

Beyond the bale


ISSUE 89 DECEMBER 2021

PROFIT FROM WOOL INNOVATION

www.wool.com



THE
WOOLMARK
COMPANY



06
FEEL MERINO
MARKETING CAMPAIGN



08
MAKE THE LABEL
COUNT CAMPAIGN IN EU



32-39
MANAGING FLYSTRIKE
CHEMICAL RESISTANCE

Beyond thebale

EDITOR

Richard Smith

E richard.smith@wool.com

Australian Wool Innovation Limited

A L6, 68 Harrington St, The Rocks,
Sydney NSW 2000
GPO Box 4177, Sydney NSW 2001
P 02 8295 3100
E info@wool.com W wool.com
AWI Helpline 1800 070 099

SUBSCRIPTION

Beyond the Bale is available free.
To subscribe contact AWI
P 02 8295 3100 E info@wool.com

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

COPYRIGHT

Material in Beyond the Bale is copyright. Reproduction of the material is encouraged. However prior permission must be obtained from the Editor.

DISCLAIMER

To the extent permitted by law, Australian Wool Innovation Ltd excludes all liability for loss or damage arising from the use of, or reliance on, the information contained in this publication. The Woolmark symbol is a certification mark registered in many countries.

© 2021 Australian Wool Innovation Ltd. All rights reserved.

ADVERTISING SALES

Steve Luxford, Pulse Hub Pty Ltd
P 0429 699 553

E steve.luxford@pulsehub.com.au
Advertising is subject to terms and conditions published on the ratecard, which is available from Pulse Hub.

ISSN

1447-9680

FRONT COVER

Woolgrower Peter Schuster with daughters Eliza and Jessica. Peter and his wife Angela run a non-mulesed enterprise comprising 10,000 Merino sheep at Dubbo in Central West NSW.

An integrated approach to flystrike management is always important. For the Schusters, chemicals definitely aren't the only tool left in the flystrike management toolbox. Shearing, crutching, paddock selection and worm management as well as selecting sheep that are more resistant to flystrike are just as important.

Peter and Angela Schuster's non-mulesed enterprise features in a flystrike management case study on page 34.

Front cover photo credit (lower, middle image): gt29

ISO
This magazine is printed on PEFC
(Programme for the Endorsement of
Forest Certification) paper stock.



04 VICTORIA BECKHAM
KNITWEAR COLLECTION



30 LIFETIME EWE
MANAGEMENT

OFF-FARM

- 4 Victoria Beckham knitwear collection
- 5 Victoria Beckham pom pom pattern
- 6 Feel Merino marketing campaign
- 8 Make the Label Count campaign in EU
- 10 Wool is ideal for the circular economy
- 11 Fashionscapes documentary backs wool
- 12 China e-commerce campaign
- 14 Vietnam - wool textile industry grows
- 15 Campaign for Wool in the UK
- 16 Fully recyclable mattress includes wool
- 17 Lana Vello activewear collection
- 18 Benetton's one million wool collection
- 19 Levi's® new sustainable boot
- 20 Cubus: new Merino collection in Norway
- 20 Moomin-marvellous Merino collection
- 21 Merino basks in the sun in France
- 21 Le magnifique Merino beanie
- 22 Wool4School reached 10-year milestone
- 24 Student bags the Bradford Textile Award

AWI INVESTMENT STRATEGIES

- Marketing
- Sheep Production, Science & Technology
- Consultation
- Processing Innovation & Education Extension
- Traceability

AWI E-NEWSLETTERS:

To subscribe to the free monthly AWI e-newsletter for woolgrowers, and the weekly wool market review e-newsletter, visit www.wool.com/subscribe

CONNECTING WITH AWI

- wool.com
- feedback@wool.com
- wool.com/podcast
- twitter.com/woolinnovation
- facebook.com/AustralianWoolInnovation
- youtube.com/AWIWoolProduction
- Instagram.com/AustralianWool
- View Beyond the Bale online at <http://beyondthebale.wool.com>

AWI STATE-BASED GROWER NETWORKS

AWI-supported networks are present in each state.

- Sheep Connect NSW
- Sheep Connect SA
- Sheep Connect Tasmania

ON-FARM

- 26 Mitigation of greenhouse gas emissions
- 27 Supplements reduce emissions
- 28 Research into carbon neutral wool
- 28 Soil health award winner
- 30 Lifetime Ewe Management trainers
- 32 Combatting chemical resistance
- 34 Rebalancing flystrike prevention tools
- 36 Rethinking flystrike management
- 37 AWI investing more on fighting flystrike
- 38 Breeding for flystrike resistance
- 39 AWI breeding publications
- 40 ParaBoss advisors trained
- 41 ParaBoss upgrade underway
- 42 New gear to retain learner shearers
- 43 AWI-funded in-shed harvesting courses
- 44 Top technique provides girl power
- 45 Dealing with shearing cuts
- 46 Digital tally counter being developed
- 46 grow^{AG}: innovation opportunities
- 47 MerinoLink: linking the Merino industry
- 48 Profiling the Pingelly (WA) MLP site
- 50 Merino Sire Evaluation
- 52 Exclusion fencing providing a DeFence
- 54 SA Dog Fence progress
- 55 Novel scents to catch wild dogs
- 55 Wild dog control benefits native wildlife
- 56 School Merino wether competitions
- 57 AWI Graduate Training Program
- 58 Market Intelligence update
- 60 EMI level stable
- 61 Market insights from Autumn in Europe
- 62 Readers' photos
- 63 Seasonal conditions forecast

THE WOOLMARK COMPANY

- woolmark.com
- twitter.com/woolmark
- facebook.com/thewoolmarkcompany
- youtube.com/thewoolmarkcompany
- Instagram.com/thewoolmarkcompany

- BESTWOOL/BESTLAMB (Vic)
- The Sheep's Back (WA)
- Leading Sheep (Qld)

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

AWI WORKING FOR WOOLGROWERS



John Roberts
Acting Chief Executive Officer
Australian Wool Innovation

Former AWI Chief Operating Officer John Roberts was appointed AWI Acting Chief Executive Officer (CEO) in October. Here, he provides readers with a rundown of some recent changes at the company.

My name is John Roberts and I stem from a wool-producing family at Binalong in NSW. I have more than 30 years of experience in the wool industry, having worked in a wide range of roles at AWI and in private agribusiness companies, including as a wool buyer and trader.

Formerly AWI's Chief Operating Officer, I was named in October this year as Acting CEO ahead of a search process of internal and external candidates to be conducted by the AWI board to identify a permanent CEO. My appointment as Acting CEO coincided with the move of the previous CEO, Stuart McCullough, to the new international role of AWI Chief Marketing and Innovation Officer, based in London.

On behalf of woolgrowers, I thank Stuart for his almost 12 years' service as CEO and I am delighted that the company and the industry will continue to draw on his wide skillset and experience at an international level. Stuart's new role will allow him to address some of the biggest issues facing the wool industry, including creating additional demand for Australian wool.

AWI 2021 Annual General Meeting

At the company's 2021 AGM, held on 19 November, AWI shareholders elected Ms Georgia Hack, Mr Jock Laurie and Mr Don Macdonald to the AWI board. Mr Laurie and Mr Macdonald were existing directors who were seeking re-election. Mr Laurie remains as Chairman of the AWI board.

Ms Hack joins the AWI board as an accomplished retail marketing and business professional who has led the marketing function of some of Australia's leading retail brands. In 2018, she joined David Jones and now leads its marketing function.

As announced in March, Ms Colette Garnsey who had served as an AWI director

since November 2011 (and as Chairman from November 2018 to June 2021) retired from the board at this year's AGM. On behalf of woolgrowers, I would like to thank her for her tremendous contribution to the wool industry during her time on the board.

At the AGM, AWI shareholders also endorsed resolutions to limit the tenure of AWI directors and maintain the board membership of seven.

Along with AWI general managers, I gave a detailed presentation at the AGM on the activities of the company during 2020/21 and reported on some planning for 2022. To view a video recording of the AGM, including the presentations, head to www.wool.com/agm.

WoolPoll 2021 result

On 11 November, it was announced that Australian woolgrowers voted to maintain a levy of 1.5% on wool sales to fund research, development and marketing of the natural fibre.

Growers were given five options to choose from: 0%, 1%, 1.5%, 2% and 2.5%. Before preferences were allocated, the result showed 47% of votes favoured a rate of 1.5%. The next highest option was a 2% rate, with 27% support. After preferences were distributed, 69% of votes favoured the 1.5% levy rate. The result shows that woolgrowers clearly want to maintain the 1.5% levy and for AWI to continue to work hard on their behalf.

An additional question was asked on the ballot paper this year, seeking the views of levy payers on whether the three-year cycle of WoolPoll should be changed to five years. In total, 64% of votes favoured maintaining the three-year cycle.

I would like to thank the WoolPoll Panel, in particular its Chairman Steven Bolt, for their efforts to promote the vote and get so many woolgrowers to have their say.


Looking to the future

AWI remains committed to investing woolgrower levies effectively and efficiently to deliver on-farm and off-farm R&D, as well as expanding the commercial opportunities for Australian wool across the world. We will work in a highly consultative and collaborative way that ensures all of industry remain informed and invested.

In the short term, there is still uncertainty regarding COVID and its ongoing effect on our key markets. For example, it appears that the major global economies are recovering, eg sales at clothing stores in the UK are now only 0.5% below their pre-COVID level. However, at the time of writing, COVID cases have shot up to record levels in some European countries such as Germany and Austria, and we wait to see if there is a knock-on effect on their economies.

Fundamentally though, I believe that the long-term consumer trends towards products that are environmentally friendly, and health and wellness, play in wool's favour – and AWI and its marketing arm The Woolmark Company will invest wisely in collaborative marketing campaigns that maximise the return on investment for Australian woolgrowers.

It is critical that we adopt a clear, swift and practical approach to the many challenges and opportunities that sit before us, in both the off-farm and on-farm areas. Rest assured that AWI, your R&D and marketing company, will continue to work relentlessly for you to ensure the sustainability of our industry and profitability for your enterprises.

I wish you a happy Christmas and New Year and a safe and prosperous 2022. 

Victoria Beckham 'perfectly paired' with Merino

The eponymous luxury fashion brand of Victoria Beckham has launched its first traceable collection, comprising knitwear pieces made from 100% Australian Merino wool, in collaboration with AWI subsidiary The Woolmark Company.

British luxury fashion brand Victoria Beckham launched the traceable Merino wool knitwear collection, titled 'Perfectly Paired', in October just in time for winter. The 20-piece adult knitwear collection and 14-piece childrenswear collection is filled with cosy and comfortable polo and crewneck jumpers, V-neck cardigans and gift sets of scarves and headwear.

"I am so excited to launch a farm to shop floor collection and wanted to mark this moment with classic yet fun designs for adults as well as kids, providing everyone of all ages the building blocks for the perfect statement-making and cosy winter wardrobe," Victoria said.

Designed with sustainability and longevity in mind

The new Victoria Beckham x The Woolmark Company collection has timeless appeal and is designed with sustainability at its core. The environmental impact has been considered throughout every step of the design process, from sourcing materials

to the development, manufacturing and production of each piece.

One of the most important decisions was choosing the materials. The collection is made in Pescara, Italy, from 100% natural, renewable and biodegradable Merino wool. The original eco-fibre, the non-mulesed Merino wool used in the Victoria Beckham collection is fully traceable back to five Australian woolgrowers.

The colour palette of the collection is earthy and warm, created using a unique plant-based dye process from Italian dye house Tintoria di Quaregna – the only such technology in the world certified by The Woolmark Company. Despite there being no chemicals involved, the natural dyes create incredibly vivid shades.

"I love that we've managed to create a bright and vibrant colour palette by using flowers, leaves and berries as part of a natural dye process and that the whole collection is made from recyclable, renewable and biodegradable 100% Australian Merino wool and yarn. It's the softest sheep's wool in the world!" said Victoria.

To further reduce the environmental

footprint of the collection, a bespoke kit to make your own crochet keyring, using leftover yarn from the collection, is being sent with each piece from the collection that is ordered on the Victoria Beckham website (see opposite). Even the packaging and labelling use recycled poly labels and biodegradable Polybags.

The garments are all Woolmark-certified, which means they've all been tested for longevity and colour fastness. If you look after these pieces, they will remain in your wardrobe for years to come.

Victoria Beckham and The Woolmark Company have a longstanding relationship. Victoria Beckham was a judge at the International Woolmark Prize for three years: 2012/13, 2014/15, 2016/17.

Available across the world

As well as being available to purchase from the Victoria Beckham website, the collection is also available at multiple retailers across the world including Saks Fifth Avenue, Zalando, Mytheresa, Harrods, LUISAVIAROMA, KaDeWe, Barneys Japan, TSUM, Al Srad Ltd, Grace, La Samaritaine, Retro AS Norway and Hudson's Bay.

The collection was promoted via the websites and social media channels of Victoria Beckham (which has 44 million followers in total on Instagram, Twitter and Facebook), The Woolmark Company and the stockists of the collection.

After rising to prominence in the 1990s as a member of the hugely successful group the Spice Girls, in which she was nicknamed Posh Spice, Victoria Beckham founded her eponymous fashion label in 2008. Developed at her London atelier, the brand launched with a series of form-fitting dresses and has expanded to include a ready-to-wear, footwear and eyewear line.

With offices in London and New York and a flagship store in Mayfair, the brand has won critical acclaim alongside multiple industry awards including Best Designer Brand and Brand of the Year at the British Fashion Council's Fashion Awards. In addition to victoriabeckham.com, the Victoria Beckham brand is carried in more than 320 stores in 40 countries worldwide. **B**



Promotional photo of some of the items from **Victoria Beckham's new knitwear collection** developed in collaboration with The Woolmark Company and made from 100% Australian Merino wool.

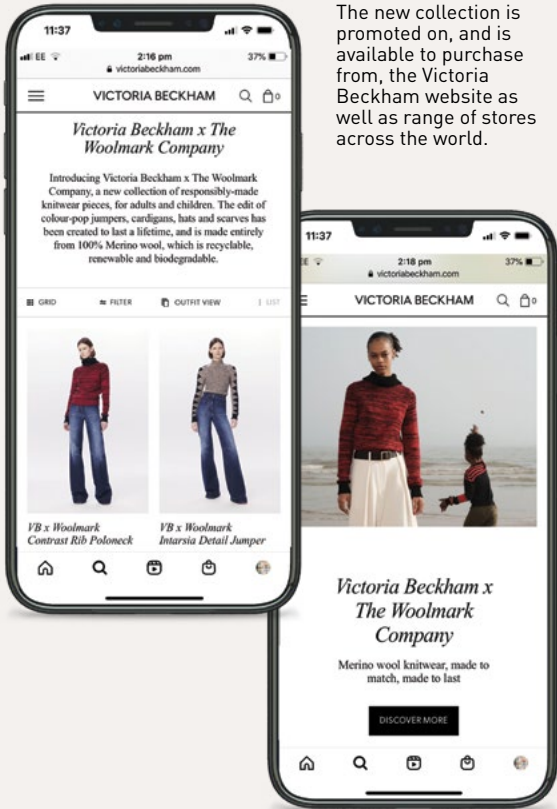
More information

www.victoriabeckham.com/pages/woolmark

www.woolmark.com/victoriabeckham

Victoria Beckham pom pom pattern for you and your family

The new collection is promoted on, and is available to purchase from, the Victoria Beckham website as well as range of stores across the world.



Victoria Beckham wearing a colour block jumper from the new Merino wool collection, as she enters Times Square Studios in New York for an appearance on the popular Good Morning America TV show in October. Source: Victoria Beckham, Twitter.



To get crafting with Australian wool, you can use the special pattern for a pom pom and crochet loop from Victoria Beckham.



“Discover the new knitwear collection, made from 100% Merino wool, the softest sheep’s wool in the world.”

Victoria Beckham on Instagram (29.2 million followers)

There’s never been a better time to order some Australian wool yarn, get crafting, and create a present for yourself or your loved ones. To help you get started, AWI is distributing a special pom pom pattern from Victoria Beckham.

As part of the launch of the new Victoria Beckham x The Woolmark Company knitwear collection, Victoria Beckham is sending a bespoke crochet kit with each piece from the collection that is ordered on the Victoria Beckham website www.victoriabeckham.com.

The kit includes several crochet patterns, for pom pom and tassel key rings. The kit also contains leftover yarn from the collection, thereby reducing the environmental footprint of the collection. The Victoria Beckham patterns are available free on the Victoria Beckham website and also at www.wool.com/vb-patterns.

For you and your family to try at home, AWI has included one of the patterns, for a pom pom with a crochet loop, as an insert with this edition of *Beyond the Bale*. Don’t worry if you’re not proficient at crocheting, you could simply make just the pom pom. It is a fun activity suitable for the whole family!

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

More information

If you don’t have the hard copy of the pom pom pattern, you can download a PDF of it at www.wool.com/vb-pompom



FEEL
MERINO



Feel Merino marketing campaign

Following the success of its Feel Merino marketing campaign last year, AWI's marketing arm The Woolmark Company launched a renewed campaign in November this year.

The campaign aims to increase North American consumers' awareness of Merino wool as a natural fibre that is soft on the skin and ideal for sports, outdoor and leisure pursuits.

A key element of the Feel Merino campaign is to drive purchases of commercially available Merino wool performance wear on e-commerce giant Amazon.

Sportswear continues to be a fast-growing apparel sector with strong demand in outdoor sectors such as hiking and biking. More recently, due to COVID-related lockdowns, the demand for leisurewear has also increased.

Merino wool's inherent qualities, such as superior softness next-to-skin, thermo-regulation, breathability and odour resistance make the fibre the perfect choice for sports, outdoor and leisure apparel.

However, research during the past few years shows that there is a persistent and outdated misconception amongst the average consumer, especially in North America, that wool is "warm and itchy" and only suitable for very traditional (ie non-sport) sectors. Last year's Feel Merino campaign by AWI's marketing arm The Woolmark Company went some way in combatting this misconception. But, while a battle might have been won (see the



results box opposite), the war is ongoing.

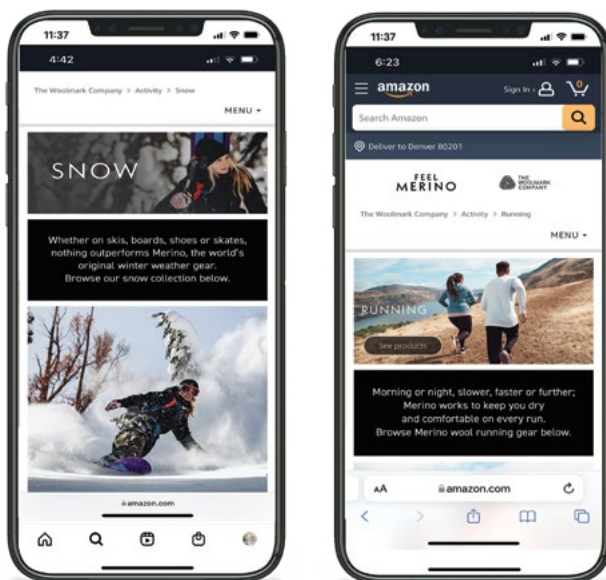
The Woolmark Company in November this year relaunched the Feel Merino campaign in the US and Canada. The campaign, which targets millennials, creates a new and modern narrative for Merino wool as a hard-working, but always soft, performance fibre.

All the campaign's marketing activity is directed towards guiding consumers to the Woolmark Feel Merino store within Amazon.com and Amazon.ca where they are directed to Merino wool products which they can buy from brand partners. These brands include Woolly, Merino.tech, Smartwool, Minus33, PEARL iZUMi, Meriwool, Ridge Merino, super.natural, Kari Traa, Western Rise, Falke, Helly Hansen and Meraki. Head to www.woolmark.com/feel-merino to access the shop on Amazon.com.

AWI Acting CEO John Roberts says there are two objectives of the Feel Merino



The **Feel Merino Anthem** is a 60-second film that presents woolgrowers and athletes in parallel – and shows viewers that Merino wool helps each perform strongly by always staying soft.



The **Woolmark Feel Merino store on Amazon.com** is split into categories, making it very easy for consumers to find commercially available Merino wool products for their preferred sporting activity.

marketing campaign in the lucrative North American market.

"Firstly, there is the educational element: to challenge any outdated perceptions of wool and increase awareness for Merino wool as a natural, modern and innovative performance fibre that is super soft against the skin," he said.

"Secondly, and crucially, the Feel Merino campaign aims to prompt action amongst consumers and get them purchasing Merino wool performance wear products via Amazon.com.

"Partnering with the world's largest e-commerce retailer, Amazon, gives the campaign the perfect media platform for Australia's premium fibre, Merino wool. It is also the perfect channel to drive consumers towards a wide range of sports, outdoor and leisurewear products that they can purchase. Online purchasing is so popular nowadays, especially amongst the younger generations."

The marketing campaign includes promotional content for the specific

performance apparel categories of **running, biking, hiking, climbing** as well as **working**, but this year the apparel categories have expanded to also include **golf, snow, yoga, loungewear** and **childrenswear**. The promotional content is being used across the digital and social channels of The Woolmark Company, as well as on the Woolmark Feel Merino store on Amazon.com and Amazon.ca.

This year's campaign again includes the Feel Merino Anthem, a 60-second film that aims to capture people's attention and provide them with a new understanding about Merino wool's natural versatility and suitability for performance wear.

The Feel Merino campaign runs through to the end of February, and we will bring readers the results of this year's campaign in a future edition of *Beyond the Bale*.

More information
www.woolmark.com/feel-merino

Results of last year's **Feel Merino** campaign

The results from last year's campaign, launched in the US in November 2020, show the campaign was a winner and proved popular:



10 million

video views



144 million

impressions



12.5% uplift

in awareness of Merino wool and The Woolmark Company



413% increase

in organic searches for 'Merino wool'



+3.1pt uplift

in Merino wool purchase intent



57%

of customers who purchased product on Amazon were new-to-brand customers, showcasing that the campaign turned those who previously did not purchase/consider Merino wool performance wear into active purchasers.



The Make the Label Count campaign mark incorporates symbols which reference the main concerns being raised with policy-makers (see box opposite).

Action on wool's eco rating challenge in the EU

AWI has joined together with international natural fibre organisations and NGOs to launch a new campaign called Make the Label Count – to help ensure the European Commission's proposal for sustainability claims on clothing is accurate and does not perpetuate greenwashing in favour of synthetics. The campaign aims to prevent the introduction of inaccurate and poor environmental scores for natural fibres such as wool, on clothing labels across the European Union.

As part of its work around circular economy and consumer protection, the EU is proposing that companies substantiate the environmental claims they make on clothing using a harmonised methodology. While its aims are laudable, the current methodology being proposed – the Product Environmental Footprint (PEF) – is narrowly drawn and fails to adequately take account of key sustainability considerations including the benefits of using renewable and biodegradable fibres, the adverse impacts of microplastic pollution and the full environmental footprint of fossil fuel fibres. As such, the PEF risks misleading consumers about the impacts of their products, and ultimately undermining the EU's sustainability objectives.

Launch of Make the Label Count campaign

A new international coalition of organisations launched the Make the Label Count campaign in October in Brussels, Belgium – the home city of the European Commission. The coalition is calling on the European Commission to ensure accurate and transparent sustainability claims on clothing in the EU.

"The European Commission started the PEF in 2013. Since then, we've had major

advancements in research and knowledge around the environmental impacts of the textile industry, but these aren't reflected in the current methodology," said Dalena White, Make the Label Count co-spokesperson and Secretary General of the International Wool Textile Organisation (IWTO).

"If the Commission proceeds to use the PEF without updating it, the fashion and textile industry won't make the green transition the EU wants to see."

The newly formed coalition is asking the European Commission for an updated methodology that reflects the goals behind

the EU's own Circular Economy strategy and its Green Deal objectives. The coalition is eager to work with EU policy makers and stakeholders to find the right solutions.

"We want to give consumers full visibility of whether a product is sustainable



Screenshot from the **Make the Label Count** campaign video.

FAST FACTS

- Because the fashion and textile industry has such a big environmental footprint, the European Commission is reviewing sustainability claims on apparel and footwear in the European Union (EU).
- While this is a good initiative, the Commission's proposed methodology behind the proposed labelling, known as the Product Environmental Footprint (PEF), is flawed and needs revising so that wool and other natural fibres are scored on a level playing field with synthetic fibres.
- The PEF methodology currently downplays or excludes critical impacts, such as a garment's renewability, biodegradability, social impact or the full impact of fossil fuels and microplastics.
- The new Make the Label Count campaign aims to raise awareness of the limitations of the current PEF methodology, work together with the European Commission on solutions for its improvement, and defer its use on clothing in the EU market until it has been revised.
- It is crucial that the methodology is accurate and complete so that consumers can make informed choices about the clothes they buy and wear.

and in its current form, the PEF doesn't do that. We need to have reliable information about whether clothes are renewable, biodegradable, and whether they shed microplastics that pollute our ecosystems and food chains," explained Dalena White.

"Only then will we ensure clothing sustainability claims give consumers credible information that substantiates green claims and prevents greenwashing."

Also presenting at the launch of the campaign, Livia Firth, Make the Label Count co-spokesperson and Creative Director of sustainable fashion consultancy Eco-Age, said: "We stand ready to help develop a clear and credible methodology that reflects the latest science to empower millions of European consumers, and beyond. When people make informed choices, they make better choices – and this in turn will encourage brands to make products with the lowest possible environmental impact."

A panel discussion was organised for the launch with distinguished guests including the Deputy Head of the European Commission's Environment Department (Sustainable Production, Products and Consumption), Paola Migliorini; the Executive President of the Fédération de la Haute Couture et de la Mode (the governing body for the French fashion industry), Pascal Morand; and Professor in Clothing and Sustainability at Consumption Research Norway (SIFO) Oslo Metropolitan University, Ingun Grimstad Klepp. The event was streamed live across the world and can be watched via playback at www.makethelabelcount.org.

Coalition of organisations

The Make the Label Count campaign brings together an international coalition of organisations who want to ensure the EU's clothing sustainability labels are credible. To date, members of the coalition include AWI, Campaign for Wool, Cashmere & Camel Hair Manufacturers Institute, Changing Markets Foundation, Cotton Australia, Discover Natural Fibers Initiative, Fibershed, International Sericultural Commission, International Silk Union, International Wool Textile Organisation and Plastic Soup Foundation.

Acting CEO John Roberts says AWI has been actively participating in the PEF process for several years, advocating for robust science to underpin the PEF's rating methods and ensure wool is not disadvantaged, and is proud to be a founding and integral member of the Make the Label Count coalition.

"On behalf of Australian woolgrowers, AWI is deeply embedded in the campaign to continue to raise awareness of concerns with the PEF methodology and ask EU policy and decision makers to defer the use of the PEF methodology for apparel until the concerns have been addressed," John said. B

More information

www.makethelabelcount.org

Hear more from Dalena White in Episode 200 of AWI's *The Yarn* podcast, available at www.wool.com/podcast



Make The Label Count co-spokesperson and Secretary General of the International Wool Textile Organisation, **Dalena White**, presenting at the campaign launch in Brussels in October.

How can the PEF methodology be improved?

Consumers should be able to trust sustainability claims on their clothing labels. We are asking European Commission policymakers to update the PEF methodology to make the label count for consumers. Here is where the Make the Label Count campaign thinks we can start:



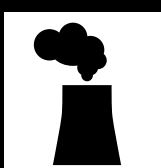
Renewability & Biodegradability

Only products made from renewable raw materials can be truly sustainable. The inherently circular attributes of natural fibres, including renewability at start-of-life and biodegradability at the end-of-life need to be accounted for in a credible product claim. Inclusion of parameters to account for biological circularity could address this limitation.



Accounting for microplastics

The environmental impacts of microplastic pollution should be included in any label intended to inform consumer choices. Laundering synthetic clothes accounts for about 35% of primary microplastics released into the environment.



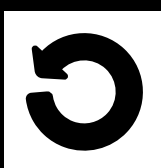
Equitable comparison of fibres

The impact of forming natural fibres is fully accounted for in PEF, whereas the impact of forming fossil fuel based fibres starts at extraction. It is not possible to have an equitable comparison of products with different system boundaries, and technically sound solutions to this problem are currently being developed.



Duration of service

The use-phase has a major influence on a garment's environmental footprint. Factors that extend the lifetime of clothing, including odour resistance, wrinkle resistance, less frequent laundering and the rate of reuse by further owners should be included in PEF methodology.



Production practices

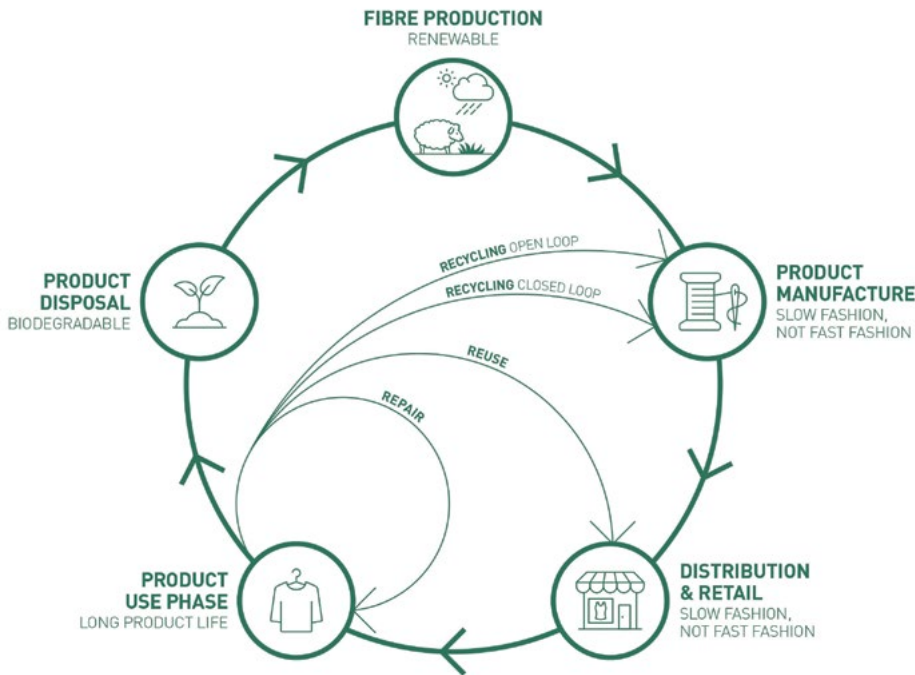
The impacts of fibre production are assessed without considering whether sustainable agricultural management practices are used. By failing to assess and incentivise sustainable agricultural practices, an important opportunity to achieve the EU's goal of 'protecting and restoring natural ecosystems' is lost.



Social impacts

The socio-economic impact of fibre production and textile manufacturing is not considered in the PEF methodology. Credible measures of sustainability encompass planet, people and prosperity.

Wool fits into a sustainable circular model of textile production that minimises waste and pollution



Wool is ideal for the circular economy

In contrast to synthetic fibres, wool fits into a sustainable circular model of textile production that minimises waste and pollution. AWI continues to educate brands and the supply chain about wool’s natural eco-credentials and, increasingly, its suitability and benefits for the circular economy.

With the global fashion and textile industry under pressure from consumers and regulators to reduce its waste and pollution, there is a push for the supply chain to change its method of production from a wasteful ‘linear’ model towards a sustainable ‘circular’ model.

- The circular economy is based on the principles of:
- using renewable resources
 - designing out waste and pollution
 - keeping products and materials in use for a long time; and
 - regenerating natural systems.

Many brands and designers are asking themselves how they can shift into a circular business model and create circular products. The answer is to use wool.

In contrast to synthetic fibres, wool has a unique set of ‘circular’ features – such as being a **renewable** and **biodegradable** fibre, suitable for **reuse** and **recycling**, and **free from microplastics** – which should make

the fibre more sought after by designers, brands and retailers.

AWI promoting Australian wool’s circularity

AWI supports the movement towards a more circular fashion industry so that wool can better compete with synthetics.

Whilst AWI’s marketing arm The Woolmark Company continues to have a very strong focus on marketing Australian wool’s eco-credentials, the company has more recently introduced information and resources for the textile and fashion industries about how well wool fits into a circular economy. The Woolmark Company not only presents the scientific evidence, but also

provides a pathway for designers and brands to incorporate wool into their products to lighten their eco-footprint and demonstrate an alignment to circularity.

For example, The Woolmark Company has created an online **Circularity Hub** on its Woolmark.com website. This is a launchpad for brands and designers to learn about all aspects of the circular economy, the different cycles within the system, and how best to integrate circular design principles into their work. This go-to resource will be updated regularly with toolkits, explainer videos and best-practice case studies to help brands and designers overcome some of the barriers to transitioning to a truly circular economy.

Other related AWI-supported initiatives include the production of the popular documentary **Fashionscapes: A Circular Economy** (see opposite page), and the **Make the Label Count** campaign, which is urging the European Commission to revise the methodology of its Product Environmental Footprint scheme (see pages 8-9) so that it reflects the goals behind the European Union’s own Circular Economy strategy.

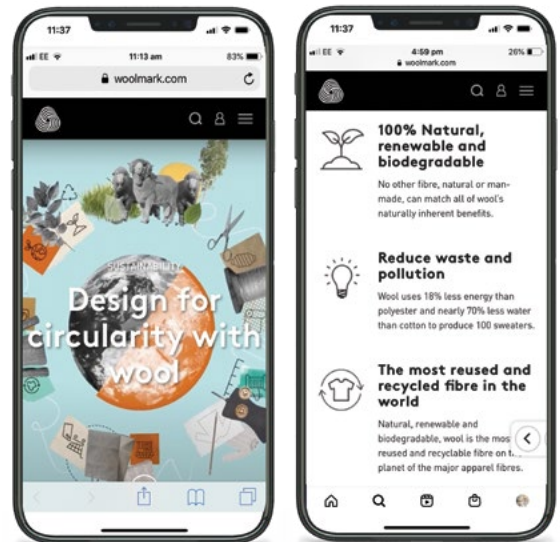
These AWI initiatives are especially important given that competitive fibres are aggressively pursuing environmental positioning strategies which pose a direct risk to wool’s market share as synthetics greenwash their way around fundamental flaws in their own claims.

More information

www.woolmark.com/circular-design



Examples of information produced by The Woolmark Company for the textile and fashion industry promoting the use of wool when designing for the circular economy: A Circularity Hub on Woolmark.com that includes information, resources and videos (below) and one of several PDF toolkits (above).



Building a true circular economy with natural fibres

A new documentary supported by The Woolmark Company challenges the global fashion industry to push for real circularity by using natural fibres, such as wool, to escape the take-make-and-waste model of fast fashion that is so detrimental to the planet's environmental health.

Sustainable fashion consultancy brand Eco-Age produced the 17-minute investigative documentary, titled *Fashionscapes: A Circular Economy*, with support by AWI's marketing arm The Woolmark Company. It was directed by acclaimed film-maker Andrew Morgan and features Eco Age's founder, Livia Firth, along with experts from across the world and includes woolgrower Charles Massy from the Monaro in NSW.

While the ideas and messaging of the circular economy – such as reducing wasteful production and pollution – appear to have been taken up enthusiastically by brands and retailers, Livia and Andrew find out in the course of their interviews that the circular economy as it applies to fashion is actually in big danger.

“Plastic is a material where you can find a problem at every single stage of its life cycle; there's no point when you can give up worrying about plastic.”

Lucy Siegle

author and journalist

The documentary warns how the emerging concept of a truly circular economy is being hijacked and greenwashed by manufacturers and retailers of fast fashion, primarily synthetic clothing. Consumers are often misinformed about the environmental impacts of synthetic

fibres, with claims often not even backed up by data or evidence, and consumers are unaware that they are complicit in a fast fashion system of 'over production for over consumption'.

One of the biggest misconceptions around a truly circular economy is that plastic is infinitely recyclable.

“As we've travelled, documented and campaigned about the issues in the global fashion industry, we've heard the same refrain from big businesses about reaching a 'magical place' where we have a circular economy and it being the solution,” Andrew Morgan warned.

“But this idea has been used to allow big corporations to put a recycling bin in a store, for example, whilst continuing to use supply chains that wreak havoc on the natural world and the phrase has been used as a marketing tool and to encourage greenwashing.”

On a more optimistic note, the documentary also explores how the fashion industry can bypass the fast fashion lies and transform the way the industry can make clothes by using natural fibres such as wool, and begin to build a truly circular economy that will result in a cleaner, greener fashion system.

“We have the tools in our hands using animals – sheep and cattle particularly – to regenerate the landscape and in turn affect a lot of the major issues that our planet now confronts. In our case, virtually no fossil fuel goes into [the production of our



Screenshots from the new *Fashionscapes* documentary: Merino sheep in their natural environment on Charles Massy's property in NSW, contrasting vividly with discarded fast fashion synthetic garments accumulating in rubbish dumps.

wool], no chemical, no industrial fertilisers, no harming of a landscape. So it's a very green healthy fibre in my view,” Charles Massy said.

“Farmers around the world are rediscovering how to create natural fibres in harmony with the land.”

Livia Firth

founder of Eco Age

Since its release in September, the documentary has been viewed more than 285,000 times on YouTube and at special screenings across the world. The documentary also garnered more than 45 press clippings with a reach of 217 million.

The documentary is the fifth episode in the Eco-Age's *Fashionscapes* series, which debuted in 2018 with the inaugural episode *Fashionscapes: Forever Tasmania* that celebrated the fine woolgrowers of Australia and their unique ties to the land on which they live. **B**

More information

View the documentary at www.youtube.com/EcoAgeTV



THE WOOLMARK COMPANY



AWI recently partnered with the largest e-commerce platform in China, TMALL, to promote Australian Merino wool. Pictured is one of the promotional images of Merino wool fashion ambassador and actress Song Yanfei that accompanied the campaign.

AWI 最近与中国最大的电子商务平台天猫合作，推广澳大利亚美利奴羊毛。图中是羊毛时尚大使和女演员宋妍霏的推广形象之一，是此次活动的宣传图之一。

China e-commerce campaign for Autumn/Winter 2021

Capitalising on the immense strength of online retailing in China, AWI's marketing arm The Woolmark Company has once again collaborated with China's most influential business-to-consumer e-commerce platform, TMALL, to launch a promotion of products made from Australian Merino wool.

Online retailing in China is enormous. It is estimated to have amounted to 2.2 trillion US dollars in 2020 and is expected to continue to grow. In fact, in a world first, online retailing is this year forecast to account for more than 50% of retail sales in China. Add the fact that China represents the world's most lucrative fashion market, then the suitability for an e-commerce marketing campaign by The Woolmark Company is obvious.

Furthermore, the marketing campaign was particularly important this year due to many other retail markets across the world still being unsettled due to COVID-19.

The Woolmark Company's partnership with TMALL aimed to put Merino wool at the front of digitally savvy shoppers' minds, whilst further championing the wool products of premium Chinese and international brands.

TMALL, which is part of Alibaba Group, is the most visited business-to-consumer online retail website in China and accounts for nearly half of all retail e-commerce sales. TMALL has established itself as the destination for quality, brand-name goods catering to increasingly sophisticated Chinese consumers.

The Woolmark Company's collaboration with TMALL built on similar and very successful joint campaigns in the previous two years.

This season's campaign highlighted the premium natural qualities and effortless

style of Merino wool – all with the aim to make Merino wool the most coveted apparel fibre for consumers during winter 2021. More than 200 leading domestic and international brands joined the campaign – including Max Mara, Theory, UNIQLO, EDITION, ERDOS and more – showcasing and selling a myriad of premium Merino wool products.

The Woolmark Company also collaborated with five Chinese celebrities and five top-tier Chinese fashion brands to support a 'Double 11' wool promotion on TMALL. 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 the US.

Campaign showing results

The success of the campaign will be measured through analysis of media and social engagement (currently available figures show that the campaign has generated more than 255 million impressions and 29 million video views) and, most importantly, by the increase in Merino wool sales.

"We were very honoured to partner once again on behalf of Australian woolgrowers with TMALL, China's most influential B2C e-commerce platform, to make high-quality Merino wool available to a larger audience," said AWI Country Manager China, Jeff Ma.

"We were also very pleased to invite the up-and-coming actress Song Yanfei to participate in our fashion film, bringing excitement to Merino wool.

"The whole campaign reminded Chinese consumers of Merino wool's natural benefits which cannot be matched by any other fibre. A new generation of consumers are now expecting more from their purchases and Merino wool's performance properties and eco-credentials are perfect to meet these expectations."



The Woolmark Company also joined hands with the No.1 livestreamer in China, Viya, to host a livestream event on 27 September, which was especially popular. It showcased a variety of Merino wool products and discussed some of the fibre's exciting benefits.



As part of the campaign, The Woolmark Company collaborated with **TMALL** and **ELLE** to promote wool product from a wide range of brands under the four themes of "Street style", "Office-approved", "Outdoorsy style" and "Cozy casual".



The closing shot from the 'Merino Wool, Chic in Every Way' video that was launched to coincide with the **TMALL** campaign, featuring Merino wool fashion ambassador and actress **Song Yanfei** (centre). In the humorous video, Song Yanfei and a 'dog with fashion sense' embarked on a search for inspiration for autumn and winter fashion. The video highlighted Merino wool's elegance and in particular its elasticity, water repellency and wrinkle resistance.



To support a Double 11 wool promotion on TMALL, The Woolmark Company invited special guests including fashion influencer **Linda**, actress **Ziyi Meng**, musician and supermodel **Yingge Yang**, actress and supermodel **Bonnie Chen**, and singer and actress **Yumiko Cheng**, to shoot a 'Double-11 Autumn/Winter Lookbook' in collaboration with five top-tier Chinese fashion brands DAZZLE, eifini, GXG, Lily and MO&Co.

Interest in wool textiles from Vietnam grows

Dalat Worsted Spinning Company Limited is not only the first worsted yarn spinning mill in Vietnam, but also one of the most modern ones in the world. Production began in June 2019.

Since AWI identified Vietnam more than a decade ago as a key emerging market for wool, Vietnam has grown into an important manufacturing hub for wool textiles, with brands from across the world showing strong interest in sourcing textiles from the country.

The Vietnam textile industry is the third largest apparel exporter in the world accounting for 6.3% of world apparel exports in 2019. AWI first identified Vietnam as an emerging manufacturing hub for wool textiles in 2012 when the Vietnam textile industry began to focus on moving toward high-quality products and production.

Since then, AWI has worked closely with partners throughout the supply chain. AWI has transferred technical knowhow about the manufacturing of wool products, disseminated information about sources of raw materials and machines, and organised international trade missions to connect project partners with buyers.

AWI currently collaborates with more than 90 partners including flatbed knitters, circular knitters and garment making companies. In recent years, AWI has also worked with Vietnamese domestic brands to produce their first wool collections which have successfully sold in the domestic market.

Vietnam is no longer an emerging market. The country now boasts a robust wool supply chain including spinning, weaving, knitting and whole garment manufacturing. This vertical integration means designers, brands and buyers can source all their garment requirements from the one country, cutting out logistical times and dealing with many suppliers.

As the country's economic and social environment has evolved, AWI has witnessed Vietnam's growing use of Australian wool to produce quality garments.

"AWI's program has successfully helped future-proof Australian wool's prospects by opening up a new and expanding processing destination for Australian wool. Our heritage in wool research and development together with Vietnam's solid background in the

textile industry made a perfect combination," said AWI Regional Development Manager, Trudie Friedrich.

"AWI's success in Vietnam can be attributed to a number of key factors including a rapidly growing economy, a rich textile culture, a competitive workforce, and a desire by brands across the world to diversify their supply chain away from China for reasons such as trade disputes and increasing costs of production there."

Vietnam Supplier Presentation webinar for Japan

With a trend for the sourcing teams



To help connect brands to Vietnamese suppliers, AWI also has a 28-page Vietnam Sourcing Guide that shines a spotlight on the expertise and diversity of the wool supply chain in Vietnam. The guide has been one of the most downloaded documents on Woolmark.com. It has recently been updated and features about 50 spinners, knitters, weavers as well as makers of garments, accessories and socks.

of brands in Japan to look at moving their production out of China, the AWI office in Japan organised a webinar in October in which six suppliers in Vietnam presented information about their businesses to Japanese trading houses, brands and suppliers.

There were 36 attendees from 22 companies including Itochu, Nippon Steel, Marubeni Fashion Link, SanMarino, Takisada, Takihyo, Asics and Wacoal.

The objective of the online seminar was to increase awareness in Japan about Vietnam suppliers, connect Vietnam suppliers with key Japanese companies and generate new wool business leads. Following the webinar, AWI in Japan and Vietnam will support business development.

"Most Japanese apparel brands rely on Japanese trading houses for overseas production," explained AWI Japan Country Manager, Samuel Cockedeey.

"With an increase in production costs in China, trading houses are searching for the next China and are actively investing in creating new supply chains in Vietnam.

"By promoting wool suppliers in Vietnam, we expect more wool business and consumption of wool. Moreover, those suppliers who work with global sports brands should look attractive, especially to Japanese sports and outdoor brands because activewear markets are booming in Japan."

The Vietnam suppliers presenting were Dalat Worsted Spinning, TOPMODE, YOUNGONE Designer Textiles International, ASIATEX, LPTEX and HOANG DUONG. Panelists also included Trudie Friedrich; Samuel Cockedeey; AWI Japan Product, Education Extension & Trade Licensing Manager, Tomohiro Nishizawa; and AWI consultant in Vietnam, Hung Nguyen.

Wool Week turns into Wool Month!

The Campaign for Wool's Wool Week in the UK returned this year to promote the natural and sustainable benefits of the fibre to consumers, but this year continued for almost a full month.

The Campaign for Wool, initiated in 2010 by its patron His Royal Highness The Prince of Wales, raises awareness amongst consumers about the unique, natural, renewable and biodegradable benefits offered by the fibre. The initiative continues to encourage collaboration between an international community of woolgrowers, major fashion designers, retailers, manufacturers and interior designers.

The Campaign has been instrumental in educating consumers about the versatility of wool, and reconnecting them with its myriad uses – from luxurious fine Merino wool apparel through to beautiful hardwearing interior products for the home.

Each year, the Campaign for Wool uses Wool Week to amplify wool's eco and environmental messages, collections, product launches, events and activities from brands, retailers and crafters.

This year's Wool Week, which continued for most of October, had 'Feel Better - Choose Wool' as its theme, which applies to many product categories – from bedding and home furnishings, to next-to-skin and sporting apparel – and also, of course, to the satisfaction of knowing that by choosing wool one has made a good choice for the planet. **E**

More information
www.campaignforwool.com

SNIPPETS FROM WOOL WEEK UK

THE YORKSHIRE SHEPHERDESS CELEBRATES WOOL WEEK

The Campaign for Wool welcomed The Yorkshire Shepherdess, Amanda Owen (sheep farmer, author and one of the stars of the *Our Yorkshire Farm* TV documentary series – shown in Australia on the Channel Nine) to celebrate Wool Week at the historic Salts Mill in Bradford. The event provided one of the first opportunities since the COVID pandemic for the local wool industry to gather in person and celebrate wool.



KATHARINE HAMNETT LONDON X JOHN SMEDLEY COLLECTION

British knitwear brand John Smedley and fashion pioneer Katharine Hamnett (famous for her slogan T-shirts – remember Wham! wearing CHOOSE LIFE) together crafted a collection of extra fine Merino wool knitwear featuring the slogan CHOOSE SLOW. It is designed to ask consumers to assess where and from whom they buy their clothing, shifting focus from fast to slow fashion.
www.johnsmedley.com



PRINCE OF WALES HIGHGROVE HERITAGE SCARF

Highgrove, the private residence of TRH The Prince of Wales and The Duchess of Cornwall in Gloucestershire, and The Prince's Foundation collaborated with the Johnstons of Elgin woollen mill to create the Highgrove Heritage Scarf. The scarf takes its inspiration from nature as well as heritage patterns and is made from 100% ultrafine Merino wool from Australia.
www.highgrovegardens.com



SLOW FASHION PROMOTION BY HAINSWORTH

Historic British weaver Hainsworth invited some of its favourite slow fashion designers to showcase their beautiful garments in its mill, taking them back to where their wool fabrics were created. In the social media and video content that was created, its customers heard from Britannical and Valdone about the importance of slow fashion and the use of wool. Pictured is Britannical's Kensington girls coat that has a Merino wool outer.
www.hainsworth.co.uk
www.britannical.com



Fully recyclable mattress is an Australian first

A model in the Origins range from the A.H. Beard that contains wool sourced from the 'Cloven Hills' property of Kate and Chris Dorahy in Victoria.

With the help of Australian wool, A.H. Beard has launched what the company says is an Australian first: a range of mattresses that are truly sustainable and fully recyclable.

A.H. Beard is an Australian family-owned business with more than 120 years' experience crafting premium sleep products. Today, A.H. Beard is one of the largest mattress manufacturers in the country, employing more than 400 people to produce up to 10,000 mattresses each week, which are sold in Australia and across the world.

CEO of A.H. Beard, Tony Pearson, says that with one million mattresses every year ending their lives in Australian landfill, the company's new Origins collection has been designed especially with sustainability in mind.

"We are proud to lead the way in developing Australia's first sustainable sleep range. A.H. Beard has always been a driving force behind mattress recycling in Australia and we couldn't rest until we had created Australia's first truly circular and fully recyclable mattresses," he said.

The mattresses in the new Origins range are made using locally sourced wool fibres, along with fabrics milled from organic cotton and Tencel®, and the world's first 100% recyclable pocket spring support system.

Each mattress is constructed without foam and glue so that at its 'end of life' it can be disassembled, and the various components separated for recycling. For example, the wool in the mattresses can be turned into protective padding blankets or roofing insulation.

Natural and renewable wool

A.H. Beard has selected materials that are not only good for sleep but are sustainably produced, using Australian growers and suppliers wherever possible to support local jobs and communities.

The wool in the A.H. Beard Origins range, which comprises nine mattress styles, is sourced from 'Cloven Hills', a composite

maternal stud and prime lamb enterprise, at Nareen in the Western District of Victoria which is owned and run by Kate and Chris Dorahy.

"Our wool averages between 33-34 micron depending on the season. As a genetics business that selects hardy sheep for prime lamb production, to stay in our flock you must not only perform on the key kg/ha drivers but have consistency of wool type and enough greasy fleece weight to warrant shearing," Chris said.

"As stronger cross bred wool markets have been much tougher, we need to find alternative markets for wool that has all the attributes the world is currently talking about, sustainability and recyclable.

"For many years our wool broker Colin Petersen of Fox & Lillie and I have talked about finding more uses for this great product that

we produce. So when Colin and David Kay, Kaytex Trading, suggested this idea we were rapt – let's hope we see more of it!"

The 'Cloven Hills' wool was scoured at EP Robinson in Geelong, which the Dorahys, with their three children, were lucky enough to witness on a tour with Colins and David.

"We loved seeing our wool go through the scour. It's always great to understand each step in the wool supply chain, and the kids have plenty of samples for school presentations too!" Kate added.

David Kay from Kaytex Trading arranged and supervised the scouring and the next stage of production to prepare the wool for use in the mattresses at A.H. Beard.

Business growth to continue

Headquartered in Sydney with six manufacturing facilities nationwide, A.H. Beard this year experienced extraordinary sales, as working-from-home became the new normal and consumers invested in their health, home and bedrooms.

A.H. Beard expects these buoyant sales to continue. It says the launch of the Origins range will play a significant role in the company's growth over the next five years, domestically and internationally, including significant increases to its export channel, predominantly in South East Asia, which will see an additional 48 A.H. Beard stores open.

Each Origins mattress is hand-made in Australia by a team of highly skilled and experienced craftspeople and the company expects workforce growth to be in line with its forecasted revenue growth due to the launch of the Origins range. **B**

More information
www.ahbeard.com



Sheep producers **Kate** and **Chris Dorahy** and their family from 'Cloven Hills' in Victoria had the opportunity to watch their wool for the A.H. Beard mattresses scoured at EP Robinson in Geelong. They are pictured here with A.H. Beard's Group Marketing Manager, **Danielle Thompson**, and Education Specialist, **Matt James**.

WA sunsets inspire new Lana Vello collection

Lana Vello, the activewear brand launched last year from the Central Wheatbelt of Western Australia, has a new collection that offers the perfect pop of colour and comfort for summer.



Founder **Mikahla Wells** (left) and friends in the Merino wool crop top and bike shorts from the new Lana Vello range.



Lana Vello's original collection, still available to purchase.

Drawing its inspiration from regional Australia and Australian Merino wool, Lana Vello is an online based business selling activewear for the modern woman that is designed to be comfortable and beautiful enough to be worn all day.

The Lana Vello brand was launched last year by Mikahla Wells who grew up on her family's farm in Wyalkatchem, a small farming community in the Central Wheatbelt of WA. She now lives at York where her fiancé, Mitchell, farms alongside his father.

"Lana Vello was launched in June 2020 in the middle of the pandemic and has grown since. The brand aims to inspire women to lead healthy, active lifestyles to feel their best. The brand focusses heavily on the incredible features of Australian Merino Wool and aims to be authentic and inspiring," Mikahla said.

"I believe we stand out from our competitors because we really do live and breathe farming and Australian Merino wool. We run a sheep and cropping farm in Western Australia."

Lana Vello's new collection titled 'Sunset State of Mind', which was launched in October, is inspired by the dramatic Western Australian sunsets and features bright colours and summer styles. The collection includes bike shorts, muscle tanks and crop tops and complements the brand's initial range that includes leggings, a tank top and T-shirt. All the garments are made with Australian Merino wool blended with the cellulosic fibre Tencel™ (made from wood pulp), with only minimal synthetic fibres to create stretch and compression.

"Merino wool is a natural, biodegradable and renewable fibre having significantly less environmental impact

"Merino wool is a natural, biodegradable and renewable fibre having significantly less environmental impact than synthetics and Lana Vello garments are made using a fully fashioned knit technique meaning there is no material wastage in the production process."

Mikahla Wells

founder of Lana Vello

than synthetics and Lana Vello garments are made using a fully fashioned knit technique meaning there is no material wastage in the production process."

Mikahla says the brand's apparel meets the growing trend of consumers seeking garments that are suitable for both fitness and social settings.

"Comfort and versatility are everything. Lots of people don't have time to be changing outfits between morning workout and heading to town to run errands. This was always a focus of the brand, but since becoming a new mum I really have come to appreciate the value of versatility so much more!"

More information

www.lanavello.com.au



Benetton's never-ending wool

In a bright burst of colours, one of the best-known fashion brands in the world, The United Colors of Benetton, launched more than one million Woolmark-certified 100% Merino wool garments in its Autumn/Winter 2021 collection.

Comfortable, colourful, sustainable: The United Colors of Benetton's new Woolmark-certified knitwear collection was launched in October in more than 2,500 stores across the world and promoted with dedicated online and offline initiatives.

Benetton is one of the best-known fashion companies in the world, present in the most important global markets. This season, the Italian fashion brand has renewed its

1 million
Merino garments in the
Benetton collection

partnership with AWI's marketing arm The Woolmark Company to certify the quality of its vibrant new wool collection comprising more than one million 100% Merino garments.

The collection capitalises on the benefits of Merino wool – its softness, quality and its colour fastness which brings the bright colours that are an iconic aesthetic of the Benetton brand.

"Australian Merino wool is world-famous for its softness, resistance, versatility and performance."

United Colors of Benetton

In its promotional material for the collection, Benetton says wool is not just a raw material, but an emotional fibre that holds people together over time. Using the slogan 'Never-ending wool', the campaign focusses on the fibre's durability – highlighting the fact that garments made of wool have a long lifespan and can be readily passed down from generation to generation, as shown in the advertising.

The brand's commitment to sustainability is a philosophy that

has permeated the Benetton Group culture for decades. This continues today with environmental protection initiatives involving various activities, from the selection of raw materials to improving the efficiency of processes along the entire supply chain.

To support the launch of Benetton's campaign, The Woolmark Company is providing educational content about wool for Benetton's e-learning platform that is accessible by 6,000 sales staff.

More information

www.benetton.com/never-ending-wool-quality.html

www.woolmark.com/benetton



The Benetton campaign shows wool garments are often handed down from **generation to generation**, becoming family heirlooms.



A highlight of the collection is a 100% Merino crew neck jumper with inlaid colourful balls of yarn reminiscent of the iconic Woolmark logo, with letters on each skein that make up the words 'bene wool'.

Levi's® gets on the front foot with Merino

Levi's® has chosen Australian Merino wool for the inner lining of its Torsten Quilted Boot, shining a spotlight on the sustainable nature and performance of the fibre during the boot's launch in the Northern Hemisphere winter.

Choose nature, wear Merino wool. That's the tagline being used by popular global brand Levi's® for the launch of its iconic Torsten Quilted boot that has been remodelled to make it a more sustainable product.

Designed in collaboration with AWI subsidiary The Woolmark Company, the updated boot now has an Australian Merino wool felt lining, guaranteeing better performance and a lower environmental impact.

The Woolmark-certified inner lining is designed to maintain structure and shape whilst drawing upon the intrinsic qualities of Merino wool including breathability, moisture management and odour resistance.

"We are excited to be working in partnership with The Woolmark Company utilising one of nature's most functional materials - Merino wool. Both high performance and sustainable, providing the perfect combination to keep you weather ready this Winter season."

Lee Anderson

Levi's® Merch Footwear

"The inclusion of Merino wool in Levi's® boot not only highlights the versatility of the original performance fibre, but also shines a spotlight on the sustainable nature of the fibre, pursuing the company's mission to inform and promote wool as the original eco

and recyclable fibre," said AWI Acting CEO, John Roberts.

"Merino wool is increasingly present in the world of the younger generations, who care not only about urban performances but also about durable and environmentally friendly materials."

The casual boot with a green soul has a utilitarian design that's ideal for both the city and great outdoors, thanks to the robust structure that ensures performance, protection and comfort. In addition to the inner lining

of the boot now being made from Woolmark-certified wool felt, the upper is constructed from leather, an insert in eco-cordura quilted effect is created with recovered waste resources, while the new grippy sole is made of 20% recycled contents.

To support the launch of the Levi's® boot, The Woolmark Company delivered a bespoke retail training program to 65 staff from the Levi's® sales and marketing teams. The Woolmark Company also created a Wool Education Pack which included content that could be used by Levi's® online retailers on their websites to promote the wool benefits of the boot.

Since the invention in 1873 of its classic Levi's® jeans, Levi Strauss & Co. has grown to be one of the world's largest brand-name apparel companies. Today, the Levi's® brand portfolio continues to evolve with its

range of leading products sold in approximately 50,000 retail locations in more than 110 countries. Levi Strauss & Co.'s fiscal 2020 net revenues were US\$4.5 billion.

This use of Merino wool by Levi's® in its Torsten Quilted Boot is just one example of how the fibre is increasingly

being used by brands as a key ingredient in footwear. The success of wool in footwear lies not only in the fibre's natural properties, but also in its ability to be constructed in a way that aids performance – and AWI's technical team has been working with several international brands to create high-performance wool footwear products that provide a natural edge over synthetic rivals. **B**

More information

www.woolmark.com/levis

www.levi.com/IT/en/p/D53690003



Levi's® Torsten Quilted boot includes The Woolmark Company's Wool Rich Blend logo on the liner as a certification of quality.



CHOOSE NATURE, WEAR MERINO WOOL.



New Merino range from Cubus in Norway

Leading Norwegian brand Cubus has launched a new Merino Premium Collection in collaboration with The Woolmark Company.



Promotional image of Scandinavian celebrity **Penny Parnevik** wearing items from the Merino Premium Collection (above) and products from the collection in **Cubus stores** across Norway (top right).

With an ethos of using natural fibres in its high-quality clothing, Cubus in September introduced a new Woolmark-certified Merino Premium Collection into its range of essential garments for the everyday wardrobe – clothes that customers can return to again and again because they are so modern, versatile, durable and comfortable.

The range for all the family comprises 100% Merino wool tops, T-shirts, singlets, jumpers, underwear, tights, shorts, dresses (for kids) and wool blend babywear. The full collection is available to Scandinavian customers online at cubus.com and in Cubus stores across Norway, Sweden and Finland.

“We are truly proud of our Merino Premium Collection, made to become our customers’ every day long-lasting favourites,” said Marketing Manager at Cubus, Johan Jakobsson.

The Woolmark Company partnered with Cubus to market the collection with a focus on educating consumers about the benefits of Merino wool and providing a seamless path-to-purchase.



As well as marketing collateral in store (Cubus has more than 280 stores across Scandinavia), the home page of cubus.com has a promotional banner linking to a Merino Premium Collection hub page on which the natural, renewable and biodegradable attributes of wool are explained.

The page also features the performance benefits of Merino wool such as it being soft next to the skin, durable and having thermoregulating properties. The page also highlights that the range is machine washable and uses wool that is Responsible Wool Standard certified.

Importantly, the cubus.com website provides consumers with easy access to purchase items from the brand’s Merino Premium Collection.

More information
www.cubus.com

Moomin-marvellous Merino collection

Lillelam’s Merino clothes for babies and children are available now with an exclusive design of Moomintroll from the famous Moomin children’s books.

Norwegian brand and Woolmark licensee Lillelam was launched in 2004 and pioneered children’s apparel made from pure Merino wool, which at that time was an unknown natural material for most people in the Scandinavian country.

Today, Lillelam is a market leader in Norway for children’s premium clothing. The brand has recently launched a new collection based on the famous Moomin children’s books by Finnish illustrator Tove Jansson. The books and their characters are always close to nature, with values that have many synergies with Lillelam.

“Lillelam shares the values of love and kindness, caring for one another and respect for nature, highlighted in the Moomin stories. This is one of many reasons why it was easy for us to agree to a collaboration with Moomin,” said founder and owner of Lillelam, Pernille Siem.

“Lillelam is a brand that exclusively

uses Merino wool, which is a pure, natural raw material, which is completely biodegradable. Since the very beginning of Lillelam, I wanted to create a high-quality brand that is both as sustainable as possible and timeless, so the garment could last long and be passed on to new users.”

The brand’s first Moomin collection consists of exclusive versions of their best-selling products: the iconic baby suit and hat as well as wool tights. Just like all Lillelam products, the Moomin collection is made of high-quality Merino wool and is machine washable.

The image of Moomintroll on the garments is created using the intarsia knitting technique. “Though a much more demanding process, it gives a far more sophisticated and beautiful result than merely printing the design on the garment,” Pernille added.

The collection is available on Lillelam’s webstore, with worldwide shipping.

More information
www.lillelam.com/moomin-by-lillelam



The 100% Merino wool bodysuit and hat from Lillelam’s Moomin collection feature Moomintroll from the famous Moomin children’s books.

Merino basks in the sun

French menswear brand **Bask in the Sun**, which is located on and inspired by the Basque coast, has released a new collection of wool and wool blend jumpers and beanies certified by The Woolmark Company.

Based at Guéthary, a fishing village on the Basque coast close to the Spanish border, the Bask in the Sun brand is inspired by the ocean and the feeling of freedom that comes from the great outdoors. Since the brand's formation in 2013, its central ethos has been on producing stylishly modern clothing with a respectful approach towards the environment.

Living next to the Atlantic Ocean and seeing plastic waste on the beaches every day, the brand's commitment to sustainability is only too real. Therefore, the majority of its garments contain natural fibres and all are manufactured with non-toxic dyes.

To minimise the brand's carbon footprint, their garments are produced in an area of north of Portugal, where the spinning, dyeing, garment manufacture and despatch (in compostable packaging) all take place within a few kilometres of each other. And, in contrast to most brands, they donate any unsold garments to charity rather than burning and destroying them.

Working with The Woolmark Company, the brand's Autumn/Winter 2021 collection includes wool and wool blend jumpers, hoodies, cardigans and beanies, which for the first time are Woolmark certified. A highlight is the Balbaia jumper, made of 100% extra fine Australian Merino wool, which is available in two colours. There are three styles of beanie comprising 100% extra fine Merino wool. The range also includes four styles of wool blend jumpers, plus a hoodie, a cardigan and a beanie.

The knitwear from French brand **Bask in the Sun** is inspired by the Basque coast where the brand is headquartered.

The wool composition of each garment and the relevant Woolmark logo is displayed for customers to see on each product page in the brand's online shop at www.baskinthesun.fr.

The brand's Autumn/ Winter 2021 lookbook (a lookbook contains photos and details of a collection) also included pages that highlight the natural, biodegradable, renewable and odour resistance properties of wool, and explain that Australian Merino wool is the world's softest wool. The lookbook also highlights that the garments are Woolmark certified for content and quality. **B**

More information

www.baskinthesun.fr



Woolmark-certified 100% Australian Merino 'Balbaia' jumper from the Autumn/Winter 2021 collection of French brand **Bask in the Sun**.

Le magnifique Merino beanie

In collaboration with The Woolmark Company, French lifestyle brand Cabaïa has launched its first product made from Australian wool, a beanie with natural and timeless style.

Popular amongst young French consumers, Cabaïa is a fast-growing brand that is renowned for its iconic beanies, backpacks and socks. The brand is present in all of France through its strong retail, wholesale network and social media community.

Cabaïa is committed to including more natural fibres in its collections. In response, The Woolmark Company supported the brand via in-kind support in the development of a Woolmark-certified beanie collection, which is made from 100% extra fine Australian Merino wool.

The brand is promoting the collection, alongside the benefits of Australian Merino wool, on all its digital and social media channels as well as in-store retail touchpoints. The Woolmark logo is displayed on the beanie and accompanying swing tag and packaging.

The project not only aims to increase sales of Merino wool product, but it also aims to increase awareness of Merino wool as a sustainable option for a product range previously dominated by synthetic fibres. **B**



Cabaïa's 100% Australian Merino wool beanies on display in-store in France.

More information: www.cabaia.com

Wool4School reaches 10-year milestone with 150,000 students involved

First run by AWI a decade ago, Wool4School is an annual student competition that offers a complete fashion design experience in the classroom while introducing a new generation of students to the versatility of Australian wool.



Having recently completed its tenth year of competition, Wool4School is an annual competition that has involved about 150,000 students worldwide, not only learning the fundamentals of fashion design but also exploring the benefits and versatility of wool and the fabric it creates.

AWI Program

Manager - Education Extension,

Kelly McAvoy, says Wool4School invites students to think about the versatility of various wool fabrics as part of a creative design of their own.

"The aim of the Wool4School design competition is to teach school-aged students the benefits of Australian wool so that these future designers and consumers understand wool's benefits and are more likely to use Australian wool as their fibre of choice," Kelly said.

On the back of the success of Wool4School in Australia, AWI also runs the student design competition in the key markets of the United Kingdom (see opposite) and Italy.

Sara Regan (left) and a page from her design for a wool coat, trousers, bag and jumper, plus digital mock-up of the design (above). The garments are designed for commuting via public transport – and they can be transformed into different formats, eg the long coat can be shortened into a casual jacket by zipping off the bottom section.



2021 Australian competition winner Sara Regan

More than 7,500 students from across the nation registered for the 2021 Australia competition, in which entrants were asked to design a wool outfit ideal for commuting. The winner of the 'Aspiring' category was Sara Regan from Swinburne Senior Secondary College in Victoria, who explained how she came to enter the competition.

"Last year, as I was looking at pathways I could take to become a designer, I came across the Wool4School competition. Not knowing much about the wool fibre and Australia's role in the wool industry, I wanted to learn more about it whilst using my creative skills," Sara said.

"My favourite part of the competition would have to be creating/illustrating the final coat, trousers, jumper and bag as I got to show my creative side as an aspiring designer and create something that would be beneficial to my end-user/s. However, I also loved learning about wool and the universal properties and characteristics the fibre has to offer."

Amongst the prizes awarded to Sara for her Wool4School win is a life-changing scholarship at the Whitehouse Institute of Design.

"I'm most excited to meet like-minded aspiring designers who I can learn from and also hopefully broaden my creative mindset. Along with this, I think being able to study what I love full time will be amazing."

And what advice does Sara provide for students who are thinking of entering in 2022?

"Give it a go!" Sara said. "That's what I did, and as you work more and more on your entry you will fall more and more in love with what you create. No matter the outcome, creating a design is a huge achievement as it not only allows you to learn and grow as a designer, but it also lets you have fun along the way."

More information

www.wool4school.com

Enter the 2022 Wool4School competition

Registrations are now open for the Australian edition of the 2022 Wool4School competition.

This year, students are asked to choose their hero and design a wool outfit for them that embodies their interpretation of sustainability. Their hero could be anyone – maybe it's an athlete or artist, or perhaps a family member or teacher. Wool should make up at least 70% of the outfit's share, comprised of up to 4 pieces.

There are once again a host of amazing prizes on offer.

HOW TO GET INVOLVED

WOOLGROWERS AND PARENTS

Contact your local high school and encourage them to get involved in the Wool4School program. Information for schools and teachers is available at www.wool4school.com

YEAR 7-12 TEACHERS

Simply register your school and year groups at www.wool4school.com to receive free online resources for the classroom.

YEAR 7-12 STUDENTS

Learn more about the exciting competition at www.wool4school.com and talk to your teacher about getting involved.

KEY DATES

Competition closes: 22 July 2022
Announcement of winners:
18 August 2022



Digital mock-up of the winning design of Jan Reanne Quines.

2020/21 UK competition winner Jan Reanne Quines

Wool4School is also run in the UK and the 2020/21 winner of the senior category was Jan Reanne Quines from Tendring Technology College in Essex for her wonderful 'Astro Women's Travel Wear Collection'.

Similar to the Australian competition (see opposite), the students taking part in the Wool4School competition in the UK

were asked to design a wool outfit ideal for commuting. The winning design of Jan Reanne Quines comprised four products for students walking to and from college: a pair of jogging pants, a jacket, shoes with sensors and GPS, and a backpack with wireless GPS.

"I was inspired using wool materials including [the 100% Merino wool] Neulana Protect which is a wonderful material to use

for travelling products as there are many benefits such as being breathable and odour resistant," Jan Reanne said.

She says that she enjoyed the freedom of the design process during the competition and learning about Merino wool.

"My favourite part was that I was able to share my ideas and also that I was able to get to know that wool is a great material, not only because it's natural but because it has performance properties that other materials don't have," she said.

Her recommendation to students considering the competition is to "definitely enter, because your ideas can be bigger than you think".

"In addition, joining the Wool4school design competition can increase your knowledge and experience not just about wool and fashion, but also about caring for our environment," she added.

As part of her prize, Jan Reanne chose to join the Fashion Drawing Short Course at the prestigious London College of Fashion at the University of the Arts London (UAL), to build her skills before starting her fashion design BA. **E**

More information

View Jan Reanne's winning design and watch a video of her on the UAL course at www.wool4school.com/gb/

For all your wool,
livestock and
property needs

Proudly 100% Australian-Owned



Contact your local AWN specialist by scanning the QR code, or visit awn.net





A Merino bag to brag about

The Merino wool **Buddle Bag** that won at this year's **Bradford Textile Society Awards** (left) and other versions developed by **Izzy Coyle** (right).



London-based Izzy Coyle has won The Woolmark Company Award at this year's Bradford Textile Society Awards for her expertly designed and knitted Bundle Bag, made using Merino wool.

Through sponsorship of the prestigious Bradford Textile Society Awards in the UK, AWI has continued to promote Merino wool to tertiary textile students in this important country for both design and retail.

Textile designer Izzy Coyle, who specialises in knitted textiles, won The Woolmark Company Award in this year's competition. Izzy is a recent Textile Design graduate from Chelsea College of Arts, a constituent college of the University of the Arts London.

"I mainly started using Merino wool in my work during my final year at Chelsea; before that I spent a lot of time trying out and experimenting with various other yarns such as cotton, lambswool and mohair," Izzy said.

"I ended up predominantly using Merino wool in my work as it was so easy to work with, especially as a knitted textile student. Merino wool is a beautiful yarn to knit in; it's strong enough to not snap under the tension but also has a slight stretch to it."



Izzy Coyle at work on the design in the studio.

The Bundle Bag

The idea for Izzy's winning Bundle Bag design came from the striped tarpaulin sheets and rope used to pack away goods on the market stalls along Whitechapel High Street in London, which Izzy would see on her daily commute.

"For the Bradford Textile Society Award, I submitted a completely knitted bag I had made on industrial knitting machines. The whole bag is 'fully fashioned', meaning each panel is knit to the right shape and dimensions I need, and it is knit in a chunky 5x5 rib," Izzy said.

The bag is knitted with a blend of Merino wool and Lycra in a chunky rib that gives the bag a structured body which can be concertinaed in and out. To fasten the bag, it's folded in on itself and bound up with a knitted cord.

Izzy says the bundle bag has a luxurious feel and is also very durable yet stretchy so it will withstand the weight of everything that's inside it, and the more you fill it the more it will fan out.

"I wanted the bag to be sturdy and hold its sculptural shape, so I used multiple strands of Merino and plaited it with a single strand of Lycra to keep the knitted structure tight. I then washed the fabric and it created this strong, soft and quite dense fabric which could be stretched into different forms with ease. This fabric was appropriate for a heavy use item like my Bundle Bag as it's robust, durable and naturally water and stain resistant."

Since graduating from Chelsea College of Arts, Izzy has continued to develop her Bundle Bag (for instance, in larger sizes) and other knitted designs using Merino wool.

"I have started selling the Bundle Bag on a custom order basis and am seeking further opportunities to showcase and develop this as a business," she said.

"As well as the bags, I am also spending some time developing samples for Merino knitted tops. Much like the Bundle Bags, they are a chunky rib structure plaited with a fine strand of Lycra in a contrasting colour to replicate the same sturdy structure as the bags."

Award encourages use of Merino wool

Entrants into The Woolmark Company Award at the Bradford Textile Society Awards had to create a textile design for a wool-rich fabric, of any construction, which can be used for fashion, accessories or for interior products. The fabric had to contain a minimum 60% Merino wool and highlight the versatility and natural benefits of the luxury fibre.

The Woolmark Company sponsored the award to promote Merino wool amongst the next generation of designers. The awards offer an excellent opportunity for future textile designers to have their work recognised by the most important people within the industry.

As part of this year's prize, Izzy has the opportunity to complete one week's work experience in a high-profile design studio. **B**

More information

www.instagram.com/coyle.studio
izzycocyle@gmail.com

AWI WORKING TO SUPPORT THE FUTURE OF AUSTRALIAN WOOL-GROWING



Students at a training day for the School Merino Wether Challenge – see page 56.

Mitigation of greenhouse gas emissions

The high profile of the recent United Nations Climate Change Conference, also known as COP26, has once again highlighted the importance that all industries play their part in combatting climate change. The Australian wool industry continues to work collaboratively with other livestock industries to accurately assess and identify mitigation pathways for greenhouse gas emissions.

Wool is a natural, renewable and biodegradable fibre that is well placed to take advantage of the growing shift towards planet-friendly products. However, to optimise the eco-credentials of Australian wool and ensure that it is regarded as a sustainable fibre by all, AWI is devoting resources to remedy any environmental weak spots in the wool supply chain.

The on-farm production of greenhouse gases (GHGs), primarily methane belched by sheep, is an important area in which the Australian sheep and wool industry can reduce its environmental impact. The industry recognises this and is acting upon it. A focus of both the Australian wool industry's 10-year plan, *Wool 2030* (launched in December 2020), and the Australian sheep and wool industry's *Sheep Sustainability Framework* (launched in April 2021), is for the industry to reduce and mitigate its GHG emissions and for Australian wool production to strive for carbon neutrality.

GHG emissions from livestock are also something that critics of livestock agriculture often highlight, threatening the industry's social licence. This is despite the fact that the burning of coal, oil and gas (and not agriculture) is the dominant source of GHGs. Furthermore, the prevalent GHG from livestock is 'biogenic methane', which is part of the natural carbon cycle – it breaks down into CO₂ after about 12 years and is then taken up by plant photosynthesis. In contrast, fossil methane and CO₂ from the burning of coal, oil and gas is an extra burden on the atmosphere as it is derived from carbon securely held underground for millions of years (see diagram below).

AWI is collaborating with other rural Research & Development Corporations (RDCs) on several GHG-related projects. While this focus on carbon neutrality and reducing GHG emissions is primarily aimed at reducing the environmental footprint of the Australian wool industry, it also seeks to open up avenues for woolgrowers, who are

taking steps to reduce their farm's carbon footprint, to receive a premium by selling their 'carbon neutral' wool to brands or earning income from carbon mitigation as an 'ecosystem service'.

Mitigation strategies for lower emission wool

Significant research is under way to assess and identify the technical feasibility, the cost-benefits, and the risks and barriers to achieving lower emission wool.

The research aims to identify plausible GHG mitigation strategies for the wool industry, capitalising on previous industry research, and assess potential adoption rates, including an economic assessment of the cost to woolgrowers of implementing the mitigations options.

Potential GHG mitigation strategies could include options to:

1. **reduce emissions**, such as through the use of feed additives or low methane pasture species, and increasing flock productivity (producing more lambs and wool from each sheep); and
2. **offset emissions** by increasing on-farm carbon sequestration and storage, such as through improved management of soil organic matter and tree planting.

Pathways for woolgrowers to reduce emissions are currently being investigated by AWI with up to six different industry pathways being detailed. Planning is also under way by AWI for a research program assessing the safety and efficacy of methane-mitigating feed supplements in grazing scenarios.

Research into GHG measurements

AWI is also collaborating on a project that is investigating whether the impact of methane emissions from livestock on

global warming is being assessed accurately.

The current global standard metric for reporting GHG emissions and impacts (known as GWP100) uses a unit of measurement of 'carbon dioxide equivalents' over a timeframe 100 years. However, while carbon dioxide is a 'long-lived climate pollutant' and stays in the atmosphere indefinitely, methane is a 'short-lived climate pollutant' that has a far shorter atmospheric lifetime of about 12 years.

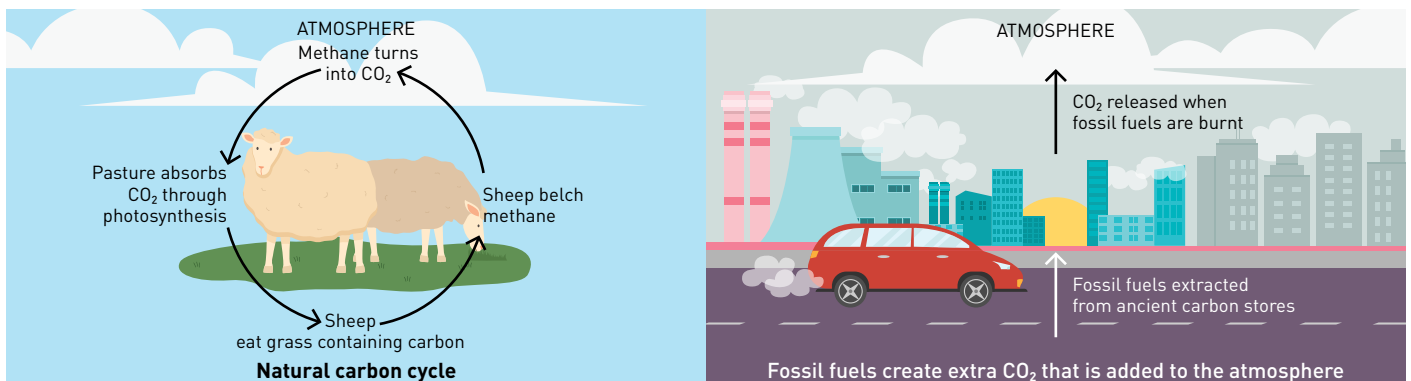
Therefore, GWP100 arguably does not accurately reflect the decomposition of methane and has limitations as a metric. This is particularly important for ruminant-based agricultural industries as their emissions of GHGs contain a *considerably* higher proportion of methane compared to other GHGs, such as carbon dioxide and nitrous oxide.

New methods of accounting for methane, such as the GWP* method, are being investigated. GWP* uses 'carbon dioxide warming equivalents' as a unit of measurement and specifically aims to rectify the problems identified in the GWP100 method.

AWI has funded a study to calculate the GHG emissions at the individual wool-growing property scale as well as the national scale over the past 40 years; the study provides a comparative assessment of the flock's emissions calculated using the experimental GWP* method and the current GWP100 method. In addition, the study models and assesses two hypothetical scenarios for the flock: a 25% decrease and a 25% increase in national flock numbers.

Analysis of the national flock emissions will identify the long-term, industry wide implications if the GWP* metric were applied. Researchers are currently drafting a peer reviewed paper, co-authored by leading GHG researchers from Oxford University.

B



Supplements that increase productivity while reducing emissions

ProAgni is an award-winning Australian biotechnology company that has developed ProTect, a vitamin and mineral premix for feedlots, which the company says is free of all antibiotics, can increase productivity, and has an ingredient certified to reduce enteric methane emissions from sheep and cattle.

Established by a trio of farmers in 2016, ProAgni is an Australian agri-biotech company, based in Albury in NSW, that is on a mission to not only improve the profitability of livestock producers, but also help the sheep and cattle industries tackle key global challenges like antimicrobial resistance, methane reduction and industry sustainability.

"We started ProAgni to reduce the environmental and social footprint of agriculture while improving farmers productivity and their bottom line – and we remain 100% committed to that goal," said co-founder and CEO, Lachlan Campbell, who is also a woolgrower from Wellington.

Lachlan says the company's ProTect product – which is formulated for feedlots, drought lots, supplementary feeding and weaning – concentrates on rumen health and fermentation to provide better feed conversion ratios and can have a direct effect on decreasing methane emissions.

The inspiration behind the product is the work of recently retired Associate Professor Athol Klieve, University of Queensland, who since the 1980s has studied the microbiome of kangaroos, sheep and cattle. After the Federal Government in 2014 decided to cut research funding into methane emissions from ruminants, the work of Professor Klieve was stranded, that is until ProAgni was formed and resurrected the research and development. Professor Klieve is now a technical advisor to ProAgni.

ProTect was commercially launched in 2018 in one reseller store in Dubbo but has now gone on to have national manufacturing and distribution with the product available in reseller stores in every state in Australia. Lachlan says it has been fed to an estimated 1.7 million animals across the country.

ProAgni's research has earned international recognition, including the

Woolgrower and ProAgni CEO Lachlan Campbell.



position of No. 6 in the 'Most Innovative Companies – Asia-Pacific' category in the Fast Company's annual list of The World's Most Innovative Companies 2021. The company has also won global accolades including a Gold for Agricultural Innovation at the prestigious Edison Awards, 'Yield Lab Winner' at SlingShot Asia, Winner – Agricultural Innovation NSW/ACT Regional Achievement and Community Awards, and Winner – Australian Small Business Champion Awards – Agricultural Services.

The company was also a top finalist in the recent Grow-NY global food and agriculture competition in the US, Future Food Asia, Thrive Australia Agrifood and RaboBank Foodbytes.

Lachlan says ProTect works by mitigating the risk of grain poisoning in sheep and cattle, while also being free of antibiotics.

"It maintains the stability of ruminal pH and removes the additional metabolic demands on the animal. That's why you get a shorter and safer transition and better performance," he said.

"It reduces feed intake while increasing weight gain, thus making the animal significantly more efficient in feed utilisation. We deliver proven 20%+ improvements in feed conversion and average daily gains which can translate into 30%+ improvements in profitability."

Lachlan says the product also has

proven methane-mitigating ingredients.

"One of the active constituents that reduce methane emissions is endorsed by the Carbon Trust, which is an international organisation originally set up by the UK government that verifies carbon footprint data to demonstrate standards have been met.

"However, in addition to that ingredient, we have done extensive modelling to show that due to the synergistic action of the other actives and the change in fermentation patterns of the rumen, ProTect reduces methane emissions even further."

ProAgni continues with its self-funded research, with the Queensland Department of Agriculture and Fisheries examining the efficiency of self-stable anaerobic probiotics, and also with Charles Sturt University on larger scale validation trials.

"ProAgni is the first company in the world to self-stabilise anaerobic bacteria and successfully feed it as a dry form feed additive to ruminants. This matters because 95% of the bacteria in the rumen are anaerobic and influence key aspects of rumen function. Probiotics containing anaerobic bacteria is the area where the opportunity exists to significantly reduce the production of methane from ruminants," Lachlan said. **E**

More information
www.proagni.com

Research into carbon neutral wool-growing

Colette Glazik from Ross in Tasmania has been awarded a 2022 Nuffield Scholarship supported by AWI and will research fairer ways to audit the greenhouse gas emissions from wool production in Australia.

A former public sector employee and qualified lawyer, Colette, her partner Joey McKibben and their two children moved to her parents' farm, 'Lewisham' at Ross, as part of their succession plan. They run a self-replacing Poll Merino flock of about 8,000 sheep and have a strong focus on sustainability.

When a long-time wool buyer asked the family to have their farm's carbon emissions assessed, they were happy to participate.

"We have a low input farm, use cell grazing principles, and have substantial areas of old growth trees excluded from livestock. However, the methodology used did not take this into account and there seemed to be other glitches, which resulted in our wool having a poor carbon credit rating," Colette said.

Colette will compare methodologies and data used to conduct carbon audits on wool producing sheep farms in Australia and internationally. She will also seek to

understand which on-farm practices are helping wool producers achieve carbon neutral (or low carbon emissions) status.

"I hope that my research will provide wool producers more clarity on their path to carbon neutral farming," Colette said.

"I would also like to identify areas of current carbon accounting methodology that require further research with the aim of finding solutions that can be adopted by policy-makers so carbon accounting is fit for purpose for woolgrowers."

With a Nuffield Scholarship supported by AWI, Colette plans to travel to New Zealand, Argentina, Portugal, Italy, the United Kingdom, Germany and South Africa, to research this topic to ensure the long-term competitiveness of the Australian wool industry.

By supporting the Nuffield Scholarship program each year, AWI is increasing farming knowledge and management skills in the Australian wool industry. **B**



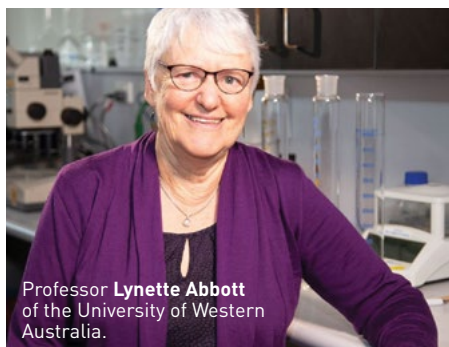
Nuffield Scholarship recipient **Colette Glazik** from Ross in Tasmania.

More information

Information on previous AWI Nuffield woolgrower scholars and their reports are available at www.wool.com/nuffield



Hear more from Colette Glazik in Episode 201 of AWI's *The Yarn* podcast, available at www.wool.com/podcast



Professor **Lynette Abbott** of the University of Western Australia.

Soil health award winner

Leading soil biology academic Lynette Abbott, who began her long career at the University of Western Australia in 1974 with the help of funding from the Australian Wool Corporation, has won the inaugural General Jeffery Soil Health Award.

Leading academic and science communicator in the field of soil science and soil biology, Emeritus Professor Lynette Abbott at the University of Western Australia (UWA), was named in August as the first recipient of the General Jeffery Soil Health Award, part of the National Landcare Awards program. The Award recognises an individual's work to champion, improve and/or educate others in soil health.

Professor Abbott is a pioneering researcher on soil fungi in agriculture and disturbed natural environments and

is acknowledged as a world leader in this field. Her research has addressed fungal interactions with plants and implications for fertilizer management and soil amendments.

She began her career at UWA in 1974 by undertaking a post-doctoral fellowship on mycorrhizal fungi in pastures, which was funded by the Australian Wool Corporation (AWC), the Australian wool industry's R&D body at the time which in due course became AWI. Professor Abbott and her colleague, Professor Alan Robson AO, continued to investigate the efficiency

of use of phosphorus fertiliser in annual pastures for many years with support of the AWC funding.

She has shared her extensive knowledge with students, and by establishing the innovative 'Know your Soil Biology' workshops for farmers, she provides hands-on activities demonstrating the benefits of soil biota for soil health. During her career, Professor Abbott has contributed to more than 130 scientific papers and to supervision of more than 30 postgraduate students. **B**

The **NEW** GOLD STANDARD SHEEP VACCINE

GlanEry® 7 in 1 B12 will protect your valuable asset and maximise on farm profits

Zoetis Australia is proud to announce that the new innovative sheep vaccine, **GlanEry® 7 in 1 B12**, is now available in stores near you. This product is a new formulation that combines the market leading proven protection of **Glanvac® 6 B12** and **Eryvac®** into one convenient vaccine.

GlanEry® 7 in 1 B12 will be the new gold standard of sheep vaccines as it will protect sheep and lambs against 7 endemic sheep diseases in Australia; **Erysipelas arthritis**, **Cheesy Gland (CLA)** and the **5 main clostridial diseases** (pulpy kidney, tetanus, malignant oedema, black disease and black leg), all in a **convenient 1mL dose**. According to the MLA, these diseases collectively **cost the Australia Sheep Industry approximately \$90M annually**².



Dr Kelly Graham, Associate Director of the Zoetis Livestock Veterinary Team is really excited about the addition of Erysipelas protection into the Zoetis Glanvac 6 in 1 range. Kelly indicated that, *'Erysipelas arthritis, caused by the bacteria Erysipelas rhusiopathiae, is the most common cause of lame lambs on farm and results in significant losses both on farm and at the abattoir. Losses on farm are due to culling, poor growth rates and reduced trading options if animals are unfit to load, and abattoir losses are associated with trim, reduced carcass weights and potential carcass condemnations.'*

There are 3 common bacteria associated with arthritis; Erysipelas, Chlamydia and pus-forming bacteria, all of which are commonly found on the sheep's skin, and in the soil and the environment. Although it is difficult to isolate the causative bacteria when investigating arthritis, recent survey work in southern Australia by Joan Lloyd³ (2016) found that 57.6% of culture positive samples included Erysipelas. In a Western Australia study, Paton et al⁴ (2003), showed that 100% of culture positive cases included Erysipelas. In a southern NSW survey, Ferguson and Munro⁵ (2014) showed that 86.3% of culture positive samples included Erysipelas. **This research confirms that Erysipelothrix rhusiopathiae is the most common cause of bacterial joint infections in Australian lambs.**

Arthritis causes significant loss of production as a result of poor weight gain and reduced wool production in lame lambs, and failure to thrive in lambs with chronic arthritis. An abattoir study¹ showed that lambs with arthritis had a **reduction in total carcass weight of (HSCW) 1.2 kg** compared to healthy lambs without arthritis. This does not include the losses due to **trim which have been estimated at approximately 3kg per carcass**⁶. In Western Australia, Paton et al⁴ (2003) also estimated that **1.4% of lambs born, died before weaning or are culled due to arthritis**.

When asked where these bacteria come from, Kelly said *'Erysipelas is found all over Australia and it can persist for a long time in the environment, including in water. It is carried on to a farm by many ways; from introduced sheep i.e. sheep that are chronically infected, by feral pigs, and a variety of other native animals, in fact over 30 species of wild birds and at least 50 species of wild mammals are known to harbour Erysipelas, as well as cattle, dogs, kangaroos and mice. All these animals and birds provide an extensive reservoir, as a source of environmental contamination. So, given this bacterium can survive in the environment and is carried by a range of animals, contamination on any farm can change from year to year, therefore if a farm doesn't experience infection one year it does not mean it won't experience problems in subsequent years.'*

The most recently published annual report (2018 – 2019) from the National Sheep Health Monitoring Project⁷, representing the abattoir findings of approximately 8.7 million sheep inspected across Australia, showed a high percentage of sheep lines had evidence of arthritis. **Erysipelas arthritis is a significant issue in Australia.**

GlanEry® 7 in 1 B12 has been developed in Australia and is manufactured in Melbourne, Victoria. **GlanEry® 7 in 1 B12** provides the convenience of 2 vaccines in 1 with premium disease protection, so will save time, labour and cost whilst making sheep vaccination simple and easy.

ERYSIPELAS ARTHRITIS

+

CHEESY GLAND (CLA)

+

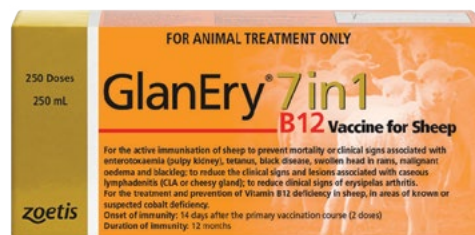
5 CLOSTRIDIAL DISEASES

&

BOOSTED WITH VITAMIN B12

ALL IN A 1ML DOSE

- ✓ Stops **Lame Lambs**
(Erysipelas arthritis)
- ✓ Protects your **Wool Cut**
- ✓ Protects **Meat Quality**
- ✓ More **Lambs to Sell**
- ✓ **Easy & Convenient**



REFERENCES: 1. Lloyd et al (2018) Trimming and production losses associated with bacterial arthritis in lambs presented to an abattoir in southern Australia, Animal Production Science, 2. MLA 2015 Priority list of endemic diseases for the red meat industries, Project B.AHE.0010. 3. MLA 2016 An investigation of the potential link between arthritis and tail length in sheep, Project B.AHE.0238. 4. Paton et al, Effect of mulesing and shearing on the prevalence of Erysipelothrix rhusiopathiae arthritis in lambs, Aust Vet J, Vol 81, No 11, November 2003. 5. Ferguson E, Munro J (2014) Incidence over a 3 month period of Erysipelothrix rhusiopathiae as a cause of polyarthritis in sheep carcasses in abattoirs in Southern NSW, The official Newsletter of the Australian Sheep Veterinarians. 6. Farquharson B (2007) Arthritis in Prime Lamb Sheep, A Review. MLA Project B.AHW.123. 7. NSHMP Annual Report 2018-19.

Lifetime Ewe Management

Setting your ewes up for success

Good conception and lamb marking rates are key to a successful sheep business. Find out how you can maximise lamb numbers by joining a Lifetime Ewe Management (LTEM) group in your area.

Being involved in an LTEM course gives you the skills and support to make feeding and managing your ewes easier. Working with groups of 5-7 farmers who meet six times in 12 months, your trainer, an experienced sheep consultant, will work with you to:

- Learn how to condition score
- Prepare ewes for joining
- Manage singles and twin-bearing ewes at different stages of their reproductive cycle
- Assess pasture and calculate supplementary feeding rates
- Set up lambing paddocks
- Form weaning strategies to maximise weaner survival
- Set targets for condition score, conception, lamb survival, ewe mortality, lamb growth rate and feed on offer.



More than 4,600 Australian producers have taken part in LTEM, representing 30% of the national flock. On average, producers increase stocking rate by 9.3%, marking percentage by 7%, weaning percentage by 8% and reduce ewe mortality by 25%.

A recent independent assessment of all the Australian sheep industry's sheep reproduction extension activities concluded that the LTEM program was the one that has had the most influence on sheep reproduction efficiency. The study estimated the benefit/cost ratio of the program was 8.5.

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



How do I join an LTEM course?

LTEM is delivered on farm and is ideally suited to a small group of 5-7 participants. There are no entry requirements for this course.

We encourage you to contact like-minded neighbours and farmers in your local area to form a group, and a trainer will come to you to deliver the LTEM course.

The cost of LTEM is \$2,400 plus GST per participant. AWI offers eligible woolgrowers a subsidy of \$1,000 bringing the course cost to \$1,400 plus GST per participant.

For more information
Contact your local LTEM trainer **opposite** or RIST's LTEM National Program Manager, Bec Malseed on 0407 730 943.

LTEM regional trainer forums

AWI and RIST in April/May undertook three, two-day LTEM regional trainer forums, bringing together the LTEM Trainers from across Australia. These forums are held at least once per year, and this year were held at Nurioopta in South Australia, Hamilton in Victoria and Wagga Wagga in NSW.

The first day of each forum was on-farm and saw trainers undertaking condition scoring and feed on offer assessments to ensure that their skills are up to date and consistent with best practice. AWI and RIST thank the woolgrowers who provided the use of their sheep for condition scoring and paddocks for pasture assessments.

On the second day of each forum, the trainers received industry and LTEM program updates. Fellow LTEM Trainers Dr Tim Gole, Dr Colin Trengove and Tim Leeming also presented on practical aspects of reproduction, health and lambing management on-farm.

LEFT: LTEM Trainers at the LTEM regional trainer forums ensuring their condition score calibration and pasture assessment skills are best practice.

NEW SOUTH WALES – LTEM TRAINERS

Laura Broughton Productive Livestock Systems	Cootamundra	0487 181 896
David Brown Brown's Resources Management Services	Wagga Wagga	0455 967 323
Hilary Bunny Aggregate Consulting	Wagga Wagga	0439 448 159
Hamish Dickson AgriPartner Consulting	Orange	0427 446 499
Tim Gole For Flock's Sake	Dubbo	0499 055 007
Luke Harrison AGnVET Services	Dubbo	0439 427 146
Rob Inglis Elders	Wagga Wagga	0455 967 323
Amanda Lockyer Nutrien Ag Solutions	Armidale	0429 787 355
Nicole Logg Care 4 Livestock	Barmedman	0407 257 871
Jim Meckiff JM Livestock	Wagga Wagga	0428 332 280
Craig Pearsall Elders	Goulburn	0428 253 103
Emily Pitt AGnVET Services	Dubbo	0475 824 661
Megan Rogers SheepSMART Solutions	Forbes	0427 459 891
Greg Sawyer Elders	Central Western NSW	0417 266 186
Anthony Shepherd Sheeppatters	Cootamundra	0409 158 858
Brett Smith Elders	Walgett	0428 492 525
Adam Turnbull Elders	Northern NSW, New England, Hunter, Mid North Coast	0439 876 058

QUEENSLAND – LTEM TRAINER

Geoff Duddy Sheep Solutions	Oman Ama	0427 007 490
------------------------------------	----------	--------------

WESTERN AUSTRALIA – LTEM TRAINERS

Mark Allington Icon Agriculture	Darkan	0428 927 034
Ken Hart Ewetopia	Narrogin	0458 812 160
Ashley Herbert Agrarian Management	Perth	0427 007 396
Georgia Reid AgPro Management	Narrakup	0447 523 110
Edward Riggall AgPro Management	Narrakup	0428 299 007

SOUTH AUSTRALIA – LTEM TRAINERS

Colin Trengove Pro Ag Consulting	Erindale	0418 808 045
Daniel Schuppan Nutrien Ag Solutions	Jamestown	0477 315 931
Deb Scammell Talking Livestock	Sevenhill	0407 790 622
Jonathan England Aginnovate	Kingston SE	0499 815 431
Elke Hocking Elke Hocking Consulting	Lucindale	0427 667 081
Emma Shattock Elders	Burra	0427 388 365
Steph Warwick Elders	Strathalbyn	0439 397 460
Tim Prance T Prance Rural Consulting	Victor Harbour	0427 812 655
Sean McGrath Millicent Veterinary Clinic	Millicent	08 8733 2782

TASMANIA – LTEM TRAINERS

Knox Heggaton Heggaton Agribusiness	Perth	0418 125 253
Bruce Jackson Vet Consultant	Moonah	0407 872 520

VICTORIA – LTEM TRAINERS

Stephen Cotton Dynamic Ag	Hamilton	0447 352 321
Alison Frischke Birchip Cropping Group	Bendigo	0429 922 787
Darren Gordon neXtgen	Dunkeld	0408 114 656
Kristy Howard Inspiring Excellence	Beechworth	0400 282 222
Andrew & Kirsty Kennedy Thrive Ag Services	Hamilton	0438 716 775
Tim Leeming Paradoo Consulting	Coojar	0427 797 242
Matthew Mahoney Agridome Consultancy	Mansfield	0419 300 840
Jess Revell Rumenate Livestock Services	Willaura	0419 319 516
Nathan Scott Achieve AG Solutions	Inverleigh	0409 493 346
Gary Simpson Dynamic Ag	Dunkeld	0428 772 449
Andrew Speirs Meridian Agriculture	Casterton	0428 685 172
Andrew Whale Livestock Logic	Hamilton	0428 292 361

Sheep Crutching



We specialise in mobile crutching systems, with one to three stand models available. No bending, no dragging, *less swearing!*

Sheep Handling



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

Combatting chemical resistance

There's more than one tool in the fight against flystrike

Understanding chemical resistance and the role that an integrated pest management approach plays in flystrike management is crucial to woolgrowers' ability to effectively prevent and treat flystrike as they enter the high-risk fly season.

Woolgrowers are becoming increasingly concerned with chemical resistance in their fight to protect their flock's welfare and combat flystrike. Recent research conducted by AWI and NSW DPI found increased resistance to dicyclanil and cryomazine in blowfly samples which coincides with reports from woolgrowers of reduced protection periods from chemicals.

What is chemical resistance?

Long term use and over reliance on just one chemical group for any type of pest control almost always results in resistance, if good resistance management plans aren't in place. Some of the chemical groups that woolgrowers used to rely on for blowfly control are no longer as effective because blowflies have become resistant to them.

Shorter protection periods provided by chemicals than those advertised on the label are often interpreted to be chemical resistance, but there are many factors that influence the protection period achieved on-farm. It's also important to remember that the advertised protection periods were developed during trials which may not necessarily reflect individual, on-farm conditions. Factors that influence the effectiveness of chemicals can be grouped as:

1. how susceptible your sheep are to flystrike (susceptible sheep);
2. what the seasonal conditions are (environment); and
3. how you use chemicals, both in the past and now (chemicals).

By looking closely at each of these factors, you can work out what the fly challenge is likely to be this season and what you can do to better manage the flystrike risk.

1. SUSCEPTIBLE SHEEP

Some sheep are more susceptible to flystrike than others.

Sheep with breech wrinkles, or long wool and wool cover in the breech area as well as those that are very daggy or have urine stain, yellow wool, lumpy wool, dermatitis or fleece rot (among other characteristics) are more likely to be struck.

Some sheep may also be at greater risk of flystrike if their conformation or structure leads to their wool staying wetter for longer. For example, sheep with high and wide shoulder blades or a dipping back are more susceptible to fleece rot and body flystrike.

It can also be more difficult to apply chemicals effectively to susceptible types

of sheep to prevent flystrike. Large and thick dags, for example, inhibit the effective application of preventative chemicals to the breech.

Unclassed lambs and weaners are also more susceptible to flystrike as they tend to have more wool colour, dermatitis and fleece rot than mature sheep.

The timing of crutching and shearing can influence the susceptibility of a mob to flystrike, as can lambing. Crutching and shearing provide approximately six weeks protection from flystrike, so scheduling either of these activities at the start or during the fly season should be considered to reduce the susceptibility of sheep to flystrike. Placental material attached to the breech of ewes can be attractive to flies and timing lambing and lamb marking to fall outside of the fly season is important in reducing the risk of flystrike and assist wound healing.

2. ENVIRONMENT

Wet, warm and calm weather conditions, particularly over several days or more, favour blowfly reproduction and maggot growth. Some rainfall patterns (heavy or persistent rain) can also wash out chemicals from the wool.

You can't do much about the weather, but you do need to consider weather forecasts when timing the application of preventative chemicals and rule out possible chemical wash out due to rainfall before attributing reduced protection periods to chemical resistance.

3. CHEMICALS

There are different chemical groups with different active chemicals that can be used for preventing or treating flystrike. Some chemical groups can be used for both, while others can be used on open wounds or to control lice and others can't. The application method for different chemical formulations varies and different chemical formulations can be applied to different wool lengths.

The protection period for each chemical formulation will vary as well. It's important to always read the label and think about the chemical groups and actives you have used and want to use rather than just the brand name.

The type and frequency of chemical use in the past are important considerations in your planned chemical use this season to avoid or

Is chemical resistance a problem on my farm?

Before deciding that chemical resistance is a problem on your farm, ask yourself:

- Were the struck sheep more susceptible to flystrike because of heavy dags, urine stain, yellow wool, fleece rot, dermatitis, lumpy wool or other characteristics?
- Did dags make penetration of the chemical difficult?
- Was the wool length consistent with label instructions for application?
- Were there persistent or heavy rainfall events following treatment, resulting in chemical wash out or increased fly pressure?
- Were the struck sheep actually treated?
- Did you check the label instructions carefully before applying the chemical, paying particular attention to application method, dosage, patterns of coverage, recommended applicator and whether the treatment should be applied off-shears or to longer wool?
- Was the applicator calibrated and working properly, with no blockages or leaks?

If you answer 'yes' to any of the first four questions or 'no' to any of the last three questions, something other than chemical resistance may be reducing the protection period or the effectiveness of the chemical treatment.

Chemicals can still be effective

Remember that if you think resistance is an issue on your property, this doesn't mean the chemicals have totally lost effectiveness. It most likely means that the period of protection may be less than that advertised on the label or what you previously expected. Protection periods may also vary between properties.

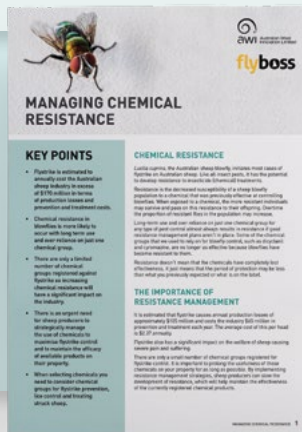
Even if you think your sheep are within the protection period of a chemical treatment, it is still important to continue to monitor your sheep for signs of flystrike and treat them accordingly if they do become struck.

It's also important not to wait until the very end of the protection period before you utilise other flystrike management tools, for example crutching and shearing, although attention must be paid to wool harvest intervals. Leaving yourself a buffer can relieve the pressure if unforeseen events delay other interventions, such as shearing or crutching.

EFFECTIVE CHEMICAL APPLICATION



Remember: Check withholding periods and intervals, keep records and attend chemical users' training.



What can I do to manage or prevent chemical resistance?

- Use a range of chemical and non-chemical tools – don't rely on one tool.
- Know chemical groups and rotate them where practical.
- Optimise the number and timing of chemical and non-chemical treatments.
- Follow the label directions and keep treatment records.
- Regularly monitor for flystrike and kill any maggots from struck sheep.

AWI has a factsheet **Managing chemical resistance**, which provides further guidance on each of the above points, available at www.wool.com/flystrikeresources.

manage chemical resistance. This means you need to:

- Consider the chemical group that was last applied (either earlier this season or at the end of the previous fly season) and where practical, avoid using a chemical from the same group next.
- Consider the chemical group that was last used to control lice and avoid using a chemical from the same group for the next preventative flystrike application in the same season.
- Consider the chemical groups that were last applied to prevent flystrike and avoid using these as a dressing to treat struck sheep this season.

Reduced protection periods may also be due to poor application techniques. Make sure you check the label carefully to ensure you are using the right chemical for the job, the correct dose and the correct application equipment and pattern. Paying attention to these details can help maximise the effectiveness of chemicals used to prevent and treat flystrike.

If you think the blowfly population on your farm may be resistant to chemicals, you should arrange a resistance test by contacting Narelle Sales, Elizabeth Macarthur Agricultural Institute on email.insectresistance@dpi.nsw.gov.au or (02) 4640 6446.

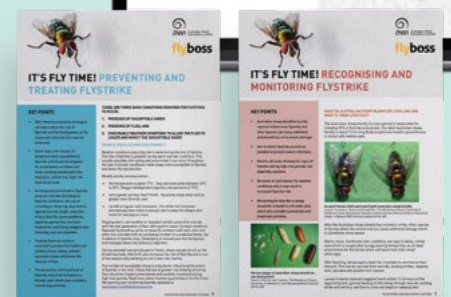
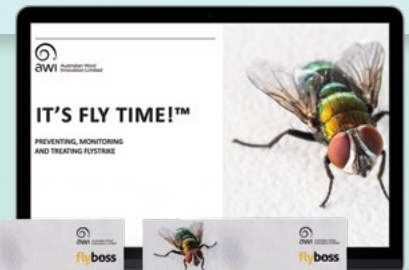
Other tools in the toolbox

Using a range of strategies and tools, rather than relying on one tool alone, will help you monitor, prevent and treat flystrike, as well as reduce the risk and manage the impact of chemical resistance on your property.

This means using a range of chemical and non-chemical options. Non-chemical options you can utilise include:

- Monitoring sheep for flystrike, environmental conditions and fly populations.
- Crutching and shearing.
- Managing scouring, dags and stain.
- Selecting paddocks that work against conditions favoured by flies.
- Reducing fly populations by killing maggots when treating struck sheep.
- Classing, selection and breeding activities that consider the susceptibility of sheep to flystrike.
- Breech modification and lamb marking following best practice.

A five-page AWI factsheet **It's Fly Time! Preventing and treating flystrike**, a three-page AWI factsheet **It's Fly Time! Recognising and monitoring flystrike** and a range of videos that address these tools are available at www.wool.com/flystrikeresources.



AWI is also piloting a workshop that looks at how you can combine these tools in a flystrike management plan and annual calendar of activities – see page 37. Workshops are scheduled to be available to woolgrowers from early 2022.

More information

- To help you manage flystrike on your property, AWI has a range of resources available that you can access online at www.wool.com/flystrikeresources
- You can also access further information from FlyBoss at www.flyboss.com.au

See overleaf for two related case studies →

Case study 1 – Non-mulesed sheep

PETER AND ANGELA SCHUSTER

Location: Central West NSW
 Property size: 5,500 ha
 Climate: Temperate
 Rainfall: 600 mm annual average
 Merino sheep: Self-replacing fine non-mulesed Merino flock
 Flock size: 10,000 sheep, joining 4,500 ewes to Merino rams
 Merino wool: Average 18-micron bright stylish wool

Rebalancing flystrike prevention tools in a non-mulesed enterprise

Peter and Angela Schuster operate a mixed farming and grazing operation across 5,500 ha south of Dubbo in Central West NSW, incorporating cropping, sheep and cattle enterprises in a 600 mm rainfall environment.

The Schusters' enterprise comprises 10,000 Merino sheep with about 4,500 Merino ewes to be joined in 2022. They have had to reconfigure their flystrike management approach since moving to non-mulesed in 2016.

Mulesing is one tool in the toolbox when it comes to controlling flystrike and chemicals are another. Taking one tool out of the toolbox doesn't mean solely relying on another but rather, for the Schusters, it increases the importance of rebalancing the remaining tools in an integrated approach to flystrike management.

Proactive approach to flystrike

An annual plan to ensure they can implement a range of preventative activities in a timely manner is critical to the Schuster's flystrike management approach.

This plan includes:

- annual shearing (double shearing for rams)
- annual crutching (double crutching for ewes but not lambs or wethers)
- careful attention to correct tail length when marking lambs
- the use of preventative chemicals at defined times of the year and depending on fly pressure
- rotation of the chemical groups used, including those used for lice control
- a tight five week lambing and marking in a low fly risk month; and
- culling struck animals.

"There is no silver bullet when it comes to flystrike management and chemicals definitely aren't the only tool. Shearing, crutching, paddock selection and worm management as well as selecting sheep that are more resistant to flystrike are just as important," Peter said.

Shearing and crutching are important preventative activities for the Schusters. "We're careful not to cut things too fine so that we still have a number of weeks of cover from a preventative chemical application up our sleeve leading into crutching or shearing

at high-risk times of the year so that if the contractor is held up, our sheep are still protected," Peter said.

"**Tail length** is absolutely critical in a non-mulesed operation," said Peter who went on to say, "Tails that are too short prevent the sheep from directing faeces and urine away from the breech leading to dags and urine stain which attract flies. A small portion of one age group of our sheep have tails that were docked too short at lamb marking. While not a problem for the wethers, this group of short tail ewes accounts for 90% of flystrike in the operation. The link is undeniable."

Chemicals are just one part of the solution. Preventative chemicals are applied as required from August/September.

"We don't push the envelope by running chemicals through to the expiry of the label protection period while high risk flystrike conditions prevail."

Regarding the **management of other parasites**, dags are not generally a problem in the area and dietary changes are managed carefully to minimise the risk.

The Schusters' operational calendar for their sheep enterprise

CLASS	JAN	FEB	MAR	APR	MAY
EWES	Crutch WEC	Join (5 weeks) Dicyclanil (breech) WEC	WEC	Scan WEC	Shear Lousicide (off- shears) Vaccinate WEC
WETHERS	Crutch WEC				Shear Lousicide (off- shears) Vaccinate
LAMBS	Crutch WEC				Shear Lousicide (off- shears) Vaccinate
RAMS	Vet check Drench Dicyclanil (body and breech)	Join			Shear Lousicide (off- shears) Vaccinate
OTHER	Irrigation	Irrigation	Irrigation Planting	Planting	Planting

WEC = Worm egg count testing, drench if required.



Peter Schuster
with daughters
Eliza and Jessica.

Lousicides that are also registered for fly control have been incorporated into their flystrike management plan to manage chemical group rotation with notable success.

"We consider the chemical group we may have used for lice control when planning which preventative chemical group we will apply early in the fly season," Peter said.

Breeding and selection to reduce the number of susceptible sheep is important. The Schusters look to introduce rams and retain ewes that have the following traits:

- white, bright wool with good staple length
- moderate skin development (body wrinkