Beyond thebale

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THE WOOLMARK







Beyond thebale

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FRONT COVER

AWI spending time with students from WA College of Agriculture Harvey and WA College of Agriculture Denmark who were working together with trainers on completing their accredited Wool Handling Certificate. AWI was very impressed with the students' talent, maturity and dedication to the Australian wool industry.

See pages 6-7 for more information about AWI-funded shearer and wool handler training.





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



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AWI STATE-BASED GROWER NETWORKS

AWI-supported networks are present in each state.

- AWI Extension NSW
- AWI Extension SA
- **AWI Extension TAS**

- AWI Extension VIC
- AWI Extension WA
- AWI Extension QLD

Find your grower network at www.wool.com/networks or call the AWI Helpline on 1800 070 099.

AWI WORKING FOR WOOLGROWERS

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



John RobertsChief Executive Officer
Australian Wool Innovation

AWI investment into wool harvesting solutions for woolgrowers

AWI continues with its multi-pronged approach to make wool harvesting easier and more cost-effective for woolgrowers and the industry. Finding solutions for woolgrowers has been and continues to be a leading priority for AWI.

We have run extra shearing and wool handling courses to draw new entrants into the industry and help retain those already in it (see pages 6-7). The new Wool Ambassadors Program sees young shearing and wool handling ambassadors in every state promoting the wool harvesting industry. We have also launched a campaign to encourage shearers and wool handlers from overseas to work in Australia during times of peak demand (see page 10).

AWI continues on work to develop technological options to help with harvesting. These initiatives include the biological wool harvesting project which is progressing well (see page 11). The AWI sheep delivery module is now commercialised and is being incorporated in more and more sheds across the country (see page 17).

Woolgrowers can play their part in helping attract and retain workers in the industry by providing modern, professional and safe working conditions on their properties and in their sheds. The SafeSheds self assessment program can help woolgrowers in this regard; the best practice guidelines and checklists not only cover the safety of the shearing shed and machinery but also include work practices, working conditions and staff amenities (see pages 14-15).

New AWI-funded R&D into suppressing sheep blowfly populations

AWI has recently begun investment in two new projects aimed at reducing the build-up of populations of the Australian sheep blowfly *Lucilia cuprina*, thereby reducing the incidence of flystrike and woolgrowers' reliance on chemicals. The first project aims to develop

a more effective and potent way of trapping sheep blowflies so that blowfly populations can be suppressed (see page 22). The second project will release millions of sterile male blowflies on Kangaroo Island in South Australia to see whether it will reduce the blowfly reproduction rate and population (see page 23). If there is a successful suppression of blowflies on Kangaroo Island, it could indicate that suppression on the mainland might also be possible.

New AWI study backs wool for 'stop-go' sports

A recent AWI-funded study into the effectiveness of wool next-to-skin activewear has revealed some exciting results that the company is now using in its marketing to the sports and outdoor industry and consumers to build demand for Australian wool. The study provided the scientific proof that 100% wool base-layer garments (in comparison to other natural and synthetic fabrics) provide greater thermal comfort during outdoor 'stop-go' sports, such as hiking, cycling and rock climbing that encompass multiple activity and resting phases. The benefit is most noticeable during the resting phases of these sports when the potential for experiencing 'after-chill' is greatest.

Anecdotal evidence has often indicated that baselayers made from wool are more comfortable. However, in the absence of scientific evidence, some sports and outdoor brands have been reluctant to preference wool over other fibre types – hindering potential future demand for wool. With the new laboratory proof to validate wool's superiority, more brands will hopefully now choose to use the fibre in their products.

The study also suggests that sportspeople who wear 100% wool base-layers have more energy available to devote to their sporting activity, compared to if they wear 100% synthetic or other natural base-layers. This is because wool's natural thermoregulating qualities mean that less of the sportsperson's energy is needed to maintain their thermal equilibrium. See pages 38-39 for more information.

AWI joint marketing campaigns with brands and retailers

One of the main ways that AWI's marketing arm The Woolmark Company directly builds demand for Australian wool is through undertaking marketing collaborations with leading brands and retailers across the world. There are reports in this edition of *Beyond the Bale* of several such marketing collaborations during the recent Northern Hemisphere peak selling autumn/ winter season. A campaign typically aims to, firstly, increase consumers' awareness of wool's benefits and put them in a purchase mind-set. Importantly, the campaign then drives and directs customers on a pathway to make wool purchases at retail.

The marketing campaigns can be complex, so to give readers more of an insight into them, we provide an in-depth look at all of the elements of one particular campaign, on pages 46-47, with iconic retailer Hudson's Bay in Canada. This successful campaign included a variety of digital and social marketing tactics to drive online customers to a Wool Shop on the Hudson's Bay e-commerce website, as well as more traditional marketing in the company's brick-and-mortar stores across Canada.

WoolPoll 2024: investment in industry R&D and marketing

2024 will see woolgrowers vote on what levy rate they collectively pay for research, development, and marketing in WoolPoll 2024. Among the rural research and development corporations (RDCs), AWI is one of two that has a democratic three-yearly vote on what the rate should be. Everyone who has paid \$100 in wool levy over the past three years is eligible to vote. Voting can be done online, via the printed ballot paper, or by email and will take place from 20 September until 1 November. Our desire is for growers to make an informed decision about their industry and their RDC, and we encourage them to learn as much as possible through publications like *Beyond The Bale*.



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.

The Woolmark Company is a subsidiary of AWI. It undertakes R&D and marketing to increase the global demand for Australian wool.

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

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 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 Kit 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.woolpoll.com.au



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.

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 Kit.

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.

WoolPoll **2**024

2024 WoolPoll Panel members

nder 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.

A WoolPoll Panel Selection Committee which comprised Nick Turner, Woolgrower Industry Consultation Panel (WICP) Independent Chair; Paul Maisey, Department of Agriculture, Fisheries & Forestry (DAFF); and Neil Jackson. AWI Board Director - met on 18 January to select the 2024 WoolPoll Panel members from 11 nominations provided by WICP representatives.

The aim was to deliver a WoolPoll Panel that was reflective of the diversity of levy payers. Importance was placed on the nominee's production experience and industry engagement,



The wool levies paid by Australian woolgrowers fund projects, such as shearer and wool handler training, that help ensure the sustainability of wool-growing enterprises.

as well as ensuring representation across varying wool sectors, diverse production systems and different geographic areas.

The WoolPoll Panel also includes a representative from DAFF (non-voting member), and a representative from AWI (non-voting member).

The members of the 2024 WoolPoll Panel are:

- 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)
- Rich Keniry (Cumnock, NSW)
- David Young (Bookham, NSW)
- Jo Harris, Department of Agriculture, Fisheries and Forestry
- Neil Jackson, AWI Board member.

The WoolPoll Panel had its first meeting on 23 February. The Panel elected Rich Keniry as the Panel Chair.



Phone: Brendan 0427 533 243

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Free Call 1800 655 033 www.commanderagquip.com.au 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.







Urrbrae Agricultural High School, SA



WA College of Agriculture Harvey



Bordertown High School, SA



Hamilton, Tas



Hoban, 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.

See opposite for a list of training scheduled nationwide for 2024 – more is planned. Programs are subject to change without notice. Keep an eye on the Facebook channels of @australianwoolinnovation (NSW, WA, Qld) and @shearerwoolhandlertraining (Vic, SA,

Tas) for the latest updates.

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

2024 SCHEDULED TRAINING

NEW SOUTH WALES

January to June 2024 – dates and locations for the latter six months of the calendar year will be advertised by the end of May.

- Contact pauline.smith@tafensw.edu.au for details about the New England TAFE courses.
- Contact DubboShearing@tafensw.edu.au for details about the Dubbo TAFE courses.
- Contact craig.french@wool.com for details about the other NSW courses.

Dates	Location	Level
15-19 Jan	Bookham	Novice school
5-9 Feb	Dubbo - TAFE	Novice school
12-16 Feb	Dubbo - TAFE	Novice school
12-23 Feb	Walbundrie	Novice school
19-23 Feb	Canowindra	Novice school
26-29 Feb	Canowindra	Improver
26-29 Feb	Dubbo - TAFE	Improver
4-8 March	Young	Novice school
11-22 March	Steam Plains	Novice school
18-22 March	Jugiong	Improver
18-22 March	Warren	Improver
8-12 April	Inverell - TAFE	Basic shearing
8-12 April	Dubbo - TAFE	Improver
15-19 April	Holbrook	Improver
29 April – 3 May	Daysdale	Improver
29 April – 10 May	Armidale - TAFE	Cert II shearing
29 April – 10 May	Armidale - TAFE	Cert II wool handling
29 April – 10 May	Ivanhoe	Novice school
29 April – 10 May	Armidale - TAFE	Cert II shearing
6-10 May	Cooma	Novice school
6-10 May	Dubbo - TAFE	Novice school
13-17 May	Cooma	Novice school
13-17 May	Dubbo - TAFE	Novice school
20-24 May	Glen Innes - TAFE	Basic shearing
3–7 June	Dubbo - TAFE	Improver
17-21 June	Barraba - TAFE	Basic shearing

SOUTH AUSTRALIA

Contact Josh Sneath on 0419 176 750 or email jsneath@swti.edu.au for details.

Dates	Location	Level
22 Jan – 2 Feb	Konetta	Improver
5-16 Feb	Konetta	Improver
5-9 Feb	Willalooka	Novice
19-23 Feb	Marrabel	Novice
4-15 March	Pandurra	Improver
25-28 March	Holowiliena	Improver
8-12 April	Langhorne Creek	Novice
6-24 May	Teetulpa	Improver
13-17 May	Cummins	Novice
13-24 May	Oakden Hills	Improver
27 May – 7 June	Oakden Hills	Improver
3–7 June	Jamestown	Novice
24-28 June	Streaky Bay	Novice
1–5 July	Pinindi	Novice
5-9 Aug	Karoonda	Novice
19-23 Aug	Ki Ki	Novice
9-13 Sept	Yorke Peninsula	Novice
23-27 Sept	Roseworthy Campus	Novice
28 Oct – 1 Nov	Furner	Novice
2-6 Dec	Parndana KI	Novice

VICTORIA

Contact the SCAA SWTI on 1300 787 984 or admin@swti.edu.au for details.

Dates	Location	Level
15–19 Jan	Balmoral	Novice
29 Jan – 2 Feb	Gymbowen	Novice
12-16 Feb	Bendigo	Novice
26 Feb – 1 March	Dookie	Novice
4-8 March	Dookie	Improver
15-19 April	Hamilton	Novice
6-10 May	Ballarat	Novice
17-21 June	Inglewood	Improver
1–5 July	Manangatang	Novice
8–12 July	Omeo	Novice
22-26 July	Telopea Downs	Improver
5–9 Aug	Wycheproof	Novice
9-13 Sept	Wedderburn	Novice
14-18 Oct	Penshurst	Novice
11–15 Nov	Bairnsdale	Novice
18-22 Nov	Nathalia	Novice

WESTERN AUSTRALIA

Contact craig.french@wool.com or valerie.pretzel@wool.com for details. Specific dates in each particular month are still being finalised.

Dates	Location	Level
Jan	Boyup Brook	Novice
Feb	Boyup Brook	Novice
March	Muresk	CRT workshop
March	Boyup Brook	Industry workshop
April	Boyup Brook	Novice
May	Boyup Brook	Improver
June	Muresk	Novice
June	Muresk	High school workshop
June	Muresk	Industry workshop
June	Narrogin	Trainers consistency workshop
July	Esperance	Novice
July	Esperance	Improver
July	Badgingarra	Novice
July	Badgingarra	Improver
Aug	Lake Grace	Wool handling
Aug	Lake Grace	Improver
Aug	Lake Grace	Wool handling
Sept	Great Southern	Industry workshop
Sept	Perth	Royal Perth Show
Oct	Albany	Wool handling
Oct	Boyup Brook	Novice
Oct	Katanning	National Sports Shear
Nov	Boyup Brook	Novice
Dec	Boyup Brook	Improver

QUEENSLAND

Contact craig.french@wool.com for details.

Dates	Location	Level
15-19 April	Tambo AWI/RESQ	Novice
May (dates TBC)	St George	Novice
June (dates TBC)	Barcaldine	Improver
2–6 Sept	Tambo AWI/RESQ	Novice

TASMANIA

Locky West on 0400 865 631 or email lachlan.west@wool.com for details.

Dates	Location	Level
5-9 Feb	Bothwell	Novice
12-16 Feb	Bothwell	Improver
6-10 May	Ross	Novice
29 July – 2 Aug	Fingal	Improver
5-9 Aug	Fingal	Novice
18-22 Nov	Gretna	Novice

WOOL HARVESTING RUNNING IN THE FAMILY

In October, three siblings of the Schoff family in Queensland each won titles at the National Shearing and Wool Handling Championships. They are now Queensland representatives in AWI's Wool Ambassadors Program, an important role as confidence returns to the state's wool-growing industry.

National wool harvesting champions Alexander, Grace and Karl Schoff from Chinchilla in Queensland come from a family with a background in sheep and wool.

Their father, Phil, has been shearing since he was a teenager; and their mother, Michelle, has been in the sheds most of her life too, wool handling and classing. Before the family moved to Queensland about 13 years ago, the family had a sheep station at Cobar in central western NSW, so the siblings have been involved in sheep for most of their lives.

Eldest son Alexander learnt how to shear when he was young, but he prefers and excels at wool handling.

"Growing up on a sheep station from a very young age I used to help mum with the wool handling and all other aspects of shed work during shearing," Alexander said.

"When I left school I went straight into working in the shearing sheds. I learnt on the job and also a lot from watching competitors, like Joel Henare, at wool handling competitions.

"I like that I can travel Australia with the job, looking at how each farm is run differently and learning from it. I've worked in every state with many different contractors. After I get back from New Zealand at the beginning of March, I will be going out to western Queensland and then Western Australia for the spring run."

"I would recommend wool handling to those who want to learn and do the job."

Alexander Schoff

Grace, now 23, also had a great induction into wool harvesting from her parents and began her first shearing job in November 2018 as soon as she left school.

"I was very keen to learn about shearing from the age of 13. I was always pestering my dad with questions and he patiently took the time to teach me guite a bit about how to shear. I also went to a shearing school at Willalooka in South Australia which was helpful," Grace said.

"During my whole first year of working, I'd pull up at least five minutes before the end of every run so I could watch each of the other shearers to see if I could learn something new. I found

you can always discover something different from every shearer. And if you're genuinely interested, they are more than happy to show you a few tricks they've picked up over the years.

"I love the atmosphere in the shearing shed. When you get in a team with people who enjoy their job and love having a laugh, it makes the day go way too fast. It's a great way to meet new people from all across the country and I love the challenges that come with the job."

"If you have got the heart and the willingness to continue learning and improving every day, shearing is a great career."

Grace Schoff

Karl, aged 18, says shearing wasn't at the top of his list of things to achieve when he left school, but when he started working in the shearing shed with his dad and brother as a shedhand, he gave shearing a go.

"Dad showed me how to shear first on the long blow and I worked on other sections of the sheep as the weeks went by. I shore my first full sheep in August 2022 and later in the year I went and competed at my first show in Bendigo in which I made the final of the novice and placed sixth. It was a great feeling and from then on, I was hooked," Karl said.

"In January 2023, I got a learner's pen with Ben Cocking in Henty. I thoroughly enjoy working with Ben and his crew and Ben has encouraged me by sending me to an AWI Learner's

shearing school at Walbundrie and later in the year to an Improver school at Lockhart which were both run by Richard Lahey.

"The thing that I like about the wool industry is the challenge of trying to shear every sheep as clean as possible and to improve on my technique."

"I plan on staying in the shearing industry as long as I can. I would recommend shearing if you have the passion, dedication, ambition and willingness to learn."

Karl Schoff

Triple Schoff success at the Nationals

The Schoff family had a memorable time at last year's National Shearing and Wool Handling Championships in Jamestown, with each of the siblings winning their category titles.

Alexander won the open wool handling title, Grace won the intermediate shearing title and Karl, who only started shearing in January of that year, won the novice shearing title. Their sister, Holly, along with their parents, were all there in Jamestown to enjoy the excitement of the three wins.

"It was amazing winning the Nationals," Alexander said. "But it was even better seeing Grace and Karl win because they work so hard to better themselves. It was also great to have mum, dad and my other sister Holly there



The Schoff family celebrating the wins of Grace, Alexander and Karl at the 2023 National Shearing and Wool Handling Championships, with parents Phil and Michelle, and sister Holly.



Alexander on his way to winning the 2023 national open wool handling title.

because they have supported me so much.

"I first started taking part in competitions in 2014 as a learner shearer and then I started competing in wool handling competitions in 2016 when I was in my last year at school and I absolutely loved it. I like putting myself under pressure and trying to better myself at every competition. I also enjoy meeting all the new people.

"I hope one day to represent Australia at the World Championships and become a world champion."

Grace has been taking part in competitions pretty much since she learnt to shear.

"Dad does competitions and has represented Queensland, so seeing him compete made me want to get involved. As I went to more competitions, I met heaps of amazing shearers who I could watch, and learn how they shear at competition level. Competitions are also great to catch up with mates and make new mates that have the same interests," she said.

Grace injured her shoulder a week before the National Championships last year, which she thought might hinder her performance in the competition.

"Winning the intermediate class was a huge shock, I was by no means expecting such a good result with my injury," she said.

"The support from most of the Queensland team was really good, and I had a really good time catching up with people I hadn't seen in years."

Karl says winning the novice shearing title at the Nationals was "amazing".

"At the competitions I like watching the open shearers. Since I have been doing comps, I have met a lot of great people who are willing to share their knowledge with younger people," Karl said.



Grace hard at work in the shed.

Schoff siblings as wool ambassadors

In recognition of their achievements and great work ethic, the siblings have been appointed as Queensland representatives 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 at workshop and competitions.

AWI National Manager, Wool Harvesting Training & Careers Development, Craig French, says the Schoffs are role models in the Queensland wool harvesting industry.

"To have three national champions in the family in the one year is a remarkable achievement. All three are team players and have a willingness to learn and better themselves," Craig said. "They have been chosen as ambassadors due to their outstanding talent and potential to excel, and their good conduct in shearing sheds."

Alexander says that he feels honoured to be selected as a Queensland ambassador for wool handling.

"As an ambassador, I'm hoping that I can encourage more Queensland wool handlers to give the shows a go," he said.

"My philosophy is that if you have a goal in life that you want to achieve, don't let negativity get in the way. I was told I would never be an Australian champion by someone, so every day at work was practice to improve on my technique."

Grace says being selected as a Queensland ambassador is an amazing opportunity.



Karl competing, with father Phil watching on.

"I hope to gain as much knowledge as possible being an ambassador and to help out getting shows up and running in Queensland this year. I want to encourage more shearers and wool handlers to get behind the shows and hopefully we'll have a bigger and better Queensland team in the future."

Karl says he was honoured to be invited to be an ambassador.

"As an ambassador, I would like to help other young shearers to achieve their ambitions in the shearing industry," Karl added.

New Zealand trip provides more experience

In January, the Schoffs and wool ambassadors from other states left on an extended trip to New Zealand, 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

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.

OVERSEAS STAFF TO FILL THE GAP IN BUSY PERIODS

In another initiative to increase the availability of wool harvesting staff in Australian sheds, AWI has launched a campaign to encourage shearers and wool handlers from overseas to work in Australia during times of peak demand.

 $W^{\text{hile Australia has historically relied on shearers and wool handlers}} \\ \text{from New Zealand to supplement Australian wool harvesting}$ staff, the COVID pandemic stopped Kiwis coming over to Australia. This caused labour shortages, made worse by there being more sheep to shear due to good seasonal conditions. The number of Kiwis working in Australia has still not fully recovered.

In a new initiative, AWI has launched a campaign to encourage experienced shearers and wool handlers from overseas to work in Australian sheds during peak demand periods of work in Australia.

In November, AWI filmed a short promotional video of four young shearers and wool handlers from Wales working in the shed of Jim and Abigail McLaughlin at 'Merryanbone North' near Warren in central NSW. The video is now being circulated by AWI on social media channels to encourage young overseas workers to contact AWI with a view to them helping fill the shortage of shed staff.

Experienced young workers from any nation are welcome, although it is anticipated that they will be from a country that has an active woolgrowing industry. For example, with 22 million sheep in the UK and a long history of sheep and wool farming, there are plenty of young people involved in the industry there. Furthermore, Australia's peak wool harvesting season is the UK's off season and it's relatively easy for UK citizens to get a visa for Australia.

"In the past, young shearers from countries like the UK have tended to travel to New Zealand to work due to there being mainly crossbred sheep there. However, as an incentive to come to Australia, AWI is now offering to train them in shearing Merinos," said AWI National Manager, Wool Harvesting Training & Careers Development, Craig French.

"The aim is for the overseas workers to then stay for the season and then come back again next year, ideally with a couple of mates."

At Merryanbone North in November, AWI-contracted trainers Daniel McIntyre from Glen Innes and Oberon-based Josh Clayton provided guidance on shearing Merinos to the shearers from Wales. Josh says the young shearers adapted very quickly to the Australian conditions and shearing Merinos.

"I noticed that by being experienced in shearing strong wool sheep, they had really active footwork and that made it quite easy to train them with Merinos," Josh said.

"They're also good communicators, they like networking, they show up to work every day and they work hard."

The young shearers were employed by Nyngan-based shearing contractor Michael Taylor, who often employs backpackers in his team.

"We had to take the fear factor out of shearing Merinos and I think we have done that. It's a good life, they earn good money and it's a good opportunity for them, and to return again and again," he said.

More information: The video is available to view at www.youtube.com/ **AWIWoolProduction**









BIOLOGICAL WOOL HARVESTING UPDATE

The AWI project to develop a new opportunity for the biological harvesting of wool is progressing well, with numerous proposals submitted to AWI for ways to remove the wool above the weakened zone.

As previously reported, AWI is funding promising research by the University of Adelaide into a new opportunity for biological harvesting of wool that generates a weakened zone at the base of the wool fibre but, importantly, enables the fleece to remain on the sheep without a net until the wool can be mechanically removed.

"I am pleased to inform woolgrowers that the scientific work with the University of Adelaide to develop a biological agent that creates the weakened zone is progressing well with more testing currently underway," said AWI CEO, John Roberts.

The next phase of AWI's biological wool

harvesting project is the funding of proposals to develop manual/semi/fully automated technology to harvest the weakened wool, ie a device that applies a force to separate the wool from the body of the sheep. This could be in the form of a handpiece for manual wool removal through to a more comprehensive automated system.

AWI issued a Request for Proposals (RFP) world-wide in October for the purpose of obtaining responses from engineering companies, universities, entrepreneurs, start-ups and other organisations. Fourteen proposals for funding were submitted and AWI is progressing with four proposals for the development of the wool removal system.

"We are grateful that there has been considerable interest in the challenge to develop a cost-effective system to remove the wool," John said.

"This is a project woolgrowers are very interested in and we have received many offers from growers to volunteer their flocks for testing purposes."

Biological wool harvesting is an example of the multi-pronged approach that AWI is taking to make wool harvesting easier and more cost-effective for woolgrowers and the industry.

More information: www.wool.com/wool-harvesting-innovation



CONTAMINATION COSTS: KEEP YOUR CLIP CLEAN

Woolgrowers can help preserve Australia's reputation for producing a quality clip by being vigilant about preventing contamination. Contamination can be a major issue for wool processors and when found is subject to claims for financial loss.

he Australian wool industry has a long and proud history of quality wool clip preparation that is recognised and valued by our customers.

Global wool processing is diverse and often relies on highly specialised equipment, that can scour, comb, spin, and weave - arguably in itself a technical artform. While these wool processing systems are well set up to remove organic vegetable matter like dust, leaves and seeds, and wool byproducts like lanolin, some materials can cause havoc when they enter these processes, either by damaging finetuned specialist equipment, or by getting processed alongside with the wool fibres and thus contaminating the wool outputs being made.

With approximately 80% of Australian wool being processed in China, there is a strong message of support for Australian woolgrowers to achieve a clip free of contamination, from leaders in companies such as China SDIC International Trade Nanjing Co., Ltd., TianYu Wool Industry Co., Ltd, Zhejiang Redsun Wool Textile Co. Ltd, and Zhejiang New Chuwa Wool Co., Ltd.

Ms Shi Juping, Vice General Manager of Zhejiang Redsun Wool Textile Co. Ltd, where Australian wool is the company's main raw material and more than 150,000 bales of Australian wool are processed annually, says contamination can have a significant impact on wool processing.



Ms Jane Guo, Chief Marketing Officer, TianYu Wool Industry Co. Ltd



Ms Shi Juping, Vice General Manager, Zhejiang Redsun Wool Textile Co. Ltd.

"There can be great difficulties to the processing enterprise, such as metal damage to scouring/ combing equipment, and the mixing of cloths, gloves, towels, woven bags and other debris into wool, which becomes dispersed after opening, resulting in the inability of the entire lot of wool to be used normally. A small piece of cloth, once mixed into wool, can become tens of thousands of fibres," Ms Juping said.

Ms Fiona Raleigh, Wool Classer Registrar, AWEX, reminds woolgrowers that anything and everything is a potential contaminant.

"We usually think about contaminants as hard or soft. Hard contaminants damage processing equipment and include common items in and around the shed such as wool hooks, lamb batts, loose wire, and tools," Ms Raleigh said.

"Soft contaminants break up and act like wool fibres potentially contaminating large portions of processed product and include rags, clothing, and towels. Most significant of these soft

contaminants would be poly propylene items, like baling twine and fertilizer bags which break up easily."

So where do contaminants come from? Wool is bulky and by nature has natural adherence, so contaminants can attach to the wool on a sheep in the paddock throughout the year or can attach to the wool during shearing or can be dropped or fall into a wool bin or bale being pressed in the wool shed.

"A misconception of contamination control is that the wool classer and harvesting staff can manage contamination by removing items or fibres as they see them," Ms Raleigh added.

"This does play a part and is a critical quality control practice, but it unfortunately cannot catch everything. Removing potential contaminants from the wool-growing environment on-farm, as well as cleaning out the wool shed of potential contaminants before and during shearing is critical."

Tips to eliminate contamination

Contamination prevention happens yearround both on-farm (paddock) as well as within the wool shed, and everyone has a part to play.

So, what can a woolgrower do to best Keep Their Clip Clean?

- Paddock hygiene is very important, such as picking up loose wire and rubbish. Fence off farm tip areas from access by sheep.
- Look at your practices during feeding including disposal of baling twine and bale wrap
- Monitor the storage of fertilizer to make sure bags retain their integrity and don't start to 'break down' especially in areas sheep may populate.
- Never use polypropylene bags as rubbish bins, curtains/covering windows or sky lights, or for portions of oddment wool.
- Shearing sheds can be 'multipurpose' storage and workshop spaces. This introduces risk. Think about the activities you undertake in your wool shed and what you introduce into the

- area. Reconsider an activity if it has a high chance of contributing to contamination. Items stored in a shed should be partitioned off and checked regularly. Never store chemicals in a shearing shed.
- Vermin and bird control is another example of limiting contamination risk, including access by feral and domestic cats.
- Before your shearing date, carry out a full shed inspection and clean all areas. This ensures staff arrive to a contamination-free workplace.
- Provide plenty of large empty rubbish bins which are regularly emptied during shearing.
- Provide storage spaces, hooks, and shelves for staff to keep their personal items away from wool areas.
- Keep dogs out of the wool area.
- Supervise visitors and children.
- Provide a large supply of paper for bulk class bales.

If you received a hard copy of Beyond the Bale in the post, it would have been accompanied with the 'Keep Your Clip Clean' poster. You are encouraged to put up the poster in your shearing shed.

(60) clean





The shearing shed safety program SafeSheds, which includes a best practice guide and safety checklists, is making the wool harvesting workplace safer for all shed workers. The resources are available for free to woolgrowers across Australia.

aunched in 2020, SafeSheds is now being used across the country by many woolgrowers and shearing contractors to help them assess the safety and conditions of their shearing sheds. This enables the woolgrower to create a program to rectify any safety hazards, improve working conditions and comply with modern workplace standards.

ON-FARM

"The shearing industry is one of the most physically demanding occupations out there. As an industry we need to do as much as is possible to reduce the risk of injuries and accidents occurring in shearing sheds," said AWI General Manager, Woolgrower Services, Stephen Feighan.

"As well as covering the safety of the shearing shed and machinery, SafeSheds also encompasses work practices, working conditions and staff amenities.

"With so many alternative career options available to young people in Australia, it is vital that the wool industry ensures that working conditions in shearing sheds are as professional as possible to attract and retain wool harvesting staff," Stephen said.

"Woolgrowers can play their part by, for instance, having their sheep properly curfewed and presented for shearing, provide safe working conditions for wool harvesting staff, and also provide a modern and professional work environment with amenities that we as woolgrowers would expect.

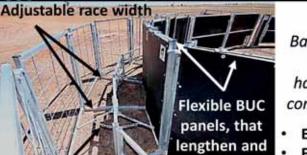
"Not only is SafeSheds helping to increase entry, retention and longevity of staff, but it also helps improve industry productivity and profitability."

By planning and documenting the improvements and steps to control risks in the shed, woolgrowers are able to provide direct evidence of efforts in managing safety as required by relevant



Ash Reichstein talking about improvements made to the shearing shed on his and his wife Megan McDowall's property at Neridup in WA, after utilising the SafeSheds program. A range of changes were made including emergency stop buttons on the board and new signage. The photo was taken during the ASHEEP & BEEF Winter Walk last year.

Back Up Charlie - Flexible Sheep Movement System



shorten

What is Back Up Charlie? Back Up Charlie is a flexible dual lane lead up race for sheep handling applications requiring consistent forward flow of sheep.

- **Easily transportable**
- Flexible to any sheep yard scenario
- Eliminates physically handling sheep into sheep handlers
- Can be assembled in a straight line or curved bugle format
- Creates a safe low stress environment for you and the sheep
- A labour saving system that increases sheep yard efficiencies
- The lightweight hock bars stop sheep turning around or backing up
- Proudly Australian owned, designed and made in Lockhart NSW



State Workplace Health and Safety Legislation.

SafeSheds is a self-assessment guide and not a formal audit or compulsory standard. It has been created to provide shearing shed operators with an understanding of the risks and options to control risks wherever possible.

Developed by AWI and WA Shearing Industry Association, SafeSheds harnesses the support of industry including WoolProducers Australia, Pastoralists & Graziers WA, WAFarmers and Shearing Contractors' Association of Australia.

SafeSheds contents

SafeSheds is available as an 80-page booklet with four sections:

- Legal obligations of people involved in shearing
- 2. Guidance on how to assess their current shearing shed and manage risks
- Detailed best practice guidelines for all areas of shearing operations:
- Module 1 The shearing shed
 - Shed structure
 - Access to and movement around the shed
 - Flooring
 - Ramps and yarding
 - Sheep pens, races and gates
 - Catching pens, gateways and doors
 - Shearing board
 - Let-go area
 - Wool and press rooms
- · Module 2 Machinery and equipment
 - Overhead gear and shearing plant
 - Back harness supports
 - Handpieces
 - Grinders
 - Woolpress
 - Tool and equipment storage
 - Unguarded machinery







The cover and example pages of the best practice guidelines and checklists from the 80-page Shearing Shed Safety Program, SafeSheds.

- Electrical safety
- Module 3 Amenities and facilities
 - Eating areas, kitchens and food preparation
 - Washing, toilets and laundry
 - Sleeping quarters
- Module 4 Work practices
 - Pennina
 - Presentation of sheep
 - Rams and sheep size
 - Wool preparation and wool pressing
 - Protective clothing
 - Chemicals and hazardous substances
 - Hygiene
 - Fitness, warming up/down
 - Drugs, alcohol and smoking
 - Dogs and visitors
 - Emergenies and first aid
 - Travel
 - Risk management and signage
- Module 5 General working conditions
 - Water
 - Heat and cold
 - Ventilation

- Dust, vapours, fumes and gases
- Lighting
- Noise
- 4. Assessment checklists
- Full assessment
- Pre-shearing checklist
- Induction checklist
- · Post shearing checklist.

Ideally, woolgrowers should go through all five modules and the full assessment checklist at least once a year, preferably early in the off-season as this will allow as much time as possible to make any changes and improvements before the next shearing.

More information: The SafeSheds booklet is available FREE in downloadable PDF format in full, or in separate sections, from the AWI website at www.wool.com/safe-sheds or you can order a hard copy by phoning the AWI Helpline on 1800 070 099. The SafeSheds checklists are also available via the AWI website in a handy digital, interactive format.



SHEARING SHEDS DESIGNED FOR SAFETY & EFFICIENCY

ACTION
THE BIG SHED PEOPLE

Since 2001, 1,742 people in Australia have lost their lives due to (non-intentional) farm-related incidents. Statistics demonstrate that it is not just the young and inexperienced that need to be vigilant, because more than half (51%) of the fatalities were people aged over 50.

The number of (non-intentional) farmrelated deaths in Australia fell from 55 in 2022 to 32 last year, according to AgHealth Australia. However, older people are still more likely to account for the majority of fatalities.

Looking at the statistics for the 2023 calendar year, 20 of the 32 on-farm deaths (62.5%) were in the 45+ year category. In contrast, 3 were in the 30-44 year category, 6 were in the 15-29 year category, and 3 were under 15 years.

Males accounted for 29 of the 32 fatalities in 2023. There were 12 fatalities in NSW, 7 each in Queensland and Victoria, with the other states accounting for the remaining 6 deaths.

Farm vehicles (15) and mobile farm machinery (8) were involved in a large majority of the total fatalities in 2023. The most frequent causes were tractors (5) and quad bikes (5).

Other causes of death in 2023 included other farm vehicles (side by side, aircraft, ute, truck), farm machinery (fixed elevator/conveyor, earth moving equipment, harvesting machine, skid steer loader), and other reasons (fire/smoke/flame, heat, cattle yards, hay bale).

Other common reasons for farm fatalities that were thankfully absent from this year's list include cars, trailers, animals, dams, sheds, powerlines, tow straps, chains and trees.

For further details, refer to the AgHealth Australia data published by AgriFutures in the 2023 Non-intentional Farm-Related Incidents in Australia report available on the AgriFutures website www.agrifutures.com.au.

There will have also been many 'near misses' and many non-fatal injuries, small and large, that could have had an impact on farm labour, productivity and profitability, as well as personal and family stress.

Causes of injury on the farm can also include anything from manual tasks and repetitive motion, through to incorrect and unsafe use of hazardous chemicals. Farming also often involves physically demanding tasks, frequently undertaken outdoors in all types of weather, and often working in isolated areas – these aspects of the work exacerbate the safety risks. Refer also to the *SafeSheds* article on pages 14-15 about preventing injuries in the shearing shed.

Taking all this into account, it is therefore important to minimise the risk of injury and improve on-farm safety. There are many



Quad bikes continue to be a major cause of injury and fatalities on Australian farms. However, appropriate safety precautions such as rollover protection and helmets, plus careful and responsible use, can reduce the risk. PHOTO: WorkSafe Victoria.

national and state organisations that have a role in helping farmers and everyone on the farm (workers, family and children, visitors) improve their safety, including their health and mental wellbeing.

One such organisation is the Rural Safety & Health Alliance (RSHA), which is a collaboration of rural Research and Development Corporations (RDCs) including AWI. The RSHA's vision is for everyone on farm to see health and safety as a priority, and adopt safe practices – see www.rsha.com.au. One way that the RDCs work to achieve this is by showcasing farmerfacing health and safety resources that are available from national and state organisations.

Safety resources for farmers

AWI and the RSHA encourage property owners, managers, workers, contractors and family members to take a look at farm safety resources provided by organisations such as:

Farmsafe Australia: A national entity that promotes awareness and adoption of health and safety practices on farms. www.farmsafe.org.au

AgHealth Australia: Within the University of Sydney's School of Rural Health at Dubbo (NSW), it conducts research on injury and fatality in agriculture and has a range of resources for farmers. http://aghealth.sydney.edu.au

National Centre for Farmer Health: A partnership at Hamilton (Vic) between Deakin University and Western District Health Service, it conducts research into risks and injury prevention for farmers, and has a range of resources. www.farmerhealth.org.au

State organisations – each provides farm safety resources:

- SafeWork NSW www.safework.nsw.gov.au/your-industry/ agriculture,-forestry-and-fishing
- AgVic: Smarter, Safer Farms
 www.agriculture.vic.gov.au/about/
 agriculture-in-victoria/smarter-safer-farms
- Worksafe Victoria www.worksafe.vic.gov.au/agriculture
- SafeWork SA www.safework.sa.gov.au/industry/ agriculture
- Safe Farms WA www.safefarms.net.au
- Workplace Health and Safety Queensland www.worksafe.qld.gov.au/your-industry/ agriculture,-forestry-and-fishing
- Safe Farming Tasmania www.worksafe.tas.gov.au/topics/servicesand-events/safe-farming-tasmania

MODULAR SHEEP DELIVERY UNITS IN REGIONAL WA

Darkan-based RW Engineering has been working with AWI to manufacture for local WA woolgrowers modular sheep delivery units that eliminate the catch and drag, thereby helping to make shearing easier and less prone to injury.

owards the end of 2022, AWI was announced as a recipient of a \$45,000 Round 5 Regional Economic Development (RED) Grant from the WA Government to help further develop and manufacture the AWI modular sheep delivery units in regional Western Australia. With matching funding from AWI, this brought the total investment to \$90,000 in 2023.

AWI has used the funding to engage with RW Engineering, based at Darkan in the Wheatbelt region of WA, which is now manufacturing the sheep delivery units to fulfil orders from WA woolgrowers.

"The sheep delivery units provide a system that delivers sheep directly to the shearer, eliminating the time and energy that shearers spend on the catch and drag. It also minimises the chance of injury to the shearer from the dragging and twisting movements," said AWI General Manager, Woolgrower Services, Stephen Feighan.

"The design focuses on a 'modular' concept in which portable singular shearing stands can be joined together to make a multi-stand shearing platform, which can be stored away after use.

"Each modular unit holds sheep in a race at the back of the unit. The shearer simply opens the gate and collects the sheep from the race and manoeuvres the sheep the metre or so to the

centre of the board before starting shearing."

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

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

AWI has working with six engineering companies across the country to make the AWI design commercially available to woolgrowers (see the box to the right).

Some of the companies also manufacture an 'automatic module' which contains a pneumatically powered delivery section that, at the press of a button, moves out from the race and then tilts the sheep into a position suitable for the shearer to then easily retrieve the animal.

RW Engineering is a 100% WA owned and run company that has been in operation for more than 20 years. It manufactures a range of livestock handling and other equipment, using locally sourced materials. The modular sheep delivery units manufactured by RW Engineering were on show at this year's Wagin Woolorama.



A sheep delivery module under construction at RW Engineering.

Where do I purchase sheep delivery units?

AWI has worked with several companies across Australia that are now manufacturing a sheep delivery system based on the AWI designs, including:

- RW Engineering of Darkan WA are manufacturing the sheep delivery system. 08 9736 1166, www. rwengineering.com.au
- Commander Ag-Quip of Albany WA produces an automatic and a manual modular race delivery system. 1800 655 033, www.commanderagquip.com.
- Haynes Engineering of Naracoorte SA produces an automatic and a manual modular race delivery system. 08 8762 2744, www.haynesengineering.com.au
- Stockpro of Condobolin NSW produces a manual modular race delivery system. 1800 354 415, www.stockpro.com.au
- ProWay of Wagga Wagga NSW produces both fixed and modular manual race delivery systems and provide a full design and construction service incorporating the modules. 1300 655 383, www.proway.com.au
- Kyabram Steel of Kyabram Vic manufactures the manual modular race units. 03 5853 1554, www. kyabramsteel.com.au

There are companies that are now manufacturing other types of sheep delivery systems, such as Perkinz (1800 750 584, www.perkinz.com.au) that produces its ShearMaster product.



RW Engineering's owner Arthur Brown in the company's workshop at Darkan in WA with one of the sheep delivery modules the company is manufacturing for woolgrowers in the state.



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: CSIR0
 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.

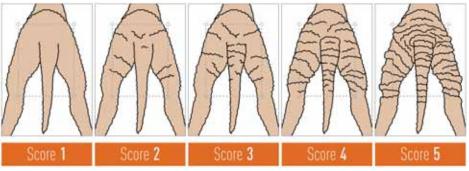
A unique and extensive dataset will result and be used to enhance existing Merino breeding and selection strategies, for both ram sellers and buyers, to deliver greater lifetime productivity and woolgrower returns.

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

As the Merino Lifetime Productivity (MLP) project approaches completion, we can increasingly use this valuable industry resource to answer a range of questions relevant to Merino sheep producers. In this article we use the MLP project data to explore how Australian Sheep Breeding Values for breech wrinkle relate to actual raw measurements or scores on farm.

Australian Sheep Breeding Values (ASBVs) are one of many tools available to support breeding decisions. They allow the comparison of genetics between animals across flocks, environments, and time. A common question asked when using ASBVs is, "How do breeding values relate to actual raw measurements or scores on farm?" This has been particularly the case for fibre diameter, although in recent times, questions about breech wrinkle have also emerged. In this article, we use the MLP project data to help answer this question.

Breech wrinkle is the leading cause of breech strike in Merinos and over the past 10 years we have seen breeders making efforts to reduce breech wrinkle with the aim of breeding more naturally flystrike resistant Merinos. Research has shown that a breech wrinkle of score 2.0 or less (based on the Visual Sheep Scores guide) will significantly reduce the incidence of breech strike in a flock.



The Visual Sheep Scores guide provides a standardised framework for scoring and assessing visual sheep traits, such as breech wrinkle (BRWR) above. The 76-page guide is available at www.wool.com/flvstrikelatest/#breeding

For users of ASBVs, they often ask, "What breech wrinkle breeding value (EBWR) is needed to achieve score 2.0 on my farm?"

What we can see, measure, or score directly from a sheep is described as the animal's phenotype. Phenotype is influenced by both a sheep's genes and the environment in which it has been raised (both before and after birth). The heritability of a trait indicates how much of the variation in a trait is a result of genetics, and ranges from 0 to 1. Breech wrinkle has a heritability of 0.3 (or 30%) meaning that 0.7 (or 70%) of the difference in performance between animals is owing to nongenetic influences that we describe as environmental factors.

EBWR ASBVs are a prediction of the genetic difference in breech wrinkle between animals. The value can be positive reflecting higher breech wrinkle, or negative reflecting a lower breech wrinkle. If two sires have a one-score difference in EBWR ASBV, it is anticipated that their progeny will exhibit a half-score difference in wrinkle score, given that their offspring inherit half of their genes from their sire and half from their dam.

The difference in actual wrinkle raw score of progeny may differ from what is predicted from their parents ASBVs. The MLP project has shown that wrinkle-based sire performance rankings remain very consistent across environments and flocks (ie sires rank similarly across environments), yet the extent of difference in performance is associated with the degree of wrinkle expression within a specific flock or environment. Environments and flocks with low wrinkle expression may experience lower variation in wrinkle scores among sires, whereas those with high wrinkle expression might see a broader range of wrinkle scores.

Within a flock, if progeny have undergone similar conditions post-birth, factors preceding their birth also play a role in wrinkle expression. For instance, lambs born as twins exhibit a

lower wrinkle score compared to singleborn lambs by between 0.3 to 0.5 scores, and offspring from maiden ewes tend to have wrinkle scores 0.1 to 0.2 lower than those born from adults.

Using the five MLP project sites as an example, we can explore how different EBWR ASBVs are expressed at each site. The sites were spread across a range of geographical locations with differing average temperature, rainfall patterns and disease pressures, and were also founded on differing Merino ewe types. Common sires (link sires) were used to create genetic linkage or a genetic reference between the sites, and we can use these sires to look at the impact of each site's environment on performance.

Two link sires were used across three sites in the MLP project 2016 joining, and a further two link sires were used across four sites in the 2017 joining.

Looking at the 2017 joining, Sire A has an EBWR ASBV of -1.4 and Sire B has an ASBV of 0.2. We expect that the progeny of Sire B will have a higher wrinkle score than Sire A by about 0.8 score at the sites (we need to halve difference in their breeding values). Figure 1 shows that the average marking breech wrinkle is similar between the MerinoLink, Macquarie and New England sites, while the Pingelly site is considerably lower. As predicted by the ASBVs, we see that Sire B's progeny are wrinklier than Sire A's progeny across all the sites with some variation associated with the different levels of wrinkle expression at each site. Sire B's wrinkle is higher than Sire A's by 0.7 at Pingelly, 0.7 at MerinoLink, 1.0 at Macquarie and 1.4 at the New England site. We also see that the sire's progeny has different breech wrinkle at each site, with Sire A's progeny ranging from score 1.3 to 1.8 and Sire B from 2.2 to 2.8.

The link sires used in the 2016 drop differed in EBWR ASBVs by 2.6 with an expected progeny difference of 1.3 in wrinkle score. Figure 2 shows the sire's EBWR ASBV along with the progeny score from three sites. As predicted, Sire D is wrinklier than Sire C across all sites

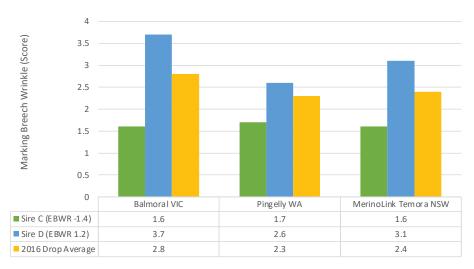


Figure 2: Average marking breech wrinkle for progeny of link sires in 2016

with a difference of 2.1 at Balmoral, 0.9 at Pingelly and 2.5 at the MerinoLink site.

It's good to note the difference in the average wrinkle scores at the same site but between the drops, eg the Pingelly 2017 drop averaged 2.0 while Pingelly 2016 drop averaged 2.3. The average in each drop is influenced by environmental factors, any changes in the ewe base between joinings, and the different mix of sires used in the two joinings. This highlights the importance of comparing raw scores within the same management group and drop because the scores are more likely to have been influenced by the same factors.

Wrap up

The work here shows that the raw measurement and scores achieved on farm using ASBVs will depend on your environment and current genetics. For woolgrowers aiming to achieve a breech wrinkle score of 2.0 on farm they will need to do some homework to determine what EBWR ASBV to target. The AWI-developed ClassiFlyTM workshop aims to support woolgrowers breeding for more flystrike resistance and can help them to work through this process. See page 20 for more details about the ClassiFlyTM workshops and how to attend.

Future articles will delve further into the likely EBWR ASBV needed for all progeny to hit the target 2.0 raw score at each MLP Site, although this early investigation suggests that based on the genetics and the environment at each site, the values would need to be less than -0.3 and possibly closer to -1.0 for some sites.

On the topic of flystrike, in a project first the New England MLP sires will have research flystrike breeding values available at the final field day on 29 May. We invite industry to join us on the day as we delve into the genetics of natural flystrike resistance and celebrate the end of data collection in the MLP Project.

Notes

In presenting these EBWR ASBVs, the MLP project recognises that the visual scores reported here were used in the generation of the sire ASBVs and are not independent of each other. The link sires have 3818 progeny assessed in MERINOSELECT although just 30% of those records are from the MLP project.

We also emphasise that ASBVs are just one tool in the breeding selection tool kit, and breech wrinkle is just one trait of several traits that may or may not be considered in a breeding program.

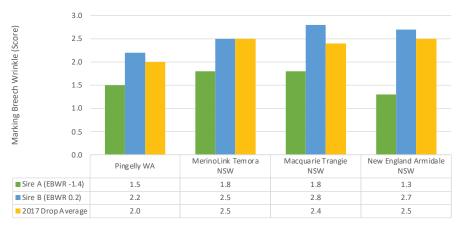


Figure 1: Average marking breech wrinkle for progeny of link sires in 2017

FINAL New England MLP field day

Wednesday, 29 May, 2024

'Chiswick', CSIRO, New England Highway, Uralla, NSW

MLP project sheep, results, research flystrike breeding values, presentations and more.

For more info: Todd Whillock 0427 740 283 AWI's ClassiFly[™] one-day workshop for woolgrowers is focused on increasing attendees knowledge and skills in classing and selection strategies for more natural and profitable flystrike resistance. The workshop is available to woolgrowers through the AWI Extension Networks in each state.

The ClassiFly™ workshop is suitable for any woolgrower that is looking to improve their understanding of what is involved in breeding sheep that are resistant to flystrike, regardless of their climate, and operating and husbandry environments.

Improving a sheep's natural resistance to flystrike through breeding reduces the risk of flystrike in both mulesed and non-mulesed sheep, reducing labour and reliance on chemical use, mulesing and crutching. These activities are generally the most labour intensive and costly tools so reducing reliance on these can improve productivity and profitability, along with improving the lifetime welfare of sheep.

The one-day workshop, delivered by AWI-accredited advisors in partnership with the AWI Extension Networks in each state, demonstrates there are both genetic and non-genetic factors that influence a sheep's susceptibility to flystrike which are described in the workshop as 'breech traits', 'wool quality traits', 'conformation traits' and 'management traits'.

Over the course of the day, workshop attendees learn about the different traits, the risk they present for flystrike, the phenotypic expression of the trait and how to class and select animals for these traits using visual assessment or Australian Sheep Breeding Values (ASBVs), or a combination of both.

The ClassiFly™ workshop is available now.

AWI's Flystrike Extension Program

ClassiFly™ is the fourth of six extension initiatives being released under AWI's Flystrike Extension Program. Woolgrowers can pick and choose how to get involved with the different components of the program that best suits their requirements, sheep type, climate, operating environment and husbandry practices.

The three previous components of the Extension Program, which are available to woolgrowers to support their flystrike management, are:

- It's Fly Time!TM Practical, just-in-time flystrike management information in the lead up to, and during, high-risk flystrike periods.
- DemystiFly[™] Practical information about managing chemical resistance in blowflies.
- SimpliFly[™] A one-day workshop to develop a property-specific, strategic flystrike management plan.

The fifth component of the Extension Program is the one-day StrateFly™ workshop for woolgrowers to develop a property-specific, whole-of-farm strategy if they are moving to a non-mulesed enterprise. The workshop is currently being piloted and will be available across Australia later this year.

The final component of the Extension Program is AmpliFlyTM. This will provide one-on-one coaching and support from a trained and accredited advisor to assist you to implement, monitor and improve your whole-of-farm plan for preventing and controlling flystrike. This will also be available later in 2024.

Woolgrowers Richard Keniry of Kildara Pastoral Company and Michael Field of T A Field Estates at a ClassiFly pilot workshop at Cowra, discussing the different traits that make sheep more susceptible to flystrike.



Where do I find more information?

Access the It's Fly Time!™ and DemystiFly™ resources, and further information about the AWI Flystrike Extension Program, at www.wool.com/

flystrikeresources or scan this QR code with the QR code reader on your smartphone.



To find out when there is going to be SimpliFlyTM, ClassiFlyTM and StrateFlyTM workshops available near you, contact the AWI Extension Network in your state and sign up to their free newsletters. You can find your AWI Extension Network at www.wool.com/networks or call the AWI Helpline on 1800 070 099.

For more detailed information on flystrike management, including access to interactive decision support tools, visit www.flyboss.com.au

For information on AWI's flystrike research, development and extension program, visit www.wool.com/flystrike

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)

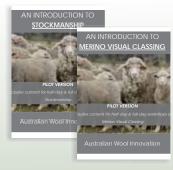
This 16-page report outlines the key learnings from a number of wool-growing enterprises, from a diverse range of environments and Merino types, that have moved to a non-mulesed enterprise.



VISUAL SHEEP SCORES – PRODUCER VERSION

(Updated 2023)

This 76-page pocket guide for commercial and stud breeders provides a standardised framework for assessing and scoring visual sheep traits, including breech and wrinkle traits.



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...

PHOTO: Draco Nguyen

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

Australian woolgrowers go to great lengths to prevent flystrike, often incurring substantial chemical and/or labour costs. However, a new project aims to develop an additional flystrike prevention option, with long-term effectiveness, minimal labour for woolgrowers, and the best outcomes for sheep.

The project, which began in December, aims to use new scientific techniques to deliver a highly specific and potent trapping solution to reduce the build-up of sheep blowfly populations. It will tackle the limitations of current trapping options, which include their inability to target specific fly species and a negligible suppression of female numbers.

Leveraging funds to fight the fly

The new project is being carried out by Deakin University, with a grant from the Australian Government's Australian Research Council, plus support and co-funding from AWI. It brings together the expertise of a multidisciplinary team of Deakin University researchers, in conjunction with AWI working with key stakeholders from woolgrower networks across the country.

"The new project's preventive approach to flystrike is a highly promising initiative that has the potential to make a significant contribution towards developing a tool to combat the viability of the Australian sheep blowfly," said AWI Program Manager, Animal Wellbeing and Industry Resilience, Carolina Diaz.

"It aims to provide an effective, eco-friendly, low-maintenance approach to flystrike, reducing woolgrowers' reliance on insecticides that are limited in number and could have increasing issues with fly resistance.

"The new project aims to provide national benefit through improved animal welfare, reduced costs and labour for woolgrowers, and alignment with sustainable practices and market demand."

R&D into blowfly behaviour

The research is led by Professor Michelle Harvey who is an experienced entomologist and one of the leading blowfly experts in Australia.

"The project will utilise chemical and molecular approaches to determine the key attraction cues for female flies to vulnerable sheep, determining specific factors that place a sheep at risk of flystrike, beyond traditional predictors such as

dag and wrinkle scores," Professor Harvey said.

"Few studies have truly understood the mechanisms of attraction, and this study utilises the natural biology of the fly-sheep interaction to target the most effective intervention point in the flystrike system. It adopts a proactive, preventive approach by removing the agent responsible for strike.

"This approach will utilise the expertise of a multidisciplinary team from the fields of entomology, biotechnology, analytical chemistry and genomics, to exploit blowfly biology and target its behaviour. Ultimately the aim is to develop a novel lure technology able to be commercialised and used on-farm, at scale across Australia."

The lure will be tested on multiple properties and in states, taking into account geographic and climate variations across Australia, to determine the effect of the lure of wild fly populations and flystrike rates – see the box below for your chance to get involved. The project is due for completion at the end of 2026.

Your chance to get involved!

Woolgrower collaborators needed: Do you have fleece rot and flystrike issues?

The project will run across three consecutive flystrike seasons (Feb 2024 to May 2024; Sept 2024 to May 2025; Sept 2025 to May 2026) across Victoria, New South Wales, South Australia, Western Australia and Tasmania.

Researchers will partner with woolgrowers over the three years, with key activities for involved growers to include:

- 1. Participation in a series of questionnaires including:
- Expression of Interest (1 X 10 mins: online form).
- Initial background interview (1 X 1–1.5 hours: via phone, zoom or in-person).
- Before season (annual) (3 X 30–45 mins: via phone, zoom or in-person).
- After season (annual)
 (3 X 30–45 mins: via phone,
 zoom or in-person).
- Exit feedback (1 X 10 mins: online form).

Time commitment estimation: 6.5 hours total involvement.

- Assisting Deakin researchers with non-invasive sampling of breech area, including skin swabs, wool samples (if available) and collection of maggots/ flies from flystruck Merinos.
- Total of 40 samples will be collected per season: 10 X healthy, 10 X dermatitis (early stages of fleece rot), 10 X fleece rot, 10 X flystruck (additional: 5 X maggots and 5 X flies)
- Over the three seasons, there will be a total of 120 sample collections.
- Researchers will provide on-site and video training, and instructional materials, to guide growers with sampling procedures for times the researchers may not be present.

Time commitment estimation: 30 hours total involvement (10 hours per season; 15-minute allowance per sample collection).

Allowing Deakin researchers to set up fly traps at farm sites throughout the project.

Woolgrowers will gain insightful knowledge regarding the bacterial trends identified from their property from the three flystrike seasons, based on a personalised written summary following each season and an opportunity to chat with the project team to discuss findings.

For more information and expressions of interest, please contact Professor Michelle Harvey via michelle.harvey@deakin.edu.au

This study has received Deakin University ethics approval (reference number: SEBE-2023-68). This is a government funded linkage project (LP210200707).

23

STERILISED BLOWFLIES TO REDUCE FLYSTRIKE

A project is under way to release millions of sterile male blowflies on Kangaroo Island to see whether it will suppress the blowfly reproduction rate and population, and therefore the incidence of flystrike.



Shooting blanks. Millions of sterile male blowflies are set to be released on Kangaroo Island in a bid to curb blowfly reproduction.

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

Examples include the screw-worm fly eradicated from North and Central America, and the tsetse fly eradicated from Zanzibar and Senegal in Africa. The technology has also been used in Australia to control or eradicate the Mediterranean fruit fly and Queensland fruit fly.

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

KI project to suppress blowfly population

The release of sterile male blowflies on Kangaroo Island (4500km² area, 600,000 sheep) in South Australia is under way in a project led by South Australian Research and Development Institute (SARDI), with the current (second) phase of the project funded by SARDI, AWI, Meat & Livestock Australia, Animal Health Australia, Livestock SA and the University of Adelaide.

If blowfly suppression on Kangaroo Island is successful, it would be a welcome boost for the local sheep and wool producers whose businesses suffered so badly during the 2019-20 bushfires. Furthermore, if there is a successful suppression of blowflies on Kangaroo Island, it could indicate that suppression on the mainland might also be possible.

AWI Program Manager, Animal Wellbeing and Industry Resilience, Carolina Diaz, says that there is no guarantee that the project will be successful, but the rewards could be significant if it is.

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

"However, it is important that the sterile male blowfly density is sufficient to dominate the already present wild, non-sterile male

population, so there is less competition for the sterile blowflies to mate. Even if initially successful, there is always the risk that wild populations could be reintroduced through uncontrollable biosecurity gaps.

"The relative isolation of Kangaroo Island means that it is a good testing ground for the technology, but it must remain biosecure from the mainland's wild blowfly population otherwise it will be at risk of re-introductions."

Rearing and release of blowflies

In the first phase of the project, jointly funded by the South Australian and Australian Governments, SARDI set up a mobile modular facility for the mass rearing of sterile blowfly males on Kangaroo Island and started production.

In the current (second) phase, sterile blowflies are being released on the Dudley Peninsula (650km²) on the eastern end of Kangaroo Island which will be followed, if successful, by three years of large-scale releases across the rest of the Island.

This will require the rearing of a massive 40-50 million blowflies per week. Rearing and harvesting equipment, diet composition and climate control will need to be developed and optimised for production at this industrial scale.

"The sheep blowfly on Kangaroo Island should be a perfect target for eradication through sterile insect technique, but that does not mean it will be easy," said SARDI Researcher, Maarten van Helden. "Our experience in fruit fly rearing in the SITplus facility in Port Augusta helps, but we will be challenged to develop these production volumes for the much bigger sheep blowfly."

To increase efficiency and reduce costs for future applications, project work will include research into the optimisation of the SIT, the ecology of the blowfly (population dynamics, mobility, distribution), optimisation of rearing techniques, and best practice release techniques (rate, frequency, flight paths, height and speed).

The project will also establish monitoring networks to obtain data on population levels and activity periods plus, hopefully, a subsequent reduction in flystrike. Collaboration with stakeholders (farmers, vets, students) will be sought to collect the information.

An annual sheep industry project that last year monitored nearly 10 million Australian sheep found a low incidence of disease, demonstrating the excellent animal health and welfare practices in the Australian sheep industry. Continued vigilance by sheep and wool producers will help ensure that this situation continues.

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

In 2022/23, the monitoring occurred in 10 abattoirs. Meat inspectors inspected 9,822,174 sheep including lambs (an increase of more than two million animals compared to the previous year) in 42,756 lines from 10,247 Property Identification Codes (PICs) for 19 animal health conditions.

The results of the NSHMP allow producers to adapt their management practices to address the animal health conditions most relevant to their local area. Producers can also access data specific to their own lines of sheep via Meat & Livestock Australia's myFeedback.

Sheep monitored during the project in 2022/23 were sourced from all Australian states. Of the direct lines of sheep, 41% were from NSW, 21% from South Australia, 16% from Western Australia, 9% from Victoria and 7% from both Queensland and Tasmania.

The NSHMP 2022/23 Annual Report provides an analysis of the data from the project for 14 of the 19 monitored conditions, thus providing a snapshot of the health of a significant proportion of the Australian sheep flock.

The remaining five health conditions (cirrhosis, dog bites, fever/septicaemia, hydatids, rib fractures) had insignificant levels of incidence.

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

Table 1: National percentage of sheep affected by each condition in 2022-2023

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

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

 the number of sheep in Australia inspected and affected during the past three years

The National Sheep Health Monitoring Project helps the Australian sheep and wool industry ensure the national flock is in good health with a low incidence of disease.



- the percentage of PICs inspected in each state that had at least one affected animal
- the percentage of animals inspected in each state that were affected
- a map showing the percentage of sheep affected in each local government area – see the example opposite, for bladder worm.

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

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

"While governments, industry groups and processors use this information to provide solid evidence to demonstrate the high quality of Australian sheepmeat and to support market access, it also provides further evidence to a wider audience that Australian sheep and wool producers are committed to exceptionally high standards of animal health and welfare," Carolina said.

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

"Although still at low levels, the health conditions that recorded the highest levels of incidence during 2022/23 were bladder worm, pleurisy and sheep measles."

See opposite for advice on their on-farm management and prevention.

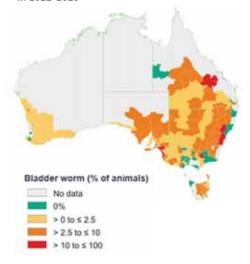
"The incidence of cheesy gland has decreased from 2021/22. But woolgrowers in particular should look out for the disease in their sheep because it is associated with a decrease in wool production, wool contamination and chronic infection causes ill thrift, emaciation and can affect reproductive performance," Carolina said.

"With the official declaration of El Niño by the Bureau of Meteorology, it's possible that we may see a shift in the prevalence of some conditions, especially those that were exacerbated by high rainfall such as grass seed lesions and some internal parasites, such as liver fluke."

Bladder worm and sheep measles

Bladder worm has now been the top condition for three years in a row and was most common in NSW, where 4.5% of inspected sheep had the condition. It was also observed quite extensively in Tasmania, with 71% of participating properties having at least one affected animal during 2022-23. Bladder worm is caused by infective cysts from the dog tapeworm *Taenia hydatigena* which are found in the sheep's liver and abdominal cavities. Similarly, sheep measles are infective cysts caused by the dog

Figure 1: Percentage of sheep affected by bladder worm in each Local Government Area in 2022-2023



tapeworm *Taenia ovis* and are found in the muscles of sheep. Most losses to profit are seen at the abattoir due to carcass trimming and offal condemnation, with higher levels of sheep measles likely to lead to full condemns and significant losses to growers as well.

On-farm management: There is no treatment for bladder worm and sheep measles, therefore prevention is the best way to manage this condition. The dog tapeworm lifecycle must be disrupted by ensuring all farm and house dogs are wormed monthly with a wormer containing the active ingredient praziquantel, which kills these tapeworms. Furthermore, you can prevent dogs from becoming infected by restricting their access to sheep carcases and raw sheep meat, therefore avoiding the ingestion of infective cysts.



Regular monthly tape worming and removing sheep meat and offal from the diet of farm dogs can control bladder worms in sheep.

Pleurisy

The occurrence of pleurisy has increased during the past three years and is a resulting condition of severe pneumonia where the infection has extended to the outer layer of the lung, known as the pleura. This can cause parts of the lung to adhere to the chest wall, leading to costly trimmings at the abattoir and welfare implications for affected sheep.

On-farm management: Reducing the occurrence of pleurisy requires the effective management of pneumonia in sheep, which includes preventing exposure to irritants within their environment. Excessively dusty and dry conditions, inhalation of drenches and dips as well as stress can all increase the risk of respiratory infections in sheep. Consider reducing the time sheep spend in yards during dry and windy conditions, preventing overcrowding, and taking your time when driving them back to their paddocks. If levels of pneumonia/ pleurisy detected are high, it may be worthwhile testing sheep to determine which pathogens are causing the pneumonia (talk to your veterinarian about this).



More information: The NSHMP Annual Report is available at www.animalhealthaustralia.com.au/nshmp

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AWI's 'Winning With Weaners' workshop helps woolgrowers identify key management strategies to improve the lifetime performance of their Merino weaners.

Merino weaners have a reputation for not being the easiest part of a Merino flock to manage. But weaners are a vital part of any self-replacing Merino enterprise because they are the next breeders and wool growers.

Difficulties can arise because these young animals are trying to grow themselves as well their first fleece, and doing so when proteinrich feed from pastures often can be limited. As a result, weaner ill thrift can occur. This is when young sheep fail to thrive when other classes of stock in the flock are in satisfactory health and body condition.

Weaner ill thrift results in poor growth and fertility, reduced wool cut and wool quality (especially staple strength), increased susceptibility to disease (especially worms) – and can lead to high mortality rates in young sheep up to one year of age.

While there are multiple and often concurrent causes of weaner ill thrift and mortality, they are all primarily related to animal management and husbandry, with genetics only having a small effect.

"Weaners are a group of animals that will benefit from additional proactive management. It will pay you back with a productive and profitable contribution to your flock and business, for years to come," said AWI National Extension Manager, Emily King.



Merino weaners need to reach bodyweight targets to ensure the highest survival rates. Ewe weaners need to reach growth targets to achieve satisfactory reproduction performance as maiden ewes.

"Joining length, feed quality, ewe condition, time of weaning, target weaning weight and average daily weight gain all play a role in the success of weaning. While effective management and timely weaning supports the lifetime productivity of the lambs, it also allows the ewes to recover condition before the next joining period."

Winning With Weaners workshop

To help woolgrowers improve weaner management of their Merino flock, in 2018 AWI launched a single-day workshop called 'Winning With Weaners'.

"The aim of the workshop is to get a minimum of 95% of weaners surviving to one year of age, but also to thrive and be productive at hogget joining and throughout their life," Emily said.

"The workshop identifies key practical actions and tools for commercial enterprises to implement on-farm to achieve this performance."

A Winning With Weaners workshop at Armidale, NSW.

Industry recommendations to lift weaner performance

- Your minimum target weaning weight (TWW) is 45% of your ewes' standard reference weight (SRW), the average weight of your mature ewes when not pregnant, bare shorn, condition score 3, no gut fill.
- Have a 5-week joining period to avoid a tail in the weaner mob.
- Imprint (train) lambs to eat supplementary feed prior to weaning.
- Use best practice lamb marking procedures (hygiene, vaccination, anaesthesia and analgesia, etc).
- Wean no later than 14 weeks from

- the start of lambing.
- Manage lighter weight lambs separately and feed them to achieve the target growth rates ASAP.
- Wean onto high quality pasture where possible and/or supplementary feed.
- Provide high quality, clean drinking water.
- Ensure good internal parasite control (monitoring and effective drenching).
- Regularly monitor weaner liveweight to reach target growth rates.

Key themes of the Winning With Weaners workshop

- Understand the impact of weaning weight on the survival of weaners to first joining.
- 2. Understand weaner nutrition, in terms of both energy and protein.
- 3. Set weaner weight targets.
- Understand the importance of weaner management on lifetime performance of breeding ewes.
- Strategies for success management calendar.

Woolgrowers Tony Overton from Walcha and Rob Kelly from Guyra in NSW's New England region attended Winning With Weaners workshops in 2018. They recently featured in an episode of AWI's *The Yarn* podcast in which they talked about how a few simple tweaks to their management has had them reaping the rewards of increased lifetime performance of their young Merino sheep.

Tony Overton manages a flock of Merino sheep on 'Europambela' at Walcha, joining about 8,000 superfine ewes that have 15 micron wool. Rob Kelly is the owner-manager of 'Mt William' at Guyra, that runs about 1,600 commercial Merino ewes with 17 micron wool.

"I did a Lifetime Ewe Management course about eight years ago that was really good at lifting our production, but although we were getting more lambs on the ground we weren't getting to shear them all a year later. It was frustrating and I wanted to minimise the losses," Tony Overton said.



"The Winning With Weaners workshop helped us see the value for our business of setting up our weaners for a lifetime of production."

Tony Overton, Farm Manager 'Europambela', Walcha "So I attended the Winning With Weaners workshop, from which there were some pretty simple management tips that I took home and applied on-farm, with good results.

"We want easy care sheep, and part of that is setting sheep up so they grow well for the first year of its life. If they do that, then they will get higher worm resistance, for example. Sheep are easy and good fun to work with, if they are healthy."

Rob Kelly agrees that attending the workshop results in increased productivity.

"Our weaner management is now more focused, so that the weaners grow better and are healthier and happier. We get the first clip off them, monitor their weights to make sure they will make joining weight, and create our next generation of sheep," Rob said.

"The weaners are the building blocks to our enterprise; if we don't have the weaners in 12 months then we're missing out on their lifetime production."

> Rob Kelly, Owner-Manager 'Mt William', Guyra

Standard reference weight

Both Rob and Tony say that one of the most important learnings from the workshop is to determine what the standard reference weight (SRW) is for your flock, set your weaning weight targets and track your progress.

"For many producers, there can be wastage in their system that just creeps up on them if they don't monitor it," Rob said. "So we've used our standard reference weight to determine our targets and we then weigh 10% of the weaners when they come through the yards and check that they are on target. If they aren't, we change management to make sure we reach the target, like improving their feed or supplementary feeding."

Tony says the SRW depends on your type of sheep but is a really good benchmark for what their growth rates should be.

"Growth rates might be above target or below target, depending on where you are through the season, but it's important to know how they are going in case there needs to be some catchup with grass or a food wagon," Tony added.

Protein vs energy

Young sheep have unique protein requirements that are different to grown sheep. If they don't eat enough protein, then they are going to fall behind in their growth.

"For weaners, we need to be looking more at the protein (rather than the energy) that the pasture is able to provide," Rob said.

"If we've got a lot of high protein, say clover, then that's great, but as we get later in the year through our dry winters, the bit of standing feed on the ground can provide energy but it's lacking in protein. So we then need to look at a high protein supplement to keep the weaners growing."

Tony says that, without providing supplementary feed, his weaners couldn't put enough weight on from his fescue-based pasture.

"So we went down the ryegrass track, brassicas and clovers, and it really quickly changed the dynamics. We still have a feed gap in the middle but it pushes our spring and autumn longer. Protein source is the key; if you haven't got green grass, you haven't got protein," Tony said.

Lifetime performance

The aim of the Winning With Weaners workshop is to lift the lifetime performance of young Merino sheep, not just for the first year.

"The workshop sets them up for a lifetime of production," Tony said. "The big winner isn't just her good conception rate in her first year, but that conception rate keeps going on for the lifetime of that ewe because she's put together better. In addition, her own lamb's weaning weight goes up because the ewe is actually set up ready to have a lamb."

Rob says his enterprise's maiden ewe conception has improved since implementing the Winning With Weaners concepts.

"The workshop made me focus more on those young sheep that are coming through, rather than just on the older ewes. My original conception rate in maidens would have been 70 to 72% whereas now it would be around 89 to 92%," said Rob.

Time saving

Woolgrowers might incorrectly assume that implementing the Winning With Weaners concepts might create a lot of timeconsuming extra work.

"I actually think it's saved us more time than what we did before," Tony said. "The weighing and monitoring became so easy. If our weaners are in the yards for something else, we just run 40 or 50 over the scales; that gives us a good enough average to tell us where we're tracking.

"Plus, if we hadn't been monitoring them and the weaners got wormy for instance, then we'd need to do additional mustering, it takes longer to handle them, and would be more frustrating."

Rob agrees, saying the weighing and monitoring doesn't feel like "another job to do".

"We're bringing the sheep in to the yards at certain times anyway, so it's pretty simple to just run a portion of them over the scales when they're there and see how they're tracking," he said.

"Having a set of scales for your sheep and weighing those lambs is a pretty simple job. The benefits of the outcomes are far greater than the time it's taken to weigh them."

Article continues on next page >>

AWI resources for best practice weaner management

Winning With Weaners workshop

The Winning With Weaners one-day workshop is run on a demand basis through the state-based AWI Extension Networks. For further details about the workshop, head to www.wool.com/workshops. For details about your AWI Extension Network, head to www.wool.com/networks

Winning With Weaners Online

This one-hour recorded webinar, containing 30 slides, is a condensed version of the single-day Winning With Weaners workshop. It is available to view for free at www.wool.com/weaning

AWI Change Makers (Episode 2): Weaning to manage

This 5-minute video outlines some key practical management tips. View the video at www.wool.com/weaning

The Yarn podcast (Episode 253): Winning With Weaners

2 connect

Hear from Tony Overton of Walcha and Rob Kelly of Guyra about how their Merino enterprises benefited after the woolgrowers attended a Winning With Weaners workshop. Head to www.wool.com/podcast

PLAN AHEAD FOR SUCCESS! Imprint feed your lambs Train them to eat grain before weaning Plan to supplementary feed your weaners The lightest 20 – 25% routinely The whole mob if your pasture quality/quantity is inadequate Think about the composition of the ration Balance energy and protein Protein requirements change with age Plan your parasite control program Full vaccination program Weaning is a stressful and critical period in the lifetime of a sheep-



Winning With Weapers

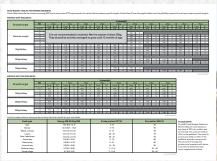


Weaning is a key time in the calendar for both the ewe and the lamb, and a few key steps will help your weaners thrive and ewes recover for next joining.

Resources

The following essential resources are available to download at www.wool.com/weaning:

- Standard reference weight (SRW) calculator This allows you to calculate the SRW for your flock, allowing for more accurate feed budgeting and management decisions.
- Weaner management checklist This contains a checklist
 of the key management practices and targets for a thriving
 weaner mob.
- Feed budget tables for Merino weaners Use these feed budget tables to first set your target weaning weight (TWW) and growth targets, then understand your weaners' requirements based on the quality and quantity of feed you have available.





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AWI held a five-day professional development course in February for 22 enthusiastic young people working in the wool industry – the industry's next generation of leaders.



The participants at the 2024 Breeding Leadership course at Clare in South Australia.

The future of the wool industry is in good hands judging by the latest group of Breeding Leadership participants.

22 wool industry representatives from across the country participated in AWI's Breeding Leadership course for 2024. Held every two years, Breeding Leadership arms the young participants, selected from throughout the wool industry, with the skills and tools to become better leaders.

The program course includes sessions on personal leadership, strategic planning, and corporate governance, as well as skills such as communication and delegation. It also provides an excellent opportunity for participants to network with other likeminded people from across Australia, as well

Charlie Brumpton from Mitchell, Queensland, day to day oversees three employees and aims to bring his new knowledge back to his team and business. "It has boosted my confidence in people management, decision making and future planning," he said.

as the skilled program deliverers and others from the wool industry.

Now in its tenth year, the five-day course has helped progress the careers of 219 young people within the wool industry, many of whom hold leading wool roles today.

The course this year was held at Clare in South Australia. As well as undertaking the structured course work, the group toured several wool-focused businesses, including Michell Wool in Adelaide and two local Merino operations to look at innovative on-farm practices and hear lived examples of what they've been hearing on the course.

AWI CEO John Roberts hosted the AWI Breeding Leadership Industry Dinner as



Allie Brinkworth from Meningie, South Australia, says she enjoyed developing her personal skills on the course. "The opportunity to network with people across the wool industry from right across Australia is so beneficial for the whole rest of my career," she said.

a networking opportunity for the course participants with industry guests.

AWI has funded the Breeding Leadership course since 2012, with this year's course delivered by Pinion Advisory.

Emily King, AWI National Extension Manager, says the AWI Breeding Leadership course is a flagship investment under AWI's Leadership and Capacity Building program.

"The Breeding Leadership course is an industryrecognised program that aims to develop young leaders to enable them to actively contribute to the future of our wool industry and encourage them to step into leadership roles within their business, industry and community," Emily said.

"The course forms a key part of AWI's commitment to education in the wool industry. Other initiatives include support for the Hay Inc Rural Education Program, Peter Westblade Wyvern Training Weekend and SA Sheep Expo."

AWI Breeding Leadership 2024 course participants

New South Wales		
Austin Grace	Murringo	
Jack Kelly	Murrawombie	
Sarah Maher	Wagga Wagga	
Jesse Moody	Tenterfield	
Christine Plummer	Buronga	
George Shannon	Bookham	
Britt Stein	Yenda	
Joe Walden	Cootamundra	
Nick Westcott	Peak Hill	
Queensland		
Charlie Brumpton	Mitchell	
South Australia		
Allie Brinkworth	Meningie	
James Goss	Brinkworth	
Liam Sander	Hamilton	
Tim Shepherd	Balaklava	
Chloe Smart	Stirling North	
Grace Teate	Wandearah	
Victoria		
Amy Byrne	Wangaratta	
Emily Foss	Upper Lurg	
Kate Methven	Branxholme	
Western Australia		
Luke Button	Tammin	
Tom Campbell	Boxwood Hill	
Trent James	Karlgarin	

TACKLING AUSTRALIA'S WEEDS WITH WEEDSCAN

Launched in December, WeedScan is a new, easy-to-use, digital tool that Australian woolgrowers - plus other landholders, community groups and NRM bodies - can use to identify, report and map priority weeds in their local area.

WeedScan benefits

- · Helps you identify priority weeds quickly without expert knowledge.
- · Provides you with easy access to best practice management information
- . Enables you to find out what priority weeds have been recorded in a specific location.
- · Suitable for weed management either at the individual enterprise level or as part of a community-led regional WeedScan network.
- · WeedScan offers the greatest benefits when it is used regularly, by lots of people, and when linked with relevant local groups.



Weeds can be a major threat to pasture productivity, native vegetation and biodiversity. However, Australia's first artificial intelligence (AI) app for weed identification, notification and management is now available to help make the fight against weeds more efficient.

WeedScan is a free and easy-to-use tool that allows users to identify, report and map more than 450 priority weeds and other weeds present in Australia.

The digital tool is powered by a CSIRO AI identification model and has been trained on more than 120,000 weed images. It has been tested across Australia by scientists, farmers, community groups, agronomists, rangers, and weeds and natural resource management officers.

A key feature of WeedScan is that the weeds identifiable by the app include many new and emerging priority weeds that may not be known to most people.

If you want to know where a particular priority weed species has been recorded, or what priority weeds have been recorded in a specific location, you can explore the WeedScan records. This will become more populated with records as more and more people use WeedScan.

WeedScan is simple to use

After having downloaded the app, simply:

- Snap a photo of a plant you suspect is a weed; and
- Upload it to WeedScan.

WeedScan's AI model will then assess your photo against verified images of weeds. Within seconds, WeedScan will suggest possible plant identifications, with degrees of confidence for each suggestion.

WeedScan can be downloaded to your smartphone or tablet from the App Store (iOS) or Google Play (Android) – simply type in WeedScan to search for the app. The tool can also be accessed via the website at www.weedscan.org.au, along with supporting resources including user guides and an introductory 'how-to' video.

Note: WeedScan will only function as desired on devices with Android 11 and above, and on iOS devices which are still supported by Apple (currently 16 and above).

A community tool for better weed control

While WeedScan allows you to identify and record a suspect weed on your own property for your own use and action, it is most effective when used as a collaboration tool with other local farmers and stakeholders to monitor and stay informed about weeds in the area, thereby assisting everyone to apply best practice control.

For example, if you are part of a local Landcare or other group, you can create your own in-app group to share your records and observations for improved weed control. Plus, using the embedded weed biology and management information relevant to your location, you can alert state and local land managers of new incursions.

Managed by the Centre for Invasive Species Solutions

WeedScan is managed by the Centre for Invasive Species Solutions (CISS), which also manages the pest animal mapping program FeralScan. CISS CEO Andreas Glanznig says WeedScan has the potential to revolutionise weed management in Australia.

"Weeds management is notoriously difficult because weeds can be challenging to identify. Correct identification is the key to effective weed management. Knowing what weeds are present in our environment and where they are located informs strategies to reduce the economic, environmental and social impacts of weeds," Mr Glanznig said.

"WeedScan will provides graziers, farmers, bush regenerators, communities, natural resource management bodies and governments with a free, easy-to-use digital tool that enables priority weeds to be identified quickly while providing access to best practice management information."

WeedScan is also supported by CSIRO, NSW Department of Primary Industries (DPI) and South Australian, Queensland and Victorian Governments, and Atlas of Living Australia. The program was funded by the Australian Government's National Landcare Program.

More information: www.weedscan.org.au

GUIDES TO MANAGING **PEST ANIMALS**

PHOTO: seng chye teo

A range of best practice management guides for invasive species that can affect woolgrowers' businesses are available from the PestSmart website.

andholders impacted by the increasing threat of feral deer will benefit from the release of the new Glovebox Guide to Managing Feral Deer, from the Centre for Invasive Species Solutions (CISS).

The guide is fast becoming one of CISS's bestselling best practice management resources, alongside existing glovebox guides and resources that help land managers combat other pest animals: wild dogs, foxes, feral pigs, feral rabbits and feral cats.

Feral deer populations are found across large parts of Australia and their numbers continue to swell. There are an estimated one to two million feral deer, creating agricultural losses of about \$69.1 million in 2021. They compete for feed with livestock, they can damage pasture and fencing, and they spread weeds.

Six species of feral deer have established selfsustaining free-ranging populations in Australia. None are native to Australia. They are susceptible to many diseases exotic to Australia such as foot and mouth disease and bluetongue, so there is the future risk that they could spread disease to livestock. Feral deer are currently found mainly in relatively inaccessible regions, which could make the diseases difficult to eradicate.

The negative impact of feral deer on Australian agricultural production, plus the environment and public and private infrastructure, will continue to grow without integrated control measures rolled out over the coming years.

The new glovebox guide is one such measure, offering practical solutions for all land managers.

As with the management of all types of pest animals, working with neighbours and the local community is important because individual animals can move across multiple properties.

Best practice management guides

CISS's best practice guides to the management of pest animals include:

- Glovebox guides for managing (1) wild dogs, (2) foxes, (3) feral pigs, (4) rabbits, (5) feral deer, and (6) feral cats.
- Field guides to poison baiting for (1) wild dogs and foxes, (2) feral pigs.
- Best-practice management of wild dogs in peri-urban environments.
- Planning guides for (1) fox management, and (2) feral cat management.

The booklets are available to download free from the PestSmart website www.pestsmart.org.au. The website also provides other best practice resources on how to plan, manage and improve pest animal control programs in Australia.





PAUL SIMONS: A LIFE OF SHIPS, SHOPS AND SHEEP

Paul Simons has had a remarkable career, from braving the North Atlantic in the Merchant Navy during the latter years of World War II, to leading the revival of Woolworths Limited as its Executive Chairman from 1987 to 1995. Additionally, for the past 40 years Paul has been a producer of quality wool, another vocation at which he has excelled.

Orn in Swansea on the coast of South Wales in 1927, Paul came from humble beginnings in a time shaped by the uncertainties and financial hardships of the Great Depression and then war. He joined the Merchant Navy as a teenager in 1944 and went on to sail many times across the treacherous battlefield of the North Atlantic while carrying supplies from the USA to Britain and its Soviet allies.

At the end of the war, Paul stayed on in the Merchant Navy and travelled the world. It was during a trip in 1946 to Sydney that his life would change forever. While visiting an ice skating rink during shore leave, Paul met his future wife, Gwenda Grant. This chance meeting not only resulted in a happy marriage of nearly 40 years, but would also influence Paul's later ventures into wool-growing; Gwenda was the niece of Lady Kate Merriman, wife of Sir Walter Merriman of Yass who was knighted for his services to the wool industry in 1954.

Not long after leaving the Merchant Navy in

1953, and now married to Gwenda, Paul joined Woolworths Limited in Sydney as a Management Trainee. His career in retail flourished at Woolworths and then Franklins. Paul rejoined Woolworths in 1987 as its Executive Chairman and is widely credited for turning around the fortunes of the struggling company. Paul has won a host of outstanding business awards during his career and is recognised as one of Australia's great business leaders.

Moving into wool: Euralie and Glencoe

In 1982, with their thoughts turning to Paul's future retirement from retail, Paul and Gwenda bought a wool-growing property, 'Euralie', near Yass in NSW. Euralie had originally belonged to the famous explorer Hamilton Hume, however it had been sadly neglected in more recent years. So while Gwenda set about renovating the Federation-style homestead and creating a wonderful garden, Paul busied himself with

learning the business of growing wool.

Euralie is about 1,000 hectares and currently runs 4,000 superfine Merinos that annually produce 140 bales of 15-17 micron wool. At 96, Paul might now be Australia's oldest superfine woolgrower! Paul's son David, a retired general surgeon, has now assumed overall supervision of the running of Euralie.

Having turned Euralie into a profitable enterprise, Paul in 2016 bought a second woolgrowing property, 'Glencoe', 30km north-east of Boorowa, at which Paul and farm manager Tom Simson run about 10,000 sheep with 18-20 micron wool. 'Glencoe' is 3,159 hectares, made up of fertile valleys and granite slopes leading up to undulating native grassland flats surrounded by old-growth native woodlands.

Having confidence in the food and fibre industries, Paul saw significant capital gains to be made over time by investing in these productive farms.



Paul Simons pictured in 2017 in an image that was used by Norwegian outdoor apparel company Devold in its marketing (as a swing tag).



Paul Simons pictured in 2020 with his partner Lyndall Eeg, and (right to left) Tom Simson (Glencoe farm manager), David Simons (Paul's son and successor), Malcolm Jones (former Euralie farm manager), and Damien Crozier (Tom's former assistant at Glencoe). PHOTO: Peter Sykes

"My focus at Euralie and Glencoe is on producing top-quality fleece while carrying out a high standard of environmental and animal welfare practices," Paul said.

Investing in farm infrastructure

Not long after purchasing Euralie and then Glencoe, Paul invested in new shearing sheds for each property to help improve the handling of the sheep and provide first-class working conditions for the shearers and farm workers. Both sheds have undercover sheep yards attached to them.

The shearing sheds are solar panelled and generate the electricity used not only in the sheds and workshops, but also in all the residences on the properties. Always keen to look after his workers, Paul provides the shearers with comfortable accommodation and facilities.

Hay sheds have also been erected along with several silos storing grain for supplementary feeding during drought.

Two large dams have been created at Euralie to provide water security during drought. Glencoe has more than 20 dams. Solar pumps have been installed to draw water from the dams, local river (in the case of Euralie) and creeks to water tanks on high ground from which water is transported via a gravity-fed pipeline system to water troughs in the paddocks.

Focus on sustainability

A keen advocate of land conservation and environmental sustainability, Paul's philosophy for both Euralie and Glencoe is that farming must work in harmony with nature.

"The focus is not on pushing the land too hard, but rather preserving it so that it serves future generations," Paul said.

"Furthermore, the provenance of fibre is becoming an essential marketing tool. At a basic level, we give the customer what they want and it's a win-win for nature and our sheep too." Paul has implemented a massive tree planting operation. This helps prevent erosion, preserve the soil, retain water in the landscape, protect the creeks, and provide shelter for the flock and habitat for native fauna. Carbon capture is another benefit of the tree planting. More than 30,000 native trees and shrubs have been planted in shelter belts on Euralie during the past 19 years and past seven years at Glencoe.

Paul has also sectioned off a proportion of each property to retain its natural state: 20% of Euralie (200 hectares) and 25% of Glencoe (790 hectares). Over time, these areas are becoming a haven for biodiversity to flourish, including native animals, birds, reptiles, insects and vegetation. It also helps improve the health of the water, soil and air.

Ongoing pasture and soil improvement is undertaken on the properties. For example, although Glencoe is in a fertile area, tests showed that the soil was undernourished so half of the pasture is now fertilised (with environmentally friendly 'worm juice') each year with an over-sowing of clover and improved grass varieties if required.



The green hills of Glencoe.

"This enables us to not only keep more sheep and get more wool, but it is also easier to maintain the land and pastures in a more responsible, biodiverse and sustainable way – guaranteeing farming for many years to come," Paul said.

The Australian National University in Canberra has commenced a research study of both Euralie and Glencoe to quantify the benefits of good environmental management. Both properties are RWS-accredited.

Animal health and welfare is also a priority on the properties. The practices recommended in the IWTO Guidelines for Wool Sheep Welfare are followed and no mulesing takes place. Losses of lambs from predation by foxes and birds of prey have been reduced by using neutered alpacas as guardian animals.

Quality and sustainability attracts buyers

Paul says the eco-credentials of the land and sheep that grow quality wool in Australia are increasingly being used by brands in their marketing to consumers.

"Discerning buyers of food or fibre seek quality from safe and sustainable origins," Paul said.

Wool from Glencoe has been sourced by two notable Northern Hemisphere brands, with the wool's origin featuring in the brands' product marketing.

McNair Shirts of Yorkshire in England retails a fully traceable Provenance line of its iconic mountain shirts, showcasing the journey that the wool takes from Glencoe all the way through to the final garment. To highlight the full traceability of the shirts to consumers, McNair has documented the progress of the wool 'from sheep to shirt' on its website and social media channels.

Outdoor apparel company Devold of Norway launched a Sheep to Shop program in 2017 which provides full traceability at every step of its value chain. Representatives from Devold visited Glencoe in 2017, with Paul and Tom subsequently featured in Devold's marketing; the company emphasised how Merino wool is a natural fibre renowned for being very fine and soft, and that it is grown at Glencoe using ethical and environmentally-sensitive farming.

Postscript

After the untimely death from cancer of Paul's wife Gwenda in 1992, Paul retired as Executive Chairman of Woolworths in 1995 and fully retired from retail in 2000. Paul now lives principally at Euralie with his partner Lyndall Eeg.

Last year, Paul self-published a book of his life, aptly titled *Ships, Shops and Sheep.* Co-authored with Terry Larder, the book had a limited print run, but a second edition is planned that will be on sale to the public.

LEARNING WITH AWI EXTENSION NETWORKS

The six AWI state-based extension networks have all been renamed. However, they will continue as before to deliver practical information and training programs to increase woolgrowers' adoption of best practice on-farm production and management.

The six state-based AWI Extension
Networks will continue to deliver the same
valuable and timely on-farm information
as usual through workshops, webinars,
newsletters, field days, social media and
conferences to their growing combined
membership of about 17,000 woolgrowers.

All networks are guided by a Producer Advisory Panel (PAP) of woolgrowers and industry stakeholders from across the state. Meeting at least twice a year, the PAPs allow woolgrowers to drive the adoption of seasonally-relevant, valuable, and timely information.

The newly-named AWI Extension Networks:

- AWI Extension NSW (formerly AWI Sheep Connect NSW)
- AWI Extension VIC (continuing to invest through BESTWOOL/BESTLAMB)
- AWI Extension SA (formerly AWI Sheep Connect SA)
- AWI Extension WA (formerly The Sheep's Back)

- AWI Extension TAS (formerly AWI Sheep Connect Tasmania)
- AWI Extension QLD (continuing to invest through Leading Sheep)

AWI National Extension Manager Emily King says the AWI Extension Networks continue to be a vital link between the research, development and marketing body AWI and the woolgrowers it works for.

"The AWI Extension Networks are well placed to assist all woolgrowers to improve their businesses, regardless of size of operation, age of farmers, level of expertise or where they live," Emily said.

"Whether it be new topics, for example innovative woolshed designs or different models of production such as summer sown legumes, or perennial issues such as lice, flies and worms, the AWI Extension Network in your state can provide information and workshops about the issue."

The AWI Extension Networks also promote and deliver key AWI programs, including the AWI-developed workshops Winning With Weaners

(see page 26), RAMping Up Repro and Picking Performer Ewes. The Networks are also playing a significant role in the delivery of the AWI SimpliFly $^{\text{IM}}$ and ClassiFly $^{\text{IM}}$ workshops for woolgrowers planning on improved flystrike protection of their flock (see page 20).

In addition, the organisation of AWI's Future Wool events are being helped by the AWI Extension Networks. These events are often conducted over a dinner and comprise an overview of AWI's R&D and marketing activities, and a chance to see the latest garments made of wool.

"The AWI Extension Networks are a great resource for any woolgrower looking to improve their enterprise or for anyone simply wanting to meet and enjoy the company and experience of other woolgrowers. All woolgrowers are encouraged to get involved," Emily added.

All the AWI Extension Networks will be run by the same organisations as previously. (AWI Extension WA changed its provider last year.)

More information: To find contact details about the AWI Extension Network in your state, head to www.wool.com/networks or phone the AWI Helpline on 1800 070 099.



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Leading Australian knitwear company Fields is a strong supporter of Australian wool and has launched a #thankawoolgrower initiative to highlight the dedication of the country's woolgrowers. Fields is also an enthusiastic advocate of the Woolmark brand which the company uses to help promote the quality of its products.



Australian company Fields is proud to produce quality knitwear using Australian wool.

produces high quality knitwear that is available in major department stores and at about a thousand smaller retailers across rural and metropolitan Australia and New Zealand. The company manufactures knitwear for its own ladies', men's and corporate wear brands as well as supplying production for many well-known private labels.

Fields General Manager Darren Elliott says the company is dedicated to supporting beautiful yarns made using Australian wool.

"Our Australian wool and wool blend yarns are fully machine washable and lightweight, which is ideal for the warm Australian climate. They have a soft handle and drape beautifully. Consumers nowadays require contemporary, casual styling, and wool plays an important part in this trend," he said.

Fields has a strong relationship with The Woolmark Company, having been a Woolmark licensee for more than 30 years.

"All our knitwear made from Merino wool and wool rich blends proudly display the Woolmark swing tickets – they are an excellent visual tool to help consumers identify a product that has been independently verified for quality," said Mr Elliott.

Supporting Australian woolgrowers

Fields is a proud supporter of Australian woolgrowers, who the company says produce the best quality wool in the world.

"As a company that values the importance of quality, we recognise that the excellence of our products is intricately linked to the quality of the wool we use, and that is why we use Australian wool," Mr Elliott said.

"We value the passion and hard work that Australian woolgrowers put into producing their wool and we are keen for them to be recognised for their dedication in producing their quality and ethically produced fibre."

Last year, Fields launched a #ThankAWoolGrower initiative which showcases the story of some of the woolgrowers that supply the fibre used in the company's knitwear.

"The hashtag #thankawoolgrower is used to raise awareness amongst our retail partners and consumers of the important role that Australian woolgrowers play in supplying high-quality, sustainable Merino wool for clothing," Mr Elliott said.

"It connects consumers with the people behind their clothing, fostering a sense of community and support for family farming businesses and the local economies."



The #thankawoolgrower logo used on the swing tags of Fields knitwear which highlights the heritage of the wool that the company sources.

The Snuggery

Working closely with Elders, Fox & Lillie and Techwool, Fields has visited several properties to produce imagery for its marketing. One of the properties featured in the campaign is 'The Snuggery', a poll Merino stud and commercial operation 35km north of Kingston SE in South Australia, owned and run by the England family, which shears 12,000 sheep.

"We have spent generations fine tuning the Merino sheep to improve wool quality. When Fields Knitwear bought our wool, it was very reassuring knowing that it would be used to make quality products for Australian consumers," said James England, Co-Owner/Manager of The Snuggery.

"Traceability is important in many aspects of the wool industry. To expand traceability to the consumer helps build brand and product loyalty. The fields #thankawoolgrower initiative helps the consumer relate to the woolgrower on an individual level.

"The vast majority of woolgrowers are exceptional in terms of animal husbandry. There are lots of examples of environmental innovation and focus. It's also very common for the woolgrowers to be locally-owned small family businesses. This information helps assure the consumer that they can buy wool with confidence."

More information: www.fields.com.au



Woolgrowers Chris, Liz and James England of 'The Snuggery' at Kingston SE in South Australia wearing 100% Merino wool knitwear manufactured by Fields, containing some of their own wool.

NEW SA BRAND PROVIDES SUSTAINABILITY & LUXURY

South Australian fashion designer Cathy Karuga, who lives with her husband on a wool-growing property in South Australia, has launched a new luxury ready-to-wear clothing brand, Yaneth, with wool central to its product range. Yaneth's timeless garments are not only available to purchase, they are also available for hire to subscribers of the brand's VIP Membership service.



Wool blend blazer and shorts.

Yaneth (pronounced Ja-nette) is a newly launched brand built on a foundation of natural fabrics with a strong emphasis on wool, a 100% renewable and biodegradable fibre. Yaneth founder, designer and director Cathy Karuga is closely connected to the fibre, living on a woolgrowing property on the outskirts of the Barossa Valley in South Australia.

Cathy and her 7th generation wool-growing husband run 3,000 breeding ewes, which inspired her to use wool as Yaneth's hero fabric, a material deeply rooted in Australian heritage.

"The brand utilises the premium and natural benefits of wool to produce sustainable and sophisticated garments with the contemporary and discerning woman in mind," Cathy said.

"As well as emphasising the beauty and versatility of wool, the Yaneth collection showcases the fibre's trans-seasonal appeal, a functionality that further highlights the sustainability of wool, with each piece able to be worn, layered and styled throughout the year."

The brand launched its first garments in October with a 16-piece Spring/Summer collection for women sized 6 to 20, with each piece designed to be worn either with other items from the collection or existing pieces in customers' wardrobes.

The collection features 12 wool garments, including a coat and blazer; a cardigan, bandeau and tops; plus, dresses, shorts, trousers and a skirt. A silk shirt, pants and dresses complete the collection. Yaneth will launch collections each season with new styles, prints and colours.

Yaneth's commitment to sustainable innovation



Designer Cathy Karuga styling the wool crepe bandeau during the collection's photoshoot.

extends beyond the choice of fabric. In addition to the brand's garments being available to purchase, Yaneth has also introduced an innovative subscription-based VIP Membership service enabling customers to hire its garments, which encourages circular consumption.

Cathy says her previous experience running a fashion label helped her identify this gap in the

"For a monthly membership fee, customers can change and refresh their wardrobes by accessing Yaneth's past and present collections. This luxury hire model allows consumers to create new looks for the week ahead or a special occasion, without cluttering their wardrobes," Cathy said.

"As well as providing customers with the opportunity to look good, the hire service helps reduce the impact of clothing on the environment by extending the usage and life of each garment."



100% wool dress

Cathy says it is important to her that the brand's clothing is designed and made in Australia.

"We are proud to work with the finest local, family-owned and operated businesses who share our principles in supporting Australian manufacturing, nurturing local craftsmanship and producing the highest quality garments and packaging," Cathy added.

More information: www.yaneth.com.au

A new AWI-funded study provides the scientific proof to sports brands and consumers that 100% natural wool fabrics provide better thermal comfort than other natural and synthetic fabrics during outdoor 'stop-go' sporting activities, especially during the resting phases when the potential for chilling is greatest.

Fast facts

- A new AWI-funded study demonstrates that 100% wool baselayer garments provide greater thermal comfort in outdoor 'stop-go' sports – such as hiking, cycling and rock climbing – and that this is most noticeable during the resting phases of these sports when the potential for experiencing 'after-chill' is greatest.
- The study also suggests that sportspeople wearing wool use less energy to maintain their thermal equilibrium, than if they wear other natural and synthetic fabrics, leaving the athletes with more energy to use during their sport and competition. The final phase of the research in 2024 aims to identify the scale of this effect and its relevance to athletes.
- AWI and its marketing arm The Woolmark Company are highlighting the results of this study to the sports and outdoor industry and to consumers.



The benefits of wearing wool are experienced throughout all phases of stop-go sports, especially during the resting periods when the potential for chilling is the greatest.

A necdotal evidence from outdoor sportspeople, such as hikers, cyclists and rock-climbers, has often indicated that only base-layers made from wool are comfortable at all stages of their sport, including before, during and after exercise, compared to base-layers made from other fibres.

However up until now, there has been no laboratory research to identify and validate this benefit that appeared to be unique to wool. In the absence of scientific evidence, some sports and outdoor brands have been reluctant to preference wool over other fibre types – hindering potential future demand for wool.

To address this knowledge gap and provide proof about the effectiveness of wool fabrics in next-to-skin activewear, AWI funded a three-year PhD study at North Carolina State University, a research leader in the textile space. The results of the study provide the scientific evidence of wool's superior thermal comfort and suitability throughout all the phases of stop-go sports.

What is the sweaty issue with stop-go sports?

Active outdoor sports such as hiking, cycling and rock climbing are also known as 'stop-go' sports because they encompass multiple activity and resting phases. Stop-go athletes sweat during the active phase, which is absorbed by their clothing, and this sweat then evaporates from the clothing during resting periods.

This evaporation has a cooling effect and can be uncomfortable. For example, a cyclist builds up a sweat during a hill climb, but is susceptible to chilling when cruising back downhill.

The solution is to wear the right clothes that enable the body to maintain more stable thermal comfort by buffering the microclimate between the fabric and the skin. Wool is ideal for this.

Study proves wool's superiority during resting phases

The garments tested at North Carolina State University were made from 100% wool, cotton, viscose and polyester – all of similar fabric weight and thickness. The fabrics were each tested using 'sweating manikins' and then humans.

The sweating manikin studies demonstrated wool to be the fibre with the highest capacity to buffer a transition from an environment of 45% relative humidity to 80% relative humidity, with an impressive temperature buffering efficiency that is 26% superior to viscose, 45% superior to cotton, and 96% superior to polyester.

The sweating manikin study clearly highlighted wool's ability to maintain thermal comfort during the resting phase by countering the evaporative cooling effect of fabric drying.

In the human testing, 12 students wore the garments during activity in a controlled climate chamber on an exercise cycle followed by resting in a simulated breeze to reflect outdoor

Figure 1: Thermal sensation rating over time

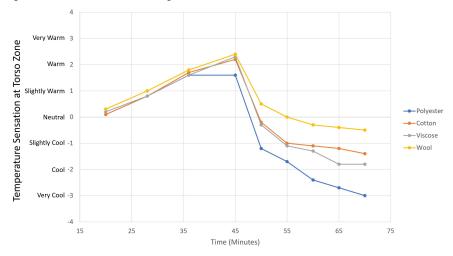
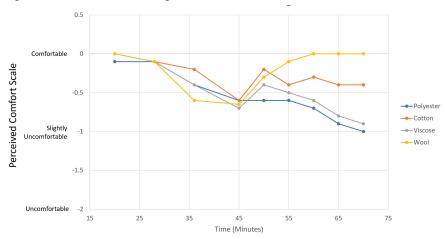


Figure 2: Perceived comfort rating over time



circumstances. The subjects were asked to rate their comfort and thermal sensation throughout each stage of exercise.

During the activity phase, no significant differences between the fibre types were detected by the subjects. However, during the *resting* phase, the wearer's perceptions associated with fibre type became significant.

It is clear from Figures 1 and 2 above that the wool garment maintained greater thermal sensation and perceived comfort during the resting phase compared to all the other garments. Although the polyester fabric dried out more quickly, that did not translate into enhanced comfort. In fact, the reverse was observed, which can be attributed to a significant decrease in skin temperature. The wool fabric had stabilised thermal sensation after the first 10 minutes of resting but the polyester fabric was still trending cooler and less comfortable after 25 minutes or more.

The garments made from cellulosic based fibres, cotton or viscose, tended to perform midway between the extremes shown by the wool and polyester garments.

"An inherent feature of 'stop-go' sports is the ongoing sequence of activity and rest - for example rock climbers take multiple rests as they make their way up the cliff face. This is important, as the research indicates that wool's ability to minimise after-chill and maintain greater comfort than other fibre types continues to be experienced throughout the stop-go sport."

Angus Ireland, AWI Program Manager, Fibre Advocacy & Eco Credentials

AWI Program Manager, Fibre Advocacy & Eco Credentials, Angus Ireland, says the researchers concluded that the interplay between wool's attributes was responsible for maintaining comfort for stop-go athletes.

"The combination of wool's ability to absorb moisture, generate heat and then only gradually release that moisture, together with its hydrophobic outer layer deferring rapid evaporation and cooling, were concluded to be responsible for wool's dominance," Angus said.

"The study demonstrates that wool base-layer garments deliver significantly better comfort and temperature performance to athletes for an extended resting period. Wool's ability to diminish after-chill was seen to be longlasting, showing no sign of disappearing even 25 minutes into a resting phase.

"While quick-drying fabrics like polyester do lower humidity levels next to the skin, they do not lead to better outcomes for the athlete. The athlete perceives rapid drying during the resting phase as uncomfortable because the rapid evaporation of sweat leads to chilling."

"Brands need to re-evaluate their focus on quick-drying sportwear and instead preference garments made from fibres, such as wool, that have been specifically designed by nature for dynamic activities."

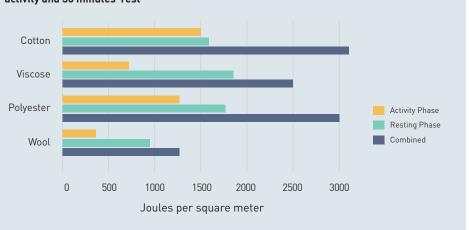
Angus Ireland, AWI Program Manager, Fibre Advocacy & Eco Credentials

Wool helps athletes conserve energy

The study also suggests that athletes wearing wool expend less energy maintaining their thermal comfort during both the activity and rest phases, with the combined energy consumption half or less than that of all other fibres (see Figure 3).

"By using less energy to maintain their thermal comfort, the athlete that wears wool is left with more energy to use during their sport and competition. Research is ongoing to identify the scale of this effect and its relevance to athletes, but it is significant to be able to identify fabrics that require less energy from the athlete," Angus said.

Figure 3: Athlete energy requirements to maintain thermal comfort during 30 minutes' activity and 30 minutes' rest



From Merino wool blended with marine waste, to glucose-releasing technology, this year's Woolmark Performance Challenge finalists developed innovative new uses for Merino wool applicable to the Luna Rossa Prada Pirelli sailing team.



For the 2023 Woolmark Performance Challenge, students were challenged to develop bold, game-changing innovations that reinvent the uniforms of the Luna Rossa Prada Pirelli sailing team.

Cince its launch in 2018, the Woolmark Performance Challenge has been run by AWI as an annual competition for tertiary students from across the world to develop innovative new product applications for Merino wool within the sports and outdoor market.

"The Woolmark Performance Challenge has cemented its rightful place as the world's leading ideas platform for the performance-wear market, harnessing ground-breaking design with the unique natural properties of Australian Merino wool," said AWI CEO John Roberts.

"Unlike other competitions which are based solely on design aesthetics, the Woolmark Performance Challenge has asked students to delve into fibre science and garment technology. During the past six years, the program has involved nearly 7,000 students from more than 325 universities in 30 countries across the world, thereby giving AWI and its partners access to a global pool of world class inventive minds.

"By developing new innovations using Merino wool in the activewear sector, and promoting Merino wool as a technical fibre, the Woolmark Performance Challenge helps increase the demand for Australian wool."

AWI partners with sports and outdoor industry brands to amplify the messages about the competition and the performance

of Merino wool - and also to further embed appreciation for the fibre within the partner companies themselves.

Past program partners have been leading sportwear company adidas (twice), Norwegian-based outdoor apparel company Helly Hansen, Swiss running shoe and apparel brand **On**, Italian mountain equipment brand **SALEWA** and French outdoor and sporting goods company Salomon.

In 2023, the partner was the Luna Rossa Prada Pirelli team, the Italian challenger in the iconic America's Cup sailing race.

Woolmark Performance Challenge since program launch

6,900+ tertiary students involved

325+ universities in 30 countries

1,350+ innovation ideas submitted





For the 2023 Woolmark Performance Challenge, students designed wool innovations suitable for the uniforms of the Luna Rossa Prada Pirelli sailing team competing in the America's Cup.

The 2023 competition

For the 2023 competition, students were challenged to develop bold, game-changing innovations that reinvent the uniforms of the Luna Rossa Prada Pirelli sailing team.

All entries to the competition must have used a minimum of 50% Merino wool within their product composition, paired only with natural or biodegradable fibres.

A key component of the Woolmark Performance Challenge has been to educate students about Merino wool. Through a series of webinars by industry experts and sportspeople, AWI has educated participating students about the attributes and benefits of the fibre – to not only arm them with information to assist in their competition entry, but to also encourage and inspire them to think about wool in their future careers.

In 2023, there were more than 120 entries from students at 36 universities in 18 countries. From these entries, five tertiary students were selected as finalists. Each of the finalists received mentoring from industry heavyweights to accelerate their concepts, enhance their skills as creative thinkers, and provide real-world advice on the practicalities of innovating for the textiles and apparel industry.

INNOVATIVE WINNING PRODUCTS OF THE CAMPAIGN

he winners of the 2023 competition and all the finalists' innovative concepts were announced in November at the ISPO sporting and outdoor goods trade show in Munich, Germany.

The competition awards the winners with prizes including industry internships and ongoing training support, plus the opportunity to sell their idea to AWI or that year's competition partner.



The five finalists of the 2023 Woolmark Performance Challenge - Edoardo Vedelago (Italy), Daniel Carhuff (USA), Anri Amagasa (Japan), Joon Han (South Korea) and Aeryk Catipon (USA) - flanked by members of the Italian sailing team Luna Rossa Prada Pirelli, Romano Battisti and Bruno Rosetti.



Winner Daniel Carhuff from the USA.

Winner - Internship at **Prada Style Department:** Merino-Marine Tex™

Winner Joon Han from South Korea.

Korean student Joon Han was deemed to have developed the most innovative design and won an internship at Prada Style Department. Joon developed an environmentally focussed product called Merino-Marine Tex™ that combines the natural benefits of Merino wool blended with naturally sourced fibres from marine waste.

Using nanotechnology and a unique dualmesh structure, Merino-Marine Tex^TM explores a comprehensive process from the filament spinning stage through to nanofinishing and fabric structure, to align with the Luna Rossa Prada Pirelli team's focus on protecting marine environments.

Joon Han, is a student of textile and fashion design at Hongik University in Seoul, South Korea.

Research bursary winner: **VVULCAN** composite rubber

Daniel Carhuff, a student studying Master of Science in Sports Product Design at the University of Oregon received a Woolmark Research Bursary for his VVULCAN product which was deemed to be the best research-led proposal with most potential for development.

Developing a family of composite materials to replace traditional plastic and rubber, the VVULCAN innovation seeks to support the performance and safety of the Luna Rossa Prada Pirelli sailing team while eliminating virgin rubber, plastic and neoprene usage. Harnessing Merino wool/rubber blends to create outsoles with greater grip in wet conditions, the VVULCAN family of composite rubbers allow for softer, more breathable seam tape as well as lighter and more ecologically considerate zipper pulls, overlays and trim pieces.

Other finalists



Aeryk Catipon, University of Oregan, USA

Aeryk developed Glycoreact, a product that harnesses the unique properties of Australian Merino wool to provide direct muscle energy in response to an athlete's activity intensity. Glycoreact combines nano-infused glucose microcapsules and optical nano sensors for transdermal glucose transfer, releasing glucose into an athlete's circulatory system to provide fuel and swift recovery when athletes need it most.



Anri Amagasa, Professional Institute of International Fashion, Japan

Using colour-changing dyes, Anri's design focuses on health, efficiency and fashion. The colour changing system feature of the design utilises temperature to indicate training efficiency or the need for medical support, alongside maintaining an elegant aesthetic for the Luna Rossa Prada Pirelli sailing team.



Edoardo Vedelago, IED Istituto Europeo Di Design, Milan, Italy

Edoardo innovated the sailing team's training uniforms by introducing far infrared (FIR) technology and microencapsulation technology to release the astaxanthin antioxidant for wearers.

More information: www.woolmarkchallenge.com

US CONSUMERS URGED TO GET OUTSIDE IN MERINO!

The Woolmark Company last year partnered with prominent US media company Outside Inc on its Get Outside Tour across the US, to inspire outdoor enthusiasts to choose Merino wool for their outdoor adventures.





Outdoor ambassadors Lyle Frenkel and Alina Drufovka have been promoting the natural benefits of Merino wool apparel to outdoor enthusiasts at events across the US

2023 GET OUTSIDE TOUR

102

onsite activations across the US

28 million

tour impressions

230,000

'in real life' direct consumer engagements

Headquartered in the city of Boulder at the foothills of the Rocky Mountains in northern Colorado, Outside Inc is an American media company that reaches more than 50 million active lifestyle enthusiasts each month through its range of magazines and digital assets. Its 30+ media brands cover a diverse range of outdoor pursuits including hiking, climbing, snowsports, running and cycling.

The company was founded on one simple idea: "Get everyone Outside". Each year, the company highlights this mission by running a Get Outside Tour during which the company gets to meet enthusiasts face to face at outdoor sports events, festivals and clinics held across the US. In 2023, the tour ran for seven months, from

April to October, with 102 activations at nearly 50 events in more than 25 states.

With Merino wool the ideal fibre to wear during outdoor pursuits, AWI's marketing arm The Woolmark Company last year partnered with Outside Inc during the Get Outside Tour to encourage people to choose Merino wool for their next outdoor adventure.

"The people attending these events are highly motivated enthusiasts that regularly buy outdoor gear, so are a perfect group to target with information about the natural benefits of wearing Merino wool apparel," said AWI Business Development Manager Americas, Sports & Performance, Monica Ebert.

"The ultimate aim of the partnership with the Get Outside Tour was to help drive sales of Merino wool outdoor sports gear at a key time of year for purchases."

The benefits of Merino wool that were promoted included its softness, odour resistance, breathability and thermoregulation, stain and wrinkle resistance, and it

being a natural, renewable and biodegradable fibre.

One of two reels on Instagram featuring Outside ambassador Alina Drufovka, highlighting the benefits of Merino wool, which received 2.2 million impressions.



"Marketing Merino wool's inherent performance properties and eco-credentials are important to ensure a new generation of consumers are knowledgeable about the fibre's benefits," Monica added.

A team of Outside ambassadors acted as an extension of The Woolmark Company's own team, leading outdoor excursions and gear demonstrations featuring key Woolmark brand partners including Artilect, Unbound Merino, Ibex, and Smartwool. The four brand partners outfitted the ambassadors to demonstrate first-hand the benefits of Merino wool on the road to consumers. The brand partners also supplied products to be displayed at the Get Outside Tour festival tent, as well as providing discount codes and giveaways.

The Get Outside Tour team engaged directly with more than 230,000 consumers 'in real life' at the events to promote the benefits of Merino wool. The Tour was supported with print and digital marketing – and the Woolmark logo was featured on the Tour van. In total, the Tour received 28 million impressions (the number of times the event marketing was seen).

In addition to organic social media features on Outside's channels, The Woolmark Company partnered on a dedicated custom content program with one of the Outside ambassadors to further highlight the benefits of Merino wool performance wear. The ambassador created two reels and supporting stories on Instagram that featured products from brand partners and the benefits of Merino wool. The two reels received 2.2 million impressions.

OPTIM WOOL USED IN THE VOLLEBAK 'FUTURE SUIT'

British clothing brand Vollebak promotes itself as "designing clothes for the next century, not the next season" – and with its previous clothing collections including invisibility cloaks, jackets for the apocalypse, and workwear for Mars, that statement seems spot on. The company has now turned to Australian Merino wool to create its latest high-performance apparel: The Future Suit.



The Future Suit from British brand Vollebak, made using Merino wool and $Optim^{TM}$ technology.

Vollebak is an award-winning clothing brand that specialises in cutting edge menswear, using the forefront of science-based materials and technology. Headquartered in London, the brand was launched in 2015 by twin brothers, designers and athletes Nick and Steve Tidball.

"In every industry there's someone building the future, whether it's technology, architecture, food, cars or space rockets. In clothing, it's us," Vollebak said.

"As a brand, we keep asking 'What can clothing do that hasn't been done before?' And that's what we're really interested in designing – using science and technology to create clothes from the future."

Perfectly applying this ethos, Vollebak last month launched a pioneering new Merino wool product, aptly titled The Future Suit, which is the company's contemporary, weather-resistant take on the suit.

The Future Suit combines a matching jacket and pants made from predominantly Merino wool, which Vollebak has transformed into a smooth, minimalist, high tech material. The cut is relaxed enough so that the suit feels comfortable for whatever your adventures are that day, but also smart enough for when you've got a dress code to meet.

"We've designed the Future Suit to easily take you from a plane to a boardroom, to lunch, or up a mountain," Vollebak said. "It doesn't look or feel like any wool suit you've seen before."

The Future Suit jacket borrows from the design of the original blouson jacket – a short jacket with a fitted waist found in military uniforms from the mid-20th century right up to the modern day. The jacket is fitted but not restrictive, and the pants come with a slight taper towards the bottom of the leg.

Optim™ technology

Vollebak prides itself on working with the most advanced materials in the world – whether they started life in NASA or in nature. While, the company has previously used Merino wool for base-layers and mid-layers, it had never before used the fibre for its outerwear, until now.

The Future Suit is built using a blend of 70% Australian Merino wool, plus polyester and polyamide, that is engineered using Optim™ spinning technology.

Optim[™] fabric is one of the innovative and high-value woven Merino wool fabrics developed by the wool development centre set up in 2013 by AWI along with one of China's leading woollen textile enterprises, The Nanshan Group.

The fabric is constructed at very high levels of thread density in warp and weft using yarns that have been stretched, but not set, during Optim™ processing. It is only when the fabric is wet-finished that the stretch is released causing the yarns to contract, thus leading to an extreme tightening of the fabric structure and the creation of the immensely dense fabric.

After optimising the spinning, weaving and finishing processes, the fabric has enhanced water and wind resistant properties without the application of any chemical treatments. The fabric retains all of Merino wool's fine properties such as breathability, thermoregulation and odour resistance. The Future Suit jacket and pants are also machine washable.

Available online

Vollebak primarily retails its appared online via its website, with free worldwide shipping.

However, reflecting the extreme disposition of the brand, it also chooses to stock some of its gear in the most remote, really remote, stores on Earth, The first store to stock Vollebak gear was in 2020 and happened to be in Australia: the Tjukayirla Roadhouse located deep in the Great Victoria Desert of Western Australia, 300km east of Laverton on the Great Central Road. So, yes, that remote!

More information:

www.vollebak.com www.instagram.com/vollebak The Autumn/Winter marketing campaign of AWI subsidiary The Woolmark Company in China last year utilised proven strategies that highlighted the eco-credentials of Merino wool to consumers and helped leading brands increase the sales of their wool products.

CAMPAIGN HIGHLIGHT RESULTS

4,000+
participating brands

525 million impressions

102 million

\$122.4 million

150%

increase in sales compared to pre-launch period

Building on its successful marketing campaigns of previous years in China, The Woolmark Company's new campaign was aimed at making Merino wool the most desirable apparel fibre for consumers in China during the recent Autumn/Winter season.

AUTUMN/WINTER 2023 MARKETING CAMPAIGN IN CHINA

1. CONTENT STRATEGY

Build consumer awareness of wool's natural eco-credentials through a campaign video and put consumers in a purchase mind-set through celebrity-led content.

2. RETAIL STRATEGY

Drive wool purchases at retail through collaboration with China's largest e-commerce platform and brands during the peak season for buying clothes.

"The marketing campaign involved a two-step rollout to consumers, to first build awareness of wool's premium natural benefits, followed by a major digital, social and e-commerce component to drive purchases of wool products," said AWI Country Manager China, Jeff Ma. See above.

The theme emphasised that Australian wool can play a role in helping to 'heal the earth' due to the fibre's natural, circular eco-credentials. The campaign slogan was: 'Merino wool back to nature'. The campaign was a strategic extension of the company's earlier Spring/Summer 2023 campaign which had highlighted that wool is a biodegradable fibre that returns to nature when it is buried in soil.

"The sustainability of products is a major concern for consumers across the world, and this also applies to consumers in China. Natural and eco-friendly materials have become an important consideration for Chinese consumers when buying clothes, with sustainable fashion messaging becoming increasingly resonant within the China market," Jeff said.

1. Building awareness of wool's natural eco-credentials

A key part of the campaign to raise awareness of the natural credentials of wool was the launch of a highly shareable 45-second video titled 'When Merino met Mother Nature'. The video uses animation, which has proved to be a highly effective medium for delivering emotive messages and achieving a large impact on Chinese consumers.

In the video, a young child goes about healing the planet by placing woollen plasters on degraded parts of the landscape resulting in a healthy, biodiverse environment. At the end of the video, the child's grandfather tells him land the audience]: "There are lots of people who care for the land just like you. They're called woolgrowers and they've been doing it for a very long time." The grandfather, child and entire set of the video are made from Merino wool.

Screenshots from the video that highlight wool can help heal the planet.









The home page of TMALL's Wool Pavilion (featuring popular celebrity Guan Xiaotong at the top), which received more than 230 million views.

"The video places Merino wool at the centre of the sustainability movement by telling a poignant narrative of the natural origins of wool, and how the fibre can play a valuable role in healing the planet," Jeff said.

"Designed to be memorable and informative, the film highlights the positive way that Australian woolgrowers and their sheep can reduce consumers' environmental impacts, set against the backdrop of a heart-warming interaction between a grandparent and grandchild."

The video and key visuals were launched in September on Chinese digital and social media platforms, and were also streamed on Xiaomi Smart TVs in China. The video received 84 million impressions (the number of times the video was presented) and 41 million video plays.

"The video was very well received, with our research showing that viewers, after watching the video, had a high recall of the campaign slogan 'Merino wool back to nature' and they said their intent to purchase Merino wool apparel had significantly increased," Jeff said.

In the lead up to and during the major retail component of the Autumn/Winter campaign, The Woolmark Company leveraged the

A screenshot from one of TMALL's live shopping events that received seven million views

growing awareness and association of wool with nature and environmental sustainability, by launching a celebrity endorsement of the fibre on social media

with famed Chinese actress Guan Xiaotong. Her films for the campaign received 145 million impressions and 33 million video plays.

"Securing A-list celebrity Guan Xiaotong as an ambassador for the Wool Week campaign proved to be a highly successful strategy, attracting substantial attention and driving significant traffic to the campaign," Jeff said.

2. Driving wool purchases at retail

For the retail aspect part of the campaign, The Woolmark Company partnered with TMALL - the largest e-commerce platform in China - for the fifth consecutive year for Wool Week, during which TMALL had a dedicated 'Wool Pavilion' page which highlighted thousands of wool products for consumers to buy.

Widely known by industry insiders and highly recognised by consumers, Wool Week has become an annual campaign that brands and consumers look forward to. This year, a total of 4,000+ brands participated in the shopping festival. Taking place in September, it is the best time for new wool product launches.

Media and retail activations following the awareness phase of the campaign maximised consumer traffic to retail partners and increased sales of wool products in the peak selling period of Autumn/Winter.

The campaign achieved remarkable average daily sales growth, experiencing an impressive 150% increase compared to the pre-launch period.

During the campaign, the Wool Pavilion received more than 230 million page views. Key visuals of celebrity Guan Xiaotong featured in the Wool Pavilion and digital advertisements. Push notifications about the campaign were sent to 53+ million users across popular apps.



Well-known Chinese actress Guan Xiaotong was an ambassador for The Woolmark Company's campaign, pictured here in a campaign photo wearing Merino wool in a natural, green setting.

During Wool Week, there were also live shopping events during which consumers were able to view on TMALL people talking about, wearing and promoting various wool apparel products from international and domestic brands. The live shopping pages alone received seven million page views.

This was also the fourth year of the collaboration with global luxury e-commerce platform Net-a-Porter, which selected more than 50 high-end brands to promote Merino wool to high-end consumers.

The campaign also led up to brand partnerships in the run up to China's Double 11 online shopping extravaganza. Double 11 (also known as Singles Day) is an online shopping festival held on 11 November in China that is similar, in some ways, to Black Friday in western nations. There is also a Double 12 shopping festival (also known as Couples Day) on 12 December, which involved further brand partnerships.

"While the campaign was successful in building and reinforcing consumers' awareness of the all-round benefits and natural credentials of Merino wool, it importantly increased consumers consideration and purchase intent for Merino wool," Jeff said.

"Most crucially, by providing a direct link between consumers' sustainability values and the point of purchase, it was successful in driving increased demand for Merino wool products which will benefit Australian woolgrowers."

HUDSON'S BAY MARKETING CAMPAIGN IN CANADA

To increase sales of Merino wool products in Canada, The Woolmark Company last year partnered with iconic luxury retailer Hudson's Bay to carry out a successful marketing campaign that combined multiple digital and traditional marketing channels. Here we provide an in-depth look at the project, to provide readers with an example of all the elements typical of a collaborative marketing campaign involving The Woolmark Company.

Founded in 1670, iconic Canadian retailer Hudson's Bay opened its first department store in 1913. It now has 85 brick-and-mortar stores and an e-commerce website, known as The Bay (thebay.com), which is one of the largest premium lifestyle platforms in Canada.

Continuing its approach to collaborate with leading retailers with a strong e-commerce and brick-and-mortar presence, AWI's marketing arm The Woolmark Company last year partnered with Hudson's Bay in a successful marketing campaign to promote Merino wool to high-spending consumers in Canada. Canada has the tenth largest economy in the world.

The marketing campaign ran for four months during the peak wool buying season from the beginning of September to the end of December. The campaign objectives were to firstly drive awareness of Merino wool as an essential ingredient for sustainable, luxury fashion; and secondly increase the demand for Merino wool products.

The forever fibre. One life is never enough for Merino wool: it's the most recycled and reused fibre in the world. Not only is our planet a big fan of its biodegradable super powers, but its circular nature means we never have to live without it.

Hudson's Bay website

Committed to you. Merino wool is not the high maintenance type. Resistant to stains and wrinkles, naturally soft and breathable, and easily machine washable, Merino is the perfect long-term staple any wardrobe would be lucky to have.

Hudson's Bay website

The Woolmark Company was successful in achieving both campaign objectives. During the four months, the campaign achieved almost 36 million impressions (the number of times the campaign marketing was seen) driving strong awareness for the campaign. A strong average sell through rate of a new Woolmark-certified collection was achieved, with exceptional success in the men's collection which had an 83% sell through rate. Total sales were A\$8.2 million.

The robust campaign included a variety of digital marketing tactics to drive online customers to a Wool Shop on Hudson's Bay e-commerce website, as well as traditional in-store marketing to increase sales in the company's stores across Canada. See the opposite page for details.

The Hudson's Bay creative team undertook a photoshoot of key wool products, creating imagery that was used across all the campaign marketing including digital, social and in-store displays. The imagery was paired with editorial content about the benefits of wool to drive increased customer engagement and purchases.

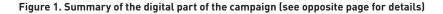
Hudson's Bay's first Woolmark-certified collection

As an addition to the marketing campaign, The Woolmark Company and Hudson's Bay procurement team worked closely to ensure that 30 Hudson's Bay wool products were certified for fibre content and quality by The Woolmark Company. The products spanned men's, women's, and accessories in Hudson's Bay's own Hudson North brand.

As a result, the Woolmark logo was attached (eg on a swing tag and/or sewn-in label) to the wool products for customers to see. On thebay.com, the Woolmark-certified Hudson North collection products were tagged online to include the Woolmark logo.

By providing quality assurance to more customers, the Woolmark Licensing Program is helping to support and increase the demand for wool. Nearly 27,000 units in the Woolmark-certified collection were sold.

This was the first time that Hudson's Bay had become a Woolmark licensee.







DIGITAL ELEMENTS OF THE CAMPAIGN

1. The Bay website landing page and Wool Shop



The key element of the digital campaign on thebay.com was a dedicated landing page and Wool Shop from which customers could purchase wool products.

Hudson's Bay and The Woolmark Company worked together to select Merino wool and other high quality wool merchandise to be included in the curated Wool Shop product range. The range included 252 products (men's, women's and home) from 44 brands, including the Woolmarkcertified Hudson North collection

The landing page and Wool Shop ran for four months from 6 September to 31 December through the busy autumn and holiday seasons.

To generate awareness of wool's benefits and increase consideration for purchase, editorial messaging about wool's natural sustainability, quality and performance was included on the landing page. The average dwell time, that is the time that a customer spent looking at the editorial, was more than 2½ longer than the average dwell time for a typical brand page. This lengthy dwell time is likely due to the wool editorial being more informative than other brand pages.

Furthermore, this destination page was the top editorial page on thebay.com during the campaign time period. Of the ten other editorials live on thebay.com during the same time period, the Wool Shop exceeded the average site traffic by more than 50%.

2. The Bay website banners



Home page banners: Advertising banners were included on the home page of thebay. com during two weeks of the campaign, one in September and one in October, to highlight the campaign and point customers to the landing page and Wool Shop. Both the home page banners had above average click through rates indicating that customers were very engaged with the messaging and the product.

Run of site banners: There were also two premium 'run of site' advertising banners that that were included throughout thebay.com during the whole of the four months of the campaign. These two run of site banners were strategically placed to maximise visibility of the campaign and linked directly the dedicated Wool Shop. Both these banners achieved a significant amount of impressions, about six times the amount of a typical campaign.

Category page banners

Advertising banners were also included on the men's and women's category pages for two weeks during November.

3. Social media

Paid social: A paid media strategy ran throughout the four months. It was focused on driving awareness with an 'always-on' Google Display ads campaign. It drove customers to the dedicated landing page and Wool Shop.

Not only were the impressions very strong on this tactic, the click through rate was above the benchmark, indicating strong consumer engagement with this campaign. Paid social was the top marketing tactic to drive traffic to the dedicated landing page.

Owned channels: Social media posts on Hudson's Bay's own Instagram and Facebook channels helped drive campaign awareness and traffic to thebay.com. The posts, which

highlighted the natural benefits of Merino wool, had strongly positive sentiment.

Influencer content: To help ensure the campaign was reaching the right audience with the right message, Hudson's Bay engaged

> with three influencers who each posted three videos which focussed on the planet positive and stylish qualities

of wool apparel.



the campaign and the availability of quality wool products on thebay. com, Hudson's Bay sent two dedicated emails to its large distribution list of highly-engaged shoppers, linking directly to the Wool Shop to drive purchases of wool

products. The first email was sent in September at the launch of the campaign with the second sent at the end of November to re-engage with customers during the peak holiday season. An advertising banner was included on a third Hudson's Bay email in December.

IN-STORE ELEMENTS OF THE CAMPAIGN

1. In-store displays

Hudson's Bay and The Woolmark Company collaborated to design instore displays for three of its flagship stores in downtown Toronto, Vancouver and Montreal. The displays were on show for five weeks from 25 September to 31 October. It is estimated that more than 400,000 people were exposed to the displays to help drive awareness of the benefits of Merino wool and purchases.

2. Retail training

While eye-catching and informative in-store displays and swing tickets can influence a



consumer's purchasing decision when in a shop, it is often the knowledge and expertise of the customer-facing retail staff that give customers the guidance and confidence to make the purchase. Consequently, The Woolmark Company provided a customised six-part video/digital training program to Hudson's Bay's shop-floor sales staff to educate them about the natural benefits of wool, so they could advise customers more appropriately. The training also addressed topics such as wool care, common customer concerns and understanding the significance of Woolmark certification. More than 7,000 Hudson's Bay staff completed the training, which is a very strong result.



Displays promoting Woolmark-certified wool product at the Hudson's Bay store in Toronto.

With a population of more than 125 million people, an economy ranked fourth in the world, and a very large premium apparel market, Japan continues to be a major consumer market for products made from Australian wool. This double page spread reports on some of the recent joint marketing campaigns undertaken there by The Woolmark Company.

JOINT CAMPAIGN WITH JAPANESE ONLINE GIANT DRIVES WOOL SALES

Following on from the previous year's successful marketing collaboration, The Woolmark Company has undertaken another campaign with the second largest luxury fashion e-commerce platform in Japan, Rakuten Fashion, to promote a massive selection of Merino wool apparel for consumers to buy during autumn/winter 2023.

> CAMPAIGN HIGHLIGHT RESULTS

> > 2 million

wool rich items promoted (+33% YOY)

756

brands promoted (+30% YOY)

\$24 million of wool products sold

50,000 kg

he two-month campaign, which ran the two-month campaign, ...
during November and December, put Merino wool at the front of digitally savvy shoppers' minds - all with the aim to make Merino wool the most coveted apparel fibre for Japanese consumers during the peak selling winter season.

Rakuten Fashion is a huge premium fashion e-commerce platform with estimated sales in 2022 of A\$1 billion, and a 40% year-on-year



growth during the past few years. Its parent company is the largest e-commerce platform in Japan.

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

"This was the largest campaign of this type we have ever conducted in the Japanese market. It showcased Merino wool products from more than 750 brands, with two million wool rich products available to purchase, an increase in volume of a third from last year."

Rakuten Fashion's online wool hub

The key objective of the campaign was to direct consumers to a 'wool hub' on the Rakuten Fashion website which showcased an enormous range of shoppable wool-rich products for men, women and children. The wool hub also included editorial content highlighting the benefits of Australian Merino wool including its eco-credentials.

A multi-channel digital and social campaign on Rakuten Fashion's owned media drove online traffic to the wool hub through advertising banners on the Rakuten Fashion

"We look forward to growing the awareness and sales of wool products through this continued partnership, with Rakuten Fashion the go-to luxury and designer fashion e-commerce platform in Japan, and Merino wool the luxury fibre of choice."

> Jin liiima. Rakuten Group

website, push notifications on its mobile application, e-newsletters to its large client base of 6.6 million consumers, and posts on its Instagram channel.

The digital campaign performed extremely well, achieving 107 million impressions (which is the number of times the campaign was seen online) and 450,000 clicks through to the wool hub page where customers could buy wool products.

The campaign involved imagery featuring famous Japanese influencers, actress and model Ami Komuro and actor Jin Suzuki. which significantly boosted the drive in sales.

"We are pleased to have collaborated again with The Woolmark Company to highlight Merino wool's many benefits, and to showcase a uniquely wide array of premium wool products to our fashion-savvy large customer base. This year we opted for the strategy of using well-known models for the key visuals, whose popularity successfully helped boost engagement and sales together with the additional advert exposure to our service users. delivering better cost performance," said Jin Iijima, Vice General Manager, Fashion Business Department, Marketplace Business, Commerce & Marketing Company, Rakuten Group, Inc.

"The campaign performed extremely well, in line with our objectives. Despite a reduction is budget compared to last year, the campaign yielded a significant A\$24 million in sales of wool rich products containing in total an estimated 50,000 kg of wool."

> Samuel Cockedey, AWI Regional Manager Japan & Korea

PROMOTION OF WOOLMARK-CERTIFIED ÁNUANS APPAREL TO GEN Z

The Woolmark Company has collaborated with fast-growing contemporary womenswear brand anuans on a two-month digital and in-store campaign to promote 20,800 pieces of the brand's Woolmark-certified products during autumn/winter.





Woolmark-certified wool coats from anuans being promoted online and in its brick-and-mortar stores.

ed by fashion influencer Asami Nakamura, ánuans has quickly gained a strong following amongst Gen Z and millennials in Japan since its launch in January 2021, through its carefully managed design, production, and attention to quality.

AWI Regional Manager Japan & Korea, Samuel Cockedey, says ánuans is a fast-growing brand that is keen to embed Merino wool in its DNA.

"The brand has consciously put Merino wool at the core of its collections and showcased its Woolmark certification to consumers as an assurance of high quality wool products. The brand operates under an agile and modern business model and benefits from a highlyengaged customer base," Samuel said.

"Given all these positives, The Woolmark Company was happy to collaborate with anuans during the recent autumn/winter season to help educate the brand's younger target customers about Merino wool's position as a premium fibre and increase sales of its Merino wool products."

The two-month digital and in-store campaign during November and December promoted a range of wool products, including coats and jackets, jumpers, dresses, skirts and trousers. There were 20,800 pieces available using 11,500 kg of wool, with all products certified by The Woolmark Company. Many of these items were sold out before they even hit the market at pre-launch on their websites, resulting in the brand ordering additional quantities of the wool products.

There were dedicated pages on the ánuans website, including a hub page featuring the benefits of wool, the meaning of Woolmark certification, and the range of wool products for customers to buy.

Online advertising banners, e-newsletters and social media posts helped drive customers to the hub page. In-store sales activations were rolled out at the brand's brick-and-mortar stores with window displays showcasing the products and their eco-credentials.

AUSSIE LAMBSWOOL KNITWEAR CAMPAIGN WITH POPULAR RETAILER

The Woolmark Company this winter helped promote the Hamilton Lambswool brand of knitwear on the popular multi brand retailer JOURNAL STANDARD relume, which is operated by one of the largest apparel groups in Japan, Baycrew's.

Following a successful collaboration with JOURNAL STANDARD relume in 2022 on a winter marketing campaign in Japan to promote wool coats, The Woolmark Company once again joined with the retailer, but this time to promote 20,700 pieces of Hamilton Lambswool knitwear during a two-month winter marketing campaign.

Launched in 2009 with a focus on a mature. down-to-earth look. JOURNAL STANDARD relume has annual sales of more than A\$100 million through a combination of online retail and brick-and-mortar stores.

The 6,900 kg of wool used in the knitwear, averaging 17.5 microns, was sourced from Victoria by the third largest trading house in Japan, Itochu, which has become a Woolmark licensee thanks to this project. There were 11 styles of knitwear (for men and women) with originally 18,000 pieces for retail. All the products (comprising 80% wool) were certified Wool Rich Blend by The Woolmark Company. The brand added almost 3,000 more pieces after the collaboration, due to its confidence in the success of the wool collection "As well as driving sales of the Australian

Merino wool knitwear at JOURNAL STANDARD relume, the campaign also helped foster The Woolmark Company's relationship with Baycrew's and Itochu which will hopefully lead to them using and promoting more Australian wool in the future," said AWI Regional Manager Japan & Korea, Samuel Cockedey.

The campaign included four co-branded landing pages on the retailer's website, one featuring interviews with young Japanese creatives promoting the knitwear. The three other pages were features for women about how to coordinate the knitwear with other apparel and the versatility of wearing it on different occasions (café, office, day off).



20,700 pieces of knitwear made from Australian Merino lambswool were promoted in a joint campaign with popular retailer JOURNAL STANDARD relume.

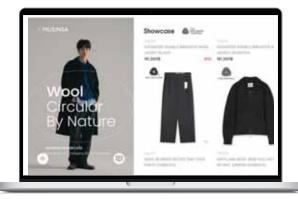
With a population of more than 50 million people, an economy ranked twelfth in the world, and the primary driver of customers' apparel purchases being quality, South Korea is a key consumer market for products made from Australian wool. This double page spread contains a snapshot of some recent initiatives undertaken there by The Woolmark Company.

Marketing collaboration with online retail giant

After a successful marketing collaboration in 2022 with Korea's leading e-commerce fashion platform, Muninsa, The Woolmark Company last year ran a second campaign with the online retail giant. This time, more than double

the number of products were promoted, resulting in the collaboration being The Woolmark Company's largest ever autumn/ winter campaign in the Korean market.

Launched in October, the extensive digital and social campaign boosted sales of a diverse selection of contemporary wool products across menswear and womenswear. There were approximately 300,000 wool items available to buy from 87 participating brands, representing



The wool hub page on the Muninsa website.

an estimated 120 tons of wool.

As well as showcasing the benefits of wool and the Woolmark-certified products, the 'Circular by Nature' environmental credentials of wool were central to the campaign.

Products could be purchased via a special wool hub page on Musinsa's e-commerce website. A 12-minute 'unboxing' style documentary that promoted the benefits of wool and the wool products was also produced by Musinsa and released on its YouTube channel. Outdoor digital advertising in central Seoul and a pop-up store complemented the campaign.



A physical pop-up store on the Muninsa Terrace in Seoul featured the irresistible 'Hug Me' theme.

Defending the premium suiting market

The Woolmark Company recently held a marketing campaign with Cambridge Members, the second largest premium suiting brand in Korea. Launched in 1977, Cambridge Members belongs to the massive Kolon Industries.



A display promoting premium wool apparel in a Cambridge Members store.

Although the men's suit market in Korea has faced downward pressure from the casualisation of apparel for a number of years, net sales in the men's suiting market increased to about \$5.23 billion in 2022, a rise of 6.1% from the previous year, as the COVID pandemic ended.

Launched in October, the marketing collaboration had the theme of 'Sustainable Classic' and explained why the timeless style of Merino wool makes it the most suitable fibre for men's suits. About 38,000 pieces were available to buy, representing an estimated 41 tons of wool.

The campaign involved digital, social and in-store promotions. The digital campaign included a special wool hub page on the Cambridge Members website which included information on the benefits and provenance of Merino wool, plus all-important links to products that customers could buy.

An 18-minute documentary that promoted the benefits of Australian wool and the Cambridge Members wool products was also produced along with two further videos from notable influencers within the Korean menswear sector.

Other recent Woolmark highlights in Korea

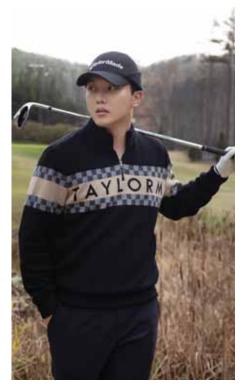
'Preview in Seoul' trade show

In August last year, The Woolmark Company participated in Preview In Seoul, the largest textile trade show organised by Korea Federation Textile Industries, which had more than 10,000 visitors. The Woolmark Company booth provided a great opportunity to connect with new brands and retail partners, introducing them to wool supply chain partners in Korea and overseas.

'Naturally Inspiring' seminar

The Woolmark Company conducted a Naturally Inspiring seminar in September, attended by 264 tertiary textile and fashion students from 27 universities in Korea. The Woolmark Company's Wool Appreciation Course was presented to educate the students about the attributes and benefits of wool, followed by presentations from garment manufacturer Appeal Korea and e-commerce platform Muninsa.

The golf wear market in South Korea has experienced remarkable growth in recent years, which has presented The Woolmark Company with a great opportunity to increase the use of Merino wool in the sport.





Merino wool apparel by major golfing brand TaylorMade that was recently promoted during a marketing collaboration with The Woolmark Company in South Korea.

Sales of golf wear in South Korea have recently increased to such a large extent that they now exceed the combined value of the United States and Japanese golf wear markets. Sales reached \$9.2 billion in 2022, a 45% year-on-year growth, and the market is expected to steadily grow in the foreseeable future.

Golfers tend to prefer premium clothing and show great interest in the quality of the fibre used in their apparel. As a result, brands are introducing more luxurious golf apparel products in South Korea, which presents a great opportunity for Merino wool.

Merino wool's premium, natural benefits of breathability, thermoregulation, elasticity, softness and odour resistance make it an ideal fibre for golfing.

The increase in golf-related TV entertainment programs, plus indoor golf facilities that recreate golf courses on large screens, have played a significant role in popularising golf in South Korea. The fashion-forward Gen Z, along with the increasing number of female golfers, have

also helped increase the sport's popularity.

Even during the off-season, approximately two million Koreans enjoy golf tours abroad, ensuring a consistent demand for golf apparel through the year. Furthermore, golf is a sport that people tend to continue with once they have tried it out, which suggests the market will endure into the future.

Promoting Merino wool to golfing brands

To help ensure that Merino wool is well represented in this growing market, The Woolmark Company in Korea last year held its first sports and golf wear workshop, attended by 32 people from 11 large brands.

The workshop focused on encouraging the brands to expand their use of wool from traditional knitted jumpers to functional woven and circular knit jersey products, thereby increasing the use of Merino wool in their collections.

The workshop program featured presentations of:

- The Woolmark Company's Wool Appreciation Course to educate the brands about the attributes and benefits of wool
- wool product samples (base-layers, jumpers, shirts, leggings, footwear and accessories) for the brands to handle and touch; and
- examples of ways that brands are successfully marketing wool sports and golf wear.

After the workshop, The Woolmark Company has continued to communicate with the brands to help them source relevant wool yarns or fabrics for their 2024 collections.

Marketing with leading golf apparel brand Taylor Made

The Woolmark Company in Korea undertook a collaborative marketing campaign last year with leading golfing brand TaylorMade to increase awareness and sales of its Merino wool apparel in Korea in the 2023 Autumn/Winter season.

TaylorMade is an American-based global golfing brand which boasts Tiger Woods and Rory McIlroy amongst its many global ambassadors. The brand is licensed in Korea to HanSung F.I which has significant expertise in the premium golf apparel market in Korea. By forming a strategic partnership with HanSung F.I, TaylorMade is expanding its apparel line and last year launched its premier Merino wool collection in Korea which comprises men's and women's jumpers.

The Woolmark Company's collaborative marketing campaign with TaylorMade was launched in October and highlighted the premium, high-performance benefits of Merino wool, along with the fibre's natural, biodegradable and renewable eco-credentials.

The campaign primarily targeted customers in their 30s-50s through a combination of digital, social media and in-store marketing.

The digital element of the campaign included a home page feature on the TaylorMade website that drove customers to a landing page that highlighted the benefits of Merino wool alongside the new collection available to purchase. Campaign videos promoted the collection online, and in-store displays featuring the products were set up in stores across Korea.

More information:

www.taylormadeapparel.co.kr

WOOL ON INDIA'S LEADING LUXURY ERETAILER

The Woolmark Company in November launched its first marketing campaign with Ajio Luxe, India's largest luxury e-retailer, increasing its sales of wool products by 92% compared to last season.

fter China, India is the largest importer of Australian wool, and the country is wellknown for its premium textile manufacturing. But as well as being an important wool manufacturing hub, India is also an increasingly important consumer market for Australian wool.

The population of India last year surpassed that of China to make it the most populous country on the planet. Furthermore, its economy is the fifth largest in the world and one of the fastest growing.

To capitalise on the growing luxury apparel market in India, AWI's marketing arm The Woolmark Company recently launched a 2½ month marketing campaign with India's leading luxury e-retailer, Ajio Luxe, which has one million daily active users and customer growth of 140% during the past year.

"The campaign aimed to raise awareness of Australian Merino wool among luxury online shoppers and increase sales of Merino wool

products from premium brands on the Ajio Luxe online retail platform during the country's peak autumn/winter shopping season," said AWI Regional Development Manager -Emerging Markets & India, Trudie Friedrich.

Successful marketing campaign

The marketing campaign featured wool apparel from nearly 50 brands on the Ajio Luxe website and app.

Banners on the Ajio Luxe home page highlighted the wool campaign and pointed people to a special landing page that contained information about Merino wool, its suitability for the circular economy, and highlights of the platform's bestselling wool apparel. Importantly, this special landing page pointed customers through to the area of the online platform where they could purchase wool apparel.

There was also another special page titled 'The

customers to the

Wonders of Wool', on which Ajio Luxe's editorial team featured wool looks and explained the trans-seasonality of wool apparel, the eco-credentials and premium nature of Merino wool, and the fibre's suitability for activewear. This page also directed

Mindful

online store to buy wool product.

The campaign was amplified by posts on Ajio Luxe's social media channels, notifications sent to Ajio Luxe's e-newsletter subscribers and app users, and posts by two famous Indian influencers to build resonance for the campaign and create conversations about wool

"While consumer education about the natural benefits of Merino wool was a key aspect of the campaign, the foremost objective was to increase sales of wool product," Trudie said.

And there certainly was an increase in sales. As a result of the campaign, Aio Luxe increased its sales of wool products by 92% compared to last season, well above the target of 22%. The total impressions for the campaign (the number of times that the campaign was seen) was 12 million, with 500,000 consumers engaging with the campaign page on the Ajio Luxe website and therefore showing an intent to purchase.

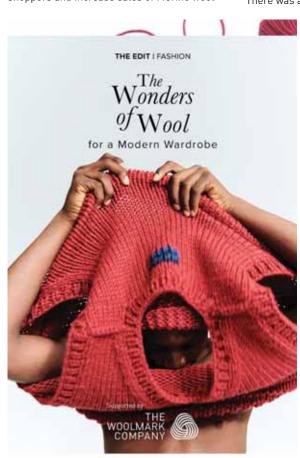
Collaboration with Reliance Group

Ajio Luxe is a part of Reliance Group, the largest business conglomerate in India. The Woolmark Company's collaboration with

> Ajio Luxe has strengthened The Woolmark Company's relationship with Reliance Brands Limited which could prove valuable for wool in India because the company is the exclusive master franchise of most domestic and international luxury brands in India.

"Ajio Luxe is proud to collaborate with The Woolmark Company, to weave a stylish narrative that champions the versatility of wool," said Group Vice President-Business at Reliance Brands Limited, Deval Shah

"With this campaign, we aim to position woollens as perennial wardrobe essentials; proving it's not just a fabric, but a style statement for the modern generation. Together, our aim has been to knit a story that is not only fashion-forward but also advocates for the enduring allure of this natural fibre in our country."



Promotional collateral on the Ajio Luxe e-commerce platform that points to wool apparel that customers can purchase.

MERINO REACHES AN APEX IN INDIA WITH ANDAMEN

Luxury Indian menswear brand Andamen last year introduced an extra fine Merino wool collection into its product range for the first time, thanks to a collaboration with The Woolmark Company, and the brand is now working on further Merino wool collections.



A Woolmark-certified 100% Australian Merino wool crew top and jumper in Andamen's Apex collection.

B ased in northern India, Andamen was founded with the aim of standing out in the world of fashion as an Indian luxury brand that embodies sophistication and excellence.

The brand predominantly uses natural fibres but, up until last year, had not used much wool.

However, that changed with the launch in November 2023 of the brand's new Apex collection that is made using almost entirely Merino wool. The collection comprises 30 styles of jumpers, polo shirts and other tops for men, made from 100% Australian Merino wool, with some styles incorporating 10% cashmere.

The new collection incorprates Woolmark-certified yarns spun in Italy and China. The company uses 16-gauge German knitting machines for the manufacturing of the products, which are crafted in a boutique factory in Nepal.

Woolmark collaboration

Andamen's choice of Merino wool for the collection is a result of work by The Woolmark Company team in India to educate and inspire Andamen about the premium, natural benefits of the fibre.

Founder & CEO of Andamen, Siddharth Suri, says the Apex collection is, as its name suggests, Andamen's most luxurious ever line of apparel since the brand was launched in 2016.

"Seven years and a wonderful collaboration with The Woolmark Company led us to craft something that marries Indian heritage and global luxury," Siddharth said.

"For Apex, we collaborated with Woolmark to source the world's very best wool from Australian farms and crafted 30 exquisite, magnificent pieces. Each of them is luxuriously soft and quietly distinguished."

For Andaman, luxury is not about exclusivity, it is about quality: the finest ingredients made with precision and care. All the products in the Apex collection are certified for quality by The Woolmark Company.

"Our collaboration with The Woolmark Company has been the cornerstone of our pursuit of excellence, achieving the highest standards."

> Siddharth Suri, Founder & CEO of Andamen



The Andamen logo is Rajan, the legendary ocean swimming elephant of the Andaman Islands.

Marketing of the collection

To promote the Apex collection, Andamen launched a digital direct-to-consumer marketing campaign to raise awareness of Merino wool's premium and natural attributes, amongst aspirational Indian millennials and GenZ.

The Andamen website has a hub page, linked to from the home page, dedicated to the Apex collection. Each product page of the collection, at which customers can purchase the apparel, includes information about Merino wool's performance benefits and eco-credentials, plus the quality assurance meaning of the Woolmark logo.

Promotion of the Australian Merino wool collection was complemented by a push on social media, including a video on YouTube of Siddharth Suri telling of his inspiration behind the collection.

Siddharth has been so inspired by the fibre that the brand is already working on developing a Merino wool collection for the spring/summer 2024 season and intends to market Merino polo T-shirts in the Indian spring/summer season.

More information: www.andamen.com



Founder & CEO of Andamen, Siddharth Suri: "Our collaboration with The Woolmark Company has been the cornerstone of our pursuit of excellence, achieving the highest standards."

PURE AUSSIE MERINO SCARVES FROM INDIA

Available at retailers across rural and metropolitan Australia, Raffal scarves and wraps incorporate designs and traditions of India while proudly using 100% Australian Merino wool.

Raffal was founded in 1999 in Victoria by former product marketing manager of the Australian Wool Corporation, Helen Webster, as the result of her enduring love for Australian wool.

"After working for many years at the Australian Wool Corporation, I wanted to explore the possibility of creating a collection of beautiful, sustainable and fashionable scarves and wraps made from pure Australian Merino wool," Helen said.

"I had years of experience understanding fashion, presenting trends to the local industry, liaising with retailers, and the promotion and advertising of wool products – and wool is such a wonderful, natural fibre. It has spring and elasticity, it is lustrous, breathes, and keeps you fresh and safe."

Grown in Australia, made in India

Helen developed her idea of producing wool scarves and wraps after travelling to India, a leading producer of high quality wool fabrics, where she had seen the widespread use of shawls. In the Northern state of Punjab, manufacturers, mainly family businesses, have been weaving beautiful shawls for many generations.

Helen chose the name Raffal for her brand, because it is the name of the type of Kashmir shawl made from Merino wool.

"India buys fine micron Australian Merino wool for its domestic shawl industry and has both hand looms and fast electronic fully automatic looms. This enables me to source a wide variety of products for my Raffal brand," Helen said.

"Our shawl and scarf range includes such things as embroideries, tie-dyeing, dipdyeing, jacquard fabrics, prints, fancy yarn and modification of fabrics."

Raffal produces two ranges each year – Autumn/Winter and Spring/Summer – which means that Helen travels twice each year to India.

"I work closely with the manufacturers in India, coming up with design concepts, tweaking them until we get what is suitable for the Australian market. Concepts and a kaleidoscope of colour ways are chosen by me, using forward colour forecasts tempered with more wearable and versatile elements, such as size and weight."





Raffal scarves and wraps are all Woolmark-certified and made from 100% fine Australian Merino wool.

Quality, Woolmark-certified products

Helen believes very strongly in upholding the quality of Raffal scarves and wraps, which are made from only pure, fine Australian Merino wool of between 19-21 micron.

"We only use the best quality, specified yarn, which is mainly sourced from Jayashree Textiles, a large producer of Woolmark-certified yarns," Helen said.

"The scarves and wraps are made by experienced and accredited manufacturers in India and all our products carry the Woolmark logo which provides customers with an assurance of quality and pure new wool content."

After import from India, the Raffal scarves and wraps are distributed for sale at about 70 retailers across Australia, in rural areas as

well as metropolitan areas – see the Raffal website for outlets.

"I make a point of selling to speciality boutiques and other outlets such as tourist destinations and galleries, rather than to large department or chain stores."

Helen says wool is the ideal fibre for scarves and wraps.

"It virtually never needs washing, only a light steam iron to get it back to its original look, and it doesn't crease which makes it ideal for travelling," she said.

"Our products are a great finishing touch to an outfit and can be worn for warmth or purely decorative reasons. They are affordable and go on performing year in, year out."

More information: www.raffal.com.au





Raffal founder Helen Webster on one of her regular trips to India to work on design concepts.

WOOL SHOWCASED AT DUTCH DESIGN WEEK

The Woolmark Company attended last year's Dutch Design Week in The Netherlands, during which the company showcased the premium natural benefits of Australian wool to tertiary students, and discovered exciting new opportunities to promote the fibre.







Students presenting their winning wool-rich textile designs at The Woolmark Company and BYBORRE wool showcase event during Dutch Design Week.

utch Design Week is one of the biggest design events in Europe, presenting the work and ideas of more than 2,600 designers to more than 350,000 visitors from home and abroad. The annual event, which takes place in the city of Eindhoven, is a key moment in the Dutch calendar and attracts a wide array of creatives, from designers and buyers to students and educators.

Specialists from AWI subsidiary The Woolmark Company attended last year's Dutch Design Week in October and were able to plug into the Dutch design community and create exciting leads for future projects and opportunities to promote Australian wool.

"A key element of The Woolmark Company's involvement in Dutch Design Week was to foster the wool education of tertiary students in The Netherlands," said London-based AWI Product & Education Extension Manager, Louise Campbell, who attended Dutch Design Week.

"This aligns with company's strategy to educate tertiary students in the early stage of their careers about the possibilities and benefits of Australian wool, so that they will be inspired to carry on using the fibre during their careers."

Wool workshop and showcase event

A highlight of The Woolmark Company's activities in Eindhoven was a special wool workshop and

showcase event for students that was held in collaboration with Amsterdam-based textile innovation studio BYBORRE.

For a chance to be selected as one of the students to take part in the workshop, tertiary students from The Netherlands and surrounding countries were invited to submit designs on the theme of: 'A textile that marks a moment in time - if your textile was discovered 100 years from now, how would it reflect you, us or our world today?'

The Woolmark Company and BYBORRE selected the 14 strongest design artworks, which were submitted by students from leading institutions across The Netherlands and Germany, who were studying a range of disciplines including textile technologies, fashion design, cross-media design, fashion business & development, and industrial design.

The 14 winners took part in the workshop on 26 October, during which students were taught about wool's many benefits and opportunities for design. Students were then given exclusive access to BYBORRE's Create™ textile design tool to translate their winning artwork into a knitted wool blend textile design, from the yarn up.

The best five designs from the workshop were knitted overnight by BYBORRE and showcased the next day at a special celebratory event during which the students networked with

industry professionals.

"There were some outstanding winning designs that highlighted not only the great design skills of the students, but also the natural versatility of wool," said Louise. "The whole workshop and showcase event was a tremendous success in shining the spotlight on wool and encouraging the next generation of design talent in the region to use the fibre in their work."

Naturally Inspiring

Another highlight of The Woolmark Company's attendance at Dutch Design Week were the introductions to key personnel from two of the leading design institutions in the Netherlands: Amsterdam Fashion Institute, which is the largest fashion university in The Netherlands, and Amsterdam Fashion Academy.

Following on from these introductions, The Woolmark Company delivered two 'Naturally Inspiring' seminars to students in Amsterdam in December.

"Naturally Inspiring seminars not only offer tertiary textile and fashion students the chance to learn about the natural benefits of wool and the variety of ways to work with the fibre, but also gives the students an insight into working in the fashion, textile and retail industries," Louise added.

Established in 1783, British textile manufacturer AW Hainsworth has been buying Australian wool for more than two centuries for production at its textile mill in Pudsey, Yorkshire, and continues to do so to this day.

A W Hainsworth has an illustrious 241-year history, from clothing royalty to providing the fabric that covers the famous Woolsack in the British Houses of Parliament. Probably its most famous cloth is the bright scarlet uniform worn by the King's Guards outside Buckingham Palace.

Underpinned by the company's centuries of experience and commitment to quality, Hainsworth continues to be a market-leading manufacturer of premium woollen textiles. All under one roof at its mill in Yorkshire, it spins, weaves, dyes and finishes a wide range of woven woollen textiles for a diverse range of modern applications and industries.

The company manufactures apparel and interior fabrics for luxury fashion brands, stage and screen productions, ceremonial military uniforms, royal palaces, and magnificent homes and hotels. It makes snooker and pool cloth, interior fabrics for aviation and railways, traditional bed blankets and throws, and the felt used in musical instruments, and more.

"When I first joined the business in 2021, I was acutely aware of Hainsworth's long and prestigious history, and how important it was to guard this as a 'custodian' of this amazing family business and West Yorkshire mill," said Managing Director at AW Hainsworth, Amanda McLaren.

"We continue to build on this foundation, with a strong commitment to investing and building a bright future for all our stakeholders to enjoy."

As a fabric design, manufacture and supply business, AW Hainsworth focusses on cutting-edge innovation and product development to produce top-quality products. The company is a Woolmark licensee.

"As a woollen manufacturer we are proud to carry the Woolmark certification for our fabrics, an extra guarantee of quality for our customers," Amanda added.

Hainsworth Protective Fabrics

Under its Hainsworth Protective Fabrics brand, the company manufactures heat and flame retardant cloth for PPE uniforms worn by professionals such as firefighters, police and the military.

Hainsworth has been manufacturing protective fabrics since the 1800s. The British Army wore Hainsworth cloth since the early days of the business – soldiers wore red Hainsworth fabric at the Battle of Waterloo in 1815, and when the RAF was formed in 1918 Hainsworth supplied the blue uniform cloth.

FIRE RESISTANT WOOL JUST WORKS.

AW Hainsworth apparel – the red tunic of the King's Guards (left) and ECO-DRY (right) – on display in November at The Woolmark Company stand at Milipol Paris, the leading trade show for homeland security and safety.

Princess of Wales visits AW Hainsworth

In September last year, AW Hainsworth was honoured to welcome HRH The Princess of Wales, a keen advocate for UK textiles, on a visit to the mill. Coincidentally, Hainsworth in 1958 bought the textile firm William Lupton and Co from her great grandparents.

HRH The Princess of Wales is pictured here in Hainsworth's state-of-the-art laboratory with a mannequin wearing a King's Guard uniform made from Hainsworth cloth. In the laboratory, she also witnessed the team carrying out a flame test on a piece of Hainsworth's personal protective equipment (PPE) fabric for firefighter uniforms.



When the London Fire Brigade was formed in the late 1800s, Hainsworth was selected to supply its uniform cloth. At the time, its wool melton fabric was the ultimate in flame retardant fabric technology. Today, Hainsworth Protective Fabrics are worn by firefighters in Britain and across the world to Australia, and are highly valued for combining flame protection and strength with comfort.

"One of the main reasons why Hainsworth is so closely aligned with the equipment PPE industry is because of the Australian wool that we use at our mill," Amanda said.

"Until 1987 in the UK and slightly later in Australia, felted Merino wool cloth had been used for the manufacture of firefighters' PPE, but while it was undoubtedly a great fibre, a downside was that it held too much



moisture and consequently would become extremely heavy and wet for the wearer.

"Now, thanks to advances in textile production and finishing, the many benefits of wool are making a comeback into the world of PPE, but with a modern twist. Hainsworth is delighted to be playing its part in ensuring that Australian Merino wool has a big future in the manufacture of firefighters' kit."

An example of this is Hainsworth's ECO-DRY fabric, designed specifically for wildland firefighters. It was developed in 2012 in collaboration with the Australasian Fire and Emergency Service Authorities Council (AFAC).

Wildland firefighters, like the rural fire service brigades in Australia, have distinct requirements and challenges in their role, as they have to walk across great stretches of land in very treacherous conditions while being exposed to extreme radiant and convective heat. If wildland firefighters do not have appropriate PPE they are at risk of developing heat exhaustion, endangering their and other lives.

"ECO-DRY is designed to be comfortable to wear as well as being highly flame retardant, and is woven from a combination of Merino wool, Lenzing™ FR and meta-aramid fibres. Merino wool wicks away moisture, which creates a steady microclimate between the cloth and the skin and helps the wearer to stay cool," Amanda said.

"The resulting fabric is breathable and comfortable, giving the wearer the necessary mobility and flexibility while still providing maximum thermal protection. The wool also provides anti-microbial and anti-odour qualities, helping it to retain its quality for longer."

ECO-DRY is the wildland fabric of choice for firefighters in South Australia and Victoria.

Hainsworth Protective Fabrics visit Downunder

In August 2023, the Business Development Manager of Hainsworth Protective Fabrics, Jack Rowan, and Head of Technical and Innovation, Martin Haworth, visited Australia to attend the AFAC emergency management conference and exhibition.

The visit gave them an opportunity to meet with Hainsworth partners and suppliers (including AWI), show off the company's protective fabrics, and speak to firefighters about the challenges they face in this market.

While they were in Australia, Jack and Martin also visited the historic wool-growing property 'Woolbrook' at Teesdale near Geelong in Victoria which supplies wool to AW Hainsworth. David Kay from Kaytex Trading, who has been purchasing wool for AW Hainsworth for more than 15 years, gave them an extensive tour of the farm.

Jack and Martin also visited EP Robinson in Geelong, Victoria, which scours all the Merino wool supplied to AW Hainsworth and have supplied the business for more than 30 years.

As a first time visitor to Australia, Jack says he gained great value from seeing the processes and expertise throughout the supply chain.

"We met people who are masters of the trade and have decades of experience working at companies that Hainsworth has been dealing with for generations," Jack said.

"In order to continue delivering consistency

and quality to our end customers, we rely on our suppliers to act as an extension of ourselves and to be our eyes and ears when anticipating our needs. Without their support we simply would not be able to achieve the high standards that our wool fabrics are known for."

The 1800-hectare mixed-farming Woolbrook property is run by Lachie Morrison, who is the fifth generation of the Morrison family at Woolbrook. After a century in the Morrison family, Woolbrook was sold in 2018, but is leased back to Lachie by the new owner.

The importance of caring for the land has always been a high priority at Woolbrook. Lachie's grandparents Janice (Jimmy) and John Morrison planted thousands of native trees from the 1960s-80s to regenerate the land and create a haven for Australian birds and wildlife. AW Hainsworth is a company that holds sustainability at heart, so this was reassuring for Jack and Martin to see.

Martin says it was a great pleasure to visit Woolbrook.

"It was obvious to see that the welfare of the animals was of paramount importance and also that there was a genuine interest from the woolgrowers as to the type of products we produce from the Australian Merino wool," Martin said.

"For myself, the visit reaffirmed the importance of building and maintaining these long term partnerships between AW Hainsworth, our suppliers and the woolgrowers, so we can continue to receive the high quality supply of Australian wool fibre."

More information:

www.awhainsworth.co.uk www.hainsworthprotectives.co.uk



'Woolbrook' at Teesdale in Victoria was visited in August by representatives from Hainsworth Protective Fabrics.

Season production by micron

Australian Wool Testing Authority (AWTA) key test data at the midpoint of the season indicates there has been a significant change to the micron distribution of the national clip during this season compared to the micron distribution at the same point in last year's season. There has been a surge in sale lots tested at both extremities of the data. See Table 1.

A large percentage of production gains has been recorded at the finest end (less than 18.5 micron) of the spectrum, with 12.7% more wool tested, and the broadest end (greater than 23.5 micron) of the clip, with 11.3% more wool tested.

Those gains have come at the expense of the dramatic reduction of -16.5% of wools tested

Table 1. Season production by AWTA key test data micron groupings

	2023/24, end of January ('000 kg)	2022/23, end of January ('000 kg)	Difference ('000 kg)	Percentage change
Superfine <18.5 µm	66,018	58,580	7,438	12.7%
Fine 18.6 to 20.5 µm	66,104	67,667	-1,563	-2.3%
Medium 20.6 to 23.5 μm	22,833	27,338	-4,505	-16.5%
Crossbred >23.5 µm	37,737	33,913	3,824	11.3%

being in the medium wool sector between 20.6 and 23.5 micron. Fine wools of 18.6 to 20.5 micron have remained relatively stable compared to the first six months of last season, but still more than 2% lower than at the same time last year.

Merino wools finer than 20.5 micron make up almost 70% of the national clip as at 1 February 2024. See Figure 1.

Figure 1. National clip by micron, 2023/24 season up to end of January

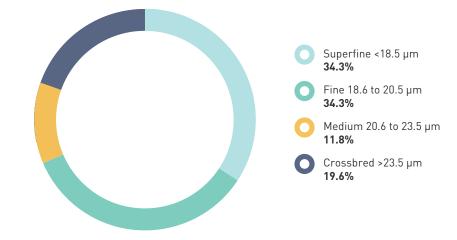
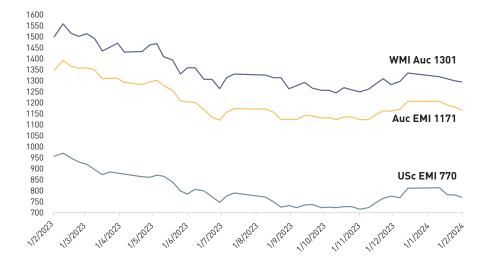


Figure 2. Market indicators during the past 12 months and at 1 February 2024



Wool price movements

EMI in AUD:

The 2023/24 season has seen the Eastern Market Indicator (EMI) in AUD improve from 1126ac/clean kg at the start of the selling season in July to be 1171ac/clean kg by the end of week 31 (1 February 2024). This is a gain during the season of 45ac or 4.0% in Australian dollar terms. The AUD EMI has averaged 1156ac/clean kg for the first seven months of the season.

During the past 12 months, the AUD EMI has fallen by 185ac from 1356ac/clean kg on 1 February 2023 to 1171ac on 1 February 2024, an overall 13.6% reduction in AUD value.

EMI in USD:

The USD EMI has advanced 22usc/clean kg from 748usc/clean kg at the start of the 2023/24 season in July to close week 31 (1 February 2024) at **770usc/clean kg.** This is a seasonal gain in US dollar terms of 2.9%. The USD EMI has averaged **753usc/clean kg** for the first seven months of the season.

During the past 12 months, the USD EMI has fallen by 188usc from 958usc to 770usc on 1 February 2024, a 19.6% fall in the USD value of wool.

WMI in AUD:

The 2023/24 season has seen the Western Market Indicator (WMI) in AUD increase 30ac from the season opening price of 1271ac/clean kg to be 1301ac/clean kg by the end of week 31 (1 February 2024). This is gain during the season of 2.4% in Australian dollar terms. The AUD WMI has averaged 1295ac/clean kg for the first seven months of the season.

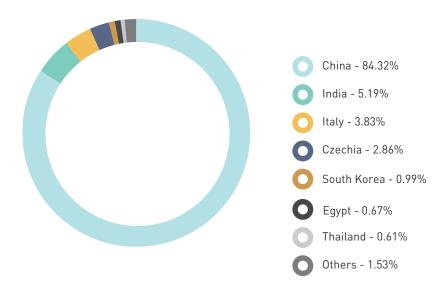
The AUD WMI has depreciated from 1510ac to 1301ac during the past 12 months. This is 209ac or 13.8% lower in the WMI in Australian dollar values.

Export destinations of Australian wool

At the completion of the first third of the 2023/24 season, the Australian Bureau of Statistics (ABS) reported that the percentage of Australian wool exported to China during that four-month period was even greater than the annual percentage of last year by volume (82.6% last year total). The season so far has seen 84.32% of all wool exported going into China by weight. Even so, the total weight is 4.4% lower than at the same time last season (by the end of October).

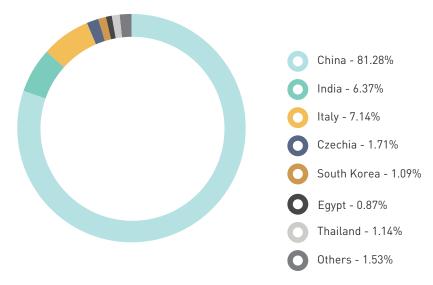
The lack of competition that has been reported for the first six months of the 2023/24 season from both the European and sub-continent users is continuing and borne out by the fall in exports to both India and, more concerningly, Italy. These importing nations are running about 23.2% lower (India) and 20.5% lower (Italy) than the same reporting period last season.

Figure 3. Exports by volume July to October 2023



While there has been a drop off in exports to Italy by *volume*, the real impact comes from the drop off in *value* of their imports. At the end of the first four months of the current season, the Italian import value represented 7.14% of the total wool export value, when you would normally expect to see Italy import 10 to 12% of Australian wool by value.

Figure 4. Exports by value July to October 2023



Just seven export destinations make up 99.6% of wool exports in any form by value, and those same seven destinations account for 98.5% of volume.

AWI MARKET INTELLIGENCE FOR WOOLGROWERS

In addition to this Market Intelligence Report provided each quarter in *Beyond the Bale*, AWI provides several other regular market intelligence services that are available FREE to woolgrowers, including:

Weekly Price Reports (during sale weeks), which include weekly EMI and WMI price movements, currency movements, the number of bales offered and sold, as well as weekly commentary from AWI on the markets.

Monthly Market Intelligence Reports

that provide insights into economic, finance and trade issues affecting global demand for wool, and what this means for the Australian wool industry.

Graphical display of market information on Wool.com, including:

- Micron price you can select from a full range of microns, sold in Sydney, Melbourne and Fremantle.
- Market Indicator you can select to display AUD, USD, CNY or EUR.
- Offering displays bales offered and bales sold.
- Currency movements you can select to display AUD/USD, AUD/CNY or AUD/ EUR.
- Forecast of bales sold displays previous season, current season, current week and forecast.

For the first four categories above, you can select to display data from 3 months to 3 years ago.

Australian Wool Production Forecasting Committee reports that provide detailed estimates of sheep numbers, sheep shorn, average cut per head and wool production. The reports are produced three times each year.

Sheep Producer Intentions Survey which are conducted three times each year jointly with MLA. The survey results are used to create regional, state and national wool and sheepmeat industry data which enables the industry to better manage the supply chain and meet producer and customer expectations.

More information: View the above market intelligence information at www.wool.com/marketintel or subscribe at www.wool.com/subscribe to receive the information by email and/or SMS. You can unsubscribe from the service at any time.

MIXED PERFORMANCES IN THE LUXURY SECTOR

PHOTO: Med-Ved

AWI Global Strategic Advisor Peter Ackroyd reports on mixed performances at the luxury end of the market. Mr Ackroyd is a former President of the International Wool Textile Organisation and is Chief Operating Officer of the Campaign for Wool.



Rob, Pamela and Bradley Sandlant from 'Pyrenees Park' in Victoria (right), with Vice Chairman of Loro Piana Pier Luigi Loro Piana and CEO Damien Bertrand (centre), alongside Barrie and Yvonne Payne of Visuela Farm (left) at the presentation of the Loro Piana Record Bale Award.

The Loro Piana Record Bale Award has once again been presented to Rob, Pamela and Bradley Sandlant from 'Pyrenees Park' in Victoria, this year for a record-breaking 10.2 micron bale. The Award was presented in early February at a ceremony in London that attracted a glamorous crowd from film and theatre (Claire Foy, Richard E Grant, Andrew Garfield and more) together with a coterie of fashion editors and influencers, not seen together in London since pre-Covid days. The New Zealand award went to Barrie and Yvonne Payne of Visuela Farm.

Loro Piana is the sole primary processor in the LVMH luxury goods group that boasts such prestigious headline fashion brands as Christian Dior, Céline, Givenchy, Fendi, Marc Jacobs, Stella McCartney, Kenzo and several more. LVMH is of course market leader in the heady world of expensive watches, fine wine, fancy champagnes and posh perfumery.

"This wool is not just a gift of nature, it is the result of the hard work of exceptional people combined with their passion and true belief in innovation, in the power to change things and improve them day after day. This enables us to create unique masterpieces for the most discerning connoisseurs," said CEO of Loro Piana, Damien Bertrand, on presenting the awards alongside Vice Chairman of the eponymous company Pier Luigi Loro Piana.

It perhaps required an event as prestigious as the Loro Piana Record Bale Award to prompt a fresh

look at the state of the luxury goods sector, a sector to which the fortunes of several premium quality spinners and weavers in UK and Italy, in particular, are intimately linked.

Whilst perhaps giving the impression of sailing serenely through the troubled waters of the fashion world during the pandemic, the luxury goods sector has recently seen some troubling trends emerge in the once unassailable luxury online marketplace that some, quite erroneously it now transpires, saw as a permanent replacement for boutiques on London's Bond Street and Melbourne's Collins Street.

Disquiet at the top end of the trade about the future of an online business model that includes MyTheresa, Net-a-Porter, Flannels and Farfetch, recently prompted a series of doom laden headlines in both the fashion and economic press.

"Can these companies survive the year?" intoned a reporter for the London-based trade journal *Drapers*.

Luxury online retail platforms Farfetch and MyTheresa have lost 90% of their market value since initial public offerings in 2018 and 2021, reported the Wall Street Journal, that led with a review of the trade under the headline 'Shopping for luxury online has fallen out of fashion'. It is not only the online retailer that is suffering; luxury brands' own websites have seen a significant decline in sales since customers started to return to in store sales. Kering recently reported online sales for their leading brand Gucci had fallen by

around 30% in the third guarter of 2023.

The news of the death of brick and mortar, maliciously put about by some in the industry during the pandemic, turned out to be the baseless self-fulfilling prophecies several suspected they were at the time.

Travelling back from Pitti Immagine Uomo's early January trade show in Florence, Italy, where men's wear collections for the Northern Hemisphere autumn/winter were showcased, leading UK fashion industry observers blamed the current morose state of trade on the vast amount of stock the online retailers had acquired during the pandemic boom.

The heady world of luxury brands seems neatly divided between the bullish and the sluggish with LVMH clearly in the lead and rival Kering [Gucci, St Laurent, Balenciaga, Bottega Veneta] decidedly in the doldrums.

Confirmation of orders for finer worsted fabrics for next winter, currently filtering through from premium brands, seems to suggest LVMH, Hermès and Richemont are performing significantly better than Kering. Analysts suggest LVMH, with a portfolio of 75 brands, is expected to have grown by 9%, whilst Kering is set to see sales figures fall by 4%, according to a consensus of expert opinion recently reported in the *Financial Times* in London. British brand Burberry, a flagship company supplied by a number of UK and Italian Woolmark licensees recently issued a profit warning.

"We are going to see the further polarisation of this industry in two ways: first of all with the bigger ones outperforming the smaller ones, and the top end of the pyramid outperforming the more aspirational ones," said Eduard Aubin, luxury goods analyst at Morgan Stanley.

"The key trend for 2023 and 2024 is that high net worth individuals will be driving growth, rather than middle income consumers," added a senior analyst speaking recently at the Première Vision trade show in Paris.

"Perhaps a rearrangement of the luxury brand market could be to the advantage of Merino spinners and weavers as consumers shy away from bling and seek more personalised luxury where the product is more important than the label," noted a UK weaver returning recently from Milano Unica, where leading producers were showing collections for the Northern Hemisphere 2025 spring/summer season.

USE THE NWD TO ATTRACT THE HIGHEST PRICE

All woolgrowers are being urged to complete the National Wool Declaration (NWD), as wool sold as Not Declared receives a discount across a broad range of microns. More than a quarter of wool sold at auction continues to be Not Declared and receives a discount. The NWD is easy to complete and provides transparency to the whole supply chain.

he National Wool Declaration (NWD) enables woolgrowers to communicate directly with prospective buyers, processors and retailers; and them to send key market feedback to woolgrowers.

Brands and retailers along the supply chain are sending clear messages to woolgrowers that they would very much like you to declare your husbandry practices through the NWD; it creates choice in the marketplace and they are sending price signals for it.

Premiums and Discounts for Mulesing Status (c/kg clean) (comparison with declared as Mulesed)

* The 2023/24 season in all tables is the year-to-date 30 December 2023.

	MERINO							NON-MERINO				
		16	17	18	19	20	21	22	27	28	29	30
Non Mulesed (NM)												
SEASON	2021/22	78	77	68	53	51	12		7	5	8	
	2022/23	25	36	15	17	19	6		0	-2	1	0
	2023/24*	23	15	15	13	9			5	7	7	
Ceased Mulesing (CM)												
SEASON	2021/22		61	40	31							
	2022/23		30	14	14	10	6					
	2023/24*			12	5	7						
Mulesed with Anaesthetic &/or Analgesic (AA)												
SEASON	2021/22		16	12	13	14	1	6	3	5	3	
	2022/23		19	5	9	6	4		0	0		
	2023/24*			2	4	3				3	2	
Not Declared (ND)												
SEASON	2021/22		-6	-5	-7	-10	-4		-7	-7	-10	-6
	2022/23	-39	-28	-24	-2	0	0		-4	-15	-13	
	2023/24*			-14	-3	-2	-5					

Source: AWEX

Criteria for calculation of Premiums and Discounts (c/kg clean) for Mulesing Status:

- Australian stored; Merino adult/weaners and crossbred fleece
- >30 N/ktex, >60% Schlum Dry, <2.2 VMB, Styles 4/5, Good/light colour (incl. H1), P Certificate
- Lengths according to diameter range: 70-95

mm (<18 μ m), 75–99 mm (19–21 μ m), 83–104 mm (22-24 μm), 90-110 mm (26-29 μm), 100-130 mm (30-34 µm)

- Records per group (micron/NWD status) >2, empty cells when not enough data to generate a ${\sf P}$ or ${\sf D}$.
- Comparison with prices for wool declared as

When a woolgrower completes the NWD, which currently is voluntary, the contents are converted for inclusion in sale catalogues and test certificates. With the market sending clear discounts for Not Declared wool during the past two and a half years, it is strongly encouraging all woolgrowers to complete the NWD, regardless of their sheep's breed and wool type.

During the past two and half years, woolgrowers have also received premiums for wool declared as Non Mulesed (NM), Ceased Mules (CM), or Mulesed with Analgesic/ Anaesthetic (AA), compared to wool that is declared as Mulesed (M) – see the table left. While the table shows averages over the selling years, if you do not mules and you mules with analgesic/anaesthetic, it would be highly likely to be financially advantageous for you to complete the NWD and declare your wool, rather than not complete the NWD.

Wool sold as Not Declared (ND) receives a Discount compared to wool that is declared as Mulesed (M). This is a greater issue for WA woolgrowers as their declaration rate is at 57.4%, that is 18.4 percentage points lower than all other states, which range from 75.8% to 85.2% wool declared. with Tasmania and Queensland having the highest declaration rates.

The message is clear, get out of the bottom 25%. To ensure your wool attracts the highest price possible, you need to ensure that your wool for auction is accompanied by an NWD.

For further advice on achieving Premiums for your wool, contact your wool broker.

More information: www.awex.com.au/market-information/mulesing-status/

Don't let your Declaration be wasted!

If you don't sign and date your NWD, the Mulesing Status of your mobs/lines of wool will not be shown on the sale catalogue and test certificate. This can reduce the number of buyers bidding on your wool, as well as the price you receive.

To ensure the Mulesing Status of your wool is known by potential buyers prior to sale, sign and date the NWD.

It is good practice for owner/managers

to talk to the wool classer at the start of shearing to detail all mobs and to sign/date the declaration.

Note, eSpecis can be electronically signed.



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*.



A busy January on the farm

"Farm kids and summer holidays - it's a juggling act that's for sure," says Edwina Moutray of Codrington in south-west Victoria in her post on Instagram, tagging #beyondthebale. "Thankfully, our Little Mate isn't scared of a bit of work and I'm actually really proud of the way he digs in. Even at this young age, he's an integral part of the team. And at the end of a long day of sheep work, there's always a cool beer for The Boss [Glenn] and a frozen Zooper Dooper for Little Mate. Perfect!" Edwina is a rural lifestyle photographer at Edwina Moutray Images [e.m.images_].



Reading the mail at Toorackie

Dennis and Brendan Haddrick of 'Toorackie' at **Williams** in the Wheatbelt of **WA** taking a break from the very hot weather, with Halley and their copy of *Beyond the Bale*.



Max Nield of Hyden in the wheatbelt of WA sent in this photo, with the comment: "I've always loved this photo because it reminds me of a farmer's mentality. When it's your time to go, you go. It doesn't matter what time in the morning the truck arrives, you're there before it. You normally watch the sun rise as the lambs you grew, through blood, sweat and tears head off. Then, onto the next."





A proud showing at West Wyalong

AWI-sponsored Nuffield scholar for 2023 Nicole Logg of West Wyalong of NSW sent in this lovely photo, published in *The West Wyalong Advocate*, of her 10-year-old daughter Gemma participating in her local show. Gemma entered the fleece from her poddy lamb (now a 3 year old wether) and had a great thrill in seeing the wool on display.



On the land with Rover

12-year-old **Chelsea Lane** of **Galore** in the Riverina of **NSW** with her favourite Corriedale ram Rover. Chelsea's mum, **Penny**, says Chelsea loves anything sheep or wool related - classing, droving, rouseabouting, and also reading *Beyond the Bale*.



Archie wrapped in wool

This is Archie, at five months old, enjoying his great grandfather's superfine two-tooth wool. The photo was sent in by Archie's Great Aunt, Juli Tomlinson of Pyramul on the Central Tablelands of NSW.



Two Tambo icons unite

Tambo Teddies, the company that hand-crafts Woolmark-certified 100% wool sheepskin teddies in the Queensland outback town of Tambo, has introduced a vibrant new range of cuddly companions: Ben's Hens. These colourful chickens are inspired by the feathered racers from Tambo-based Ben's Chicken Racing. To see the full Tambo Teddies range, head to www.tamboteddies.com.au

AWI CONSULTATION WITH WOOLGROWER REPRESENTATIVE BODIES

AWI consults with woolgrower representative bodies through the WICP and WCG to help the company determine the key R&D and marketing priorities of woolgrowers and industry. Woolgrowers wanting to provide feedback to AWI through the WICP or WCG are encouraged to contact their member organisation.

AWI regularly consults with woolgrower representative bodies through a consultation process that was developed with industry endorsement and rolled out in 2019.

The consultation process enables AWI to find out the key R&D and marketing priorities of these bodies and the woolgrowers that they represent, while also providing them with information on AWI activities and performance.

There are two key forums through which AWI formally consults and engages with woolgrower representative groups: (1) AWI Woolgrower Industry Consultation Panel (WICP) which meets four times per year, and (2) AWI Woolgrower Consultation Group (WCG) which meets twice per year.

Woolgrowers wanting to provide feedback to AWI through the WICP or WCG are encouraged to contact their member organisation – see below.

AWI Woolgrower Industry Consultation Panel (WICP)

The purpose of this forum is to ensure clear, two-way consultation between AWI and organisational representatives, through to woolgrowers. The meeting provides an opportunity for the AWI Board to receive and provide feedback on current/important issues and relevant topics from Board meetings.

The WICP comprises a core group of members from the nine national woolgrower organisations:

- ASHEEP
- Australian Association of Stud Merino Breeders
- Australian Superfine Wool Growers' Association
- Australian Wool Growers Association
- Broad wool representative
- Commercial Merino Ewe Competitions Association
- MerinoLink
- Pastoralists & Graziers
 Association of Western Australia
- WoolProducers Australia

The WICP nominates and appoints its own independent chair, and includes representatives from the Department of Agriculture, Fisheries & Forestry (DAFF) plus two AWI Board directors.

For each WICP meeting, AWI publishes on its website (1) a communique from the WICP independent Chair providing a report of the meeting, and (2) the AWI Business Unit Update presented to the WICP.

AWI Woolgrower Consultation Group (WCG)

The WCG is a broader group of 28 representatives, comprising state and regional production-based woolgrower groups, as well as the members of the WICP. The groups in the WCG (aside from the WICP members already listed above) are:

- AgForce Queensland
- Australian Dohne Breeders Society
- Birchip Cropping Group
- Flinders Merino
- Liebe Group
- Livestock SA
- Mallee Sustainable Farming
- Monaro Farming Systems
- NSW Farmers Association
- NSW Stud Merino Breeders' Association
- Queensland Merino Stud Sheepbreeders' Association
- SA Stud Merino Sheepbreeders Association
- Stud Merino Breeders Association of Tasmania
- Stud Merino Breeders' Association of WA
- SuperBorders
- Tasmanian Farmers & Graziers Association
- Victorian Farmers Federation
- Victorian Stud Merino Sheep Breeders Association
- Western Australian Farmers Federation

More information: www.wool.com/consultation



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