link insights into the role of wool in their business. From sharing her industry background to advice on business development and insights into the US market, Zoe’s valuable expertise envisioned a future where ingenuity drives the evolution of the industry.

The next edition of the Incubation Lab is planned for October.

MARKET INTELLIGENCE REPORT

Forecast production volumes

2023/24 season

The Australian Wool Production Forecasting Committee (AWPFC) in April updated its forecast of Australian shorn wool production for the current 2023/24 season to be 324 million kilograms (Mkg) greasy, which is 1.0% lower than the 2022/23 estimate and a 4 Mkg downward revision of its previous forecast in December.

The number of sheep shorn during 2023/24 is expected to remain very near the 2022/23 season level of 71.6 million head at 71.5 million. Average cut per head is expected to be 4.53 kg greasy, down 2.2% compared to 2022/23.

Australian Wool Testing Authority (AWTA) key test data shows no change in mean fibre diameter (20.8 microns) or vegetable matter (2.2%), a 2.1 mm decrease in staple length to 87.5 mm and a 0.6% reduction in yield to 65.8%.

Season production by fibre diameter

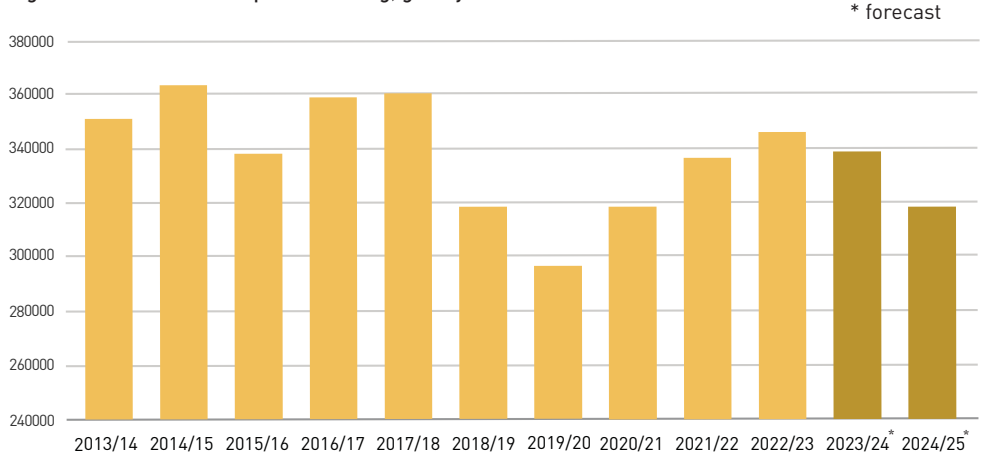
At the three-quarters point of the current season, the fibre diameter distribution of the national clip is enlarging at both ends of the micron spectrum. Production gains of 11.4% has been recorded at the finest (less than 18.5 micron) end of the spectrum. The broadest wools of greater than 23.5 micron have increased 6.6%. The downside of the production data is in the mid microns.

Fine wool Merino of 18.6 to 20.5 micron has dropped 4.2% of its percentage share, but 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.

The lower wool cutting crossbred section of the clip is growing in percentage terms of the clip which leads to more animals cutting 2.5 kg versus 5 kg per head of the Merino breed. The anecdotal reports from the past five years that Australian farmers are turning to meat sheep is now evidenced by the data.

The broader than 23.5 micron wools now contribute 20.2% of volume to the national clip so far this season. If this holds through till season's end, it will be the highest percentage share for more than a decade or two.

Figure 1: Australian wool production (kg, greasy)



2024/25 season

The AWPFC's first forecast of shorn wool production for the 2024/25 season is 306 Mkg greasy. This is a 5.8% decrease on the expected 2023/24 season final estimate.

A reduction in the number of sheep shorn (down 6.0%) is expected in most states but

particularly in Western Australia and Victoria. Uncertainty surrounding the seasonal outlook and lower gross margins for sheep and wool production compared with alternative enterprises have impacted sentiment among producers which contributed to the reduced forecast of shorn wool production for the new season.

Figure 2: National clip by micron, 2023/24 season up to 1 March 2024

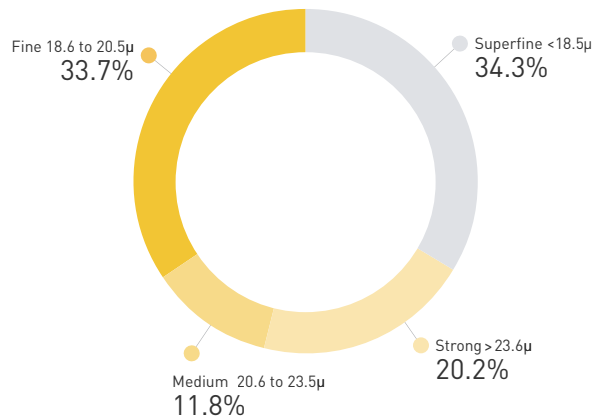
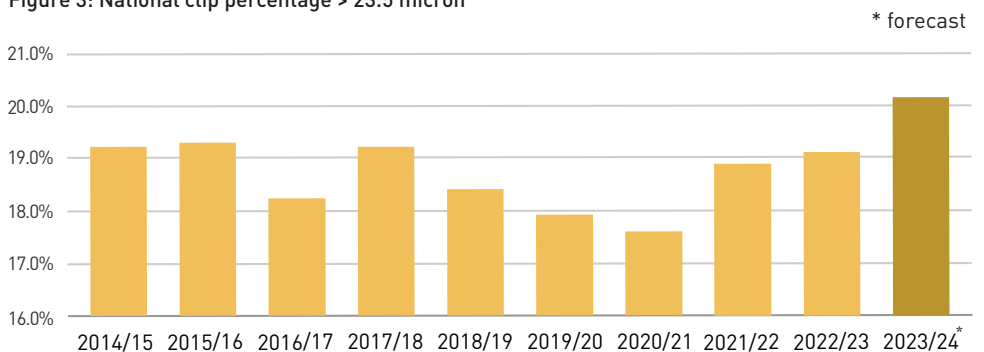


Figure 3: National clip percentage > 23.5 micron



Wool price movements

Price levels for wool when measured by the Eastern Market Indicator (EMI) in US dollars are now the most attractive for manufacturers and end users for a decade – apart from a four month period within the pandemic influenced market of 2020. The US dollar prices do remain the key indicator of wool demand. Local Australian dollar prices are holding value relatively better, but the current auction levels are predominantly influenced by the weaker Australian dollar rate of exchange against the US dollar.

Aspirational luxury shoppers have been forced to curb spending due to the high inflation and macroeconomic issues plaguing wool's major consumer markets in North America and Europe. Shoppers are prioritising essential items and boosting savings. Therefore the higher priced wools – the finest – have suffered the greatest since the commencement of the 2023/24 selling season.

In China, this demographic has also been the most impacted. The ongoing real estate

Figure 4: Eastern Market Indicator (EMI) during the past decade



crisis and stock market devaluations are the primary reasons spearheading the drop offs in spending in that nation. Whilst these economic issues are set to gradually improve in coming years, they may have lingering effects on consumer confidence.

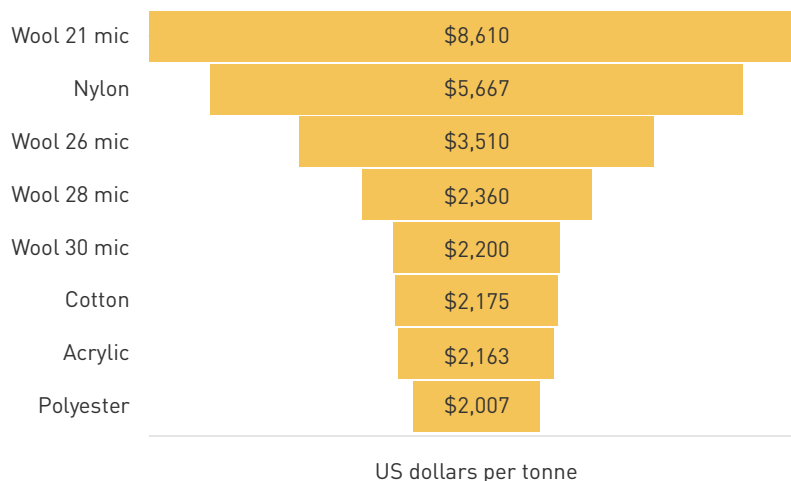
In comparison to the entire Merino sector, the crossbred wool types have staged a price recovery since the start of the season, albeit from a very poor, low price basis.

Alternative fibre price comparison

The past 12 months has seen the price of most of the extruded synthetic fibres and cotton alternatives to wool fall below the crossbred wool values.

Since the pandemic, these crossbred wools of 26 to 30 micron had been sitting underneath the values being paid for cotton, acrylic and polyester, but now are surging above their competing fibres as synthetics and cotton fall and crossbred wool regains some favour in the textile business.

Figure 5: Price of fibres at February 2024 (US/tonne)



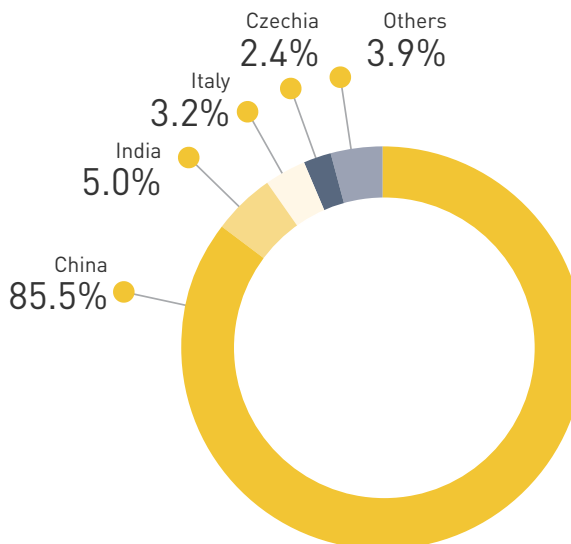
Export destinations for Australian wool

Not unsurprising, the 2023/24 season has seen the Chinese import of Australian wool grow even further. Current export data show that 85.5% of all Australian wool flowed through to China. That compares to last year's completed season figure of 82.6% by volume.

India is running at 24% less weight imported from Australia as a percentage of the total exports so far this season compared to last season's total share.

Italy is currently running at 12% lower import levels than last year whilst Czechia is just 7% short of last season's market share of exports.

Figure 6: Export destinations by volume



RESILIENCE SHOWN BY WOOL TRADE AT IWTO

AWI Global Strategic Advisor Peter Ackroyd reports on some items of interest from the recent IWTO Congress in Adelaide and the current mood in the wool textile trade. Mr Ackroyd is a former President of the International Wool Textile Organisation and is Chief Operating Officer of the Campaign for Wool.



AWI Global Strategic Advisor, Peter Ackroyd.

EU Product Environmental Footprint (PEF): IWTO is currently making common cause with cotton and other natural fibres in a quest to make the Make the Label Count campaign really count. This relatively new development was well amplified at the IWTO Congress in Adelaide by IWTO President Klaus Steger. Perhaps it required taking a closer look at key retail players in the PEF consultative process to remind the trade of the seemingly bottomless pit of cash and resources available to those in the global textile industry that would seek to discredit wool's reputation in fashion and lifestyle. The membership list of Cascale (formerly known as the Sustainable Apparel Coalition) reads like a rogue's gallery of the environmentally irresponsible, with funding that wool could only dream of for its fight for a fair hearing in the corridors of power in Brussels and beyond.

Global sustainability standards for wool:

At the opening IWTO Executive Committee meeting in Adelaide, chairman of the Italian weaving company Reda, Francesco Botto Poala, reported on the recent formation of a dedicated Wool Section within the Italian textile and fashion association Sistema Moda Italia (SMI). A positive consequence of the formation of the SMI Wool Section is that it has made a commitment of €100,000 (about A\$163,000) per year for three years to IWTO for approved projects. The Italian group stressed the recent granting of €100,000 per annum for IWTO

project funding should be in part dedicated to the creation of an IWTO Green Book that would be 'a compendium of protocols and definitions pertaining to supply chain integrity from farm to fashion'. Content of the proposed Green Book is currently under discussion, but some draft guidelines have already been compiled.

Industry marketing strategies:

If the Retail Forum at IWTO in Adelaide had been put together specifically to show woolgrowers and their trading partners, representatives and associations that effective marketing strategies are currently in place at The Woolmark Company and elsewhere, it was, according to a number of attendees not known for holding back, particularly successful. Presentations were provided on consumer marketing by The Woolmark Company's General Manager of Marketing Communications, Laura Armstrong; casualisation vs formal wear by Managing Director of Dormeuil in Paris, Richard Boidé; high performance apparel and environmental management by Executive Director of Prada, Lorenzo Bertelli; social media impacts on the consumer by designer Dion Lee; online vs bricks-and-mortar by Senior Manager at Huckberry, Jeremy Berres-Paut; and merchandising to the consumer by Head of Buying at APG/Sportscraft, Alex Kidis; as well as my own presentation on the world of retail, consumer trends and impacts on wool.

Broader micron wool:

The strong wool sector was encouraged by the presence in Adelaide of the New Zealand Associate Agriculture Minister, Hon Mark Patterson, who repeated his government's commitment to prioritise wool in public sector work, particularly in floor coverings in state schools and public buildings. If this edict is carried out as the New Zealand wool community believes it will be, it should give some long awaited comfort to the beleaguered strong wool sector.

Cautious optimism in the wool textile trade:

The mood in the wool textile trade, following the recent round of textile trade fairs, is one of cautious optimism as orders for winter 2024/25 in the Northern Hemisphere begin to reach spinners and weavers, albeit with a certain reticence. There is hope that activity will begin to pick up in June after several months of uncertainty following the post-Covid surge.

Whilst disturbing levels of uncertainty exist in some sectors of the wool textile processing pipeline, the industry seems relatively resilient in the face of headwinds including the situation in Ukraine, the Red Sea and Gaza, fuelled by persistent inflation and a relatively soft labour market in countries that count. Time will tell, as winter yarn and fabric orders begin to be confirmed and stocks continue to move, albeit sluggishly, at retail. One message is abundantly clear: the apparel market is continuing to polarise and it gives grounds for cautious optimism that several retailers that can shift volumes clearly see their future lies in the better end of the business.

Trade shows still below pre-Covid levels:

Seasonal textile trade shows forced to shut down for four seasons during Covid, are still striving to return to 2019 levels in terms of exhibitors and visitors. The European woollen and worsted spinning and weaving industry has voted key events for wool processors post pandemic in Europe to be: Pitti Immagine Filati, a machine knitting yarn show held in February and June in Florence; Milano Unica, a fabric event held in February and June; and Première Vision a fabric and CMT (Cut, Make, Trim) garment manufacturing event held in Paris each July and February. It is estimated these events are currently operating at 80% pre-Covid levels. Exhibitors at recent fabric fairs noted greater quality footfall in both Milan and Paris.

12+ month textile cycle:

The seasonal textile cycle has changed little over the years. For the all-important Northern Hemisphere winter season for wool, the calendar remains roughly the same: sample swatches and model garment lengths are selected from July to September; weavers await initial bulk piece orders being placed January to April; garments are produced May to July; and goods are in store for the Northern Hemisphere winter in early September. Upcoming textile trade shows for autumn/winter 2025/26 in Europe, where Woolmark licensees will be showing yarn collections at Pitti Immagine Filati in Florence and fabric collections at Milano Unica in Milan and Première Vision in Paris, are viewed by all in the processing pipeline as pivotal to any predicted upturn in what is currently, a decidedly morose market.



PHOTO: Maksym Belchenko

READERS' PHOTOS!

Have you got any interesting photos that you'd like to share with other readers of *Beyond the Bale*?

If so, please email the image and a brief description to the editor of *Beyond the Bale* Richard Smith at richard.smith@wool.com, or you can tag us #beyondthebale on Instagram.

If you email or tag a photo that gets published in Readers' Photos, you'll receive from us a paperback copy of the Kondinin Group's *The Story of Wool*.



Quenching a thirst

Imogen Turnbull (@ewe.beautie) shot this touching photo of a lamb taking a refreshing drink of fresh water on the family property at Michelago in the Monaro region of NSW.



New suits from vintage wool stock

Holly and Nicola Mason of Smitten Merino modelling the brand's debut collection of superfine Merino wool suits for women (blazer, pants, waistcoat and skirt), crafted in Tasmania from 40-year-old fabric! The genesis of these suits began when a farmer, who had lovingly stored and preserved the fabric for four decades, contacted Smitten after seeing the brand featured on the ABC TV series 'Moving To The Country'. www.smittenmerino.com.au



Wool's biodegradable benefits

Superfine woolgrower Susan Rowbottom of 'Rowensville' at St Helens in south western Victoria (centre) with a new display of the two garments that she buried in soil for six months to demonstrate the biodegradability of wool. On the left-hand side is a polyester jumper that did not biodegrade at all; on the right-hand side is a pure wool jumper that significantly biodegraded. Pictured with Susan are fellow 2021 committee members of the Women on Farms gathering at Port Fairy, Lorraine Ermacora and Catherine Haldane.



A drink and a dribble

This great photo was shot by Andrew Snodgrass (@photos_by_snoddy) at Wallaroo, South Australia.



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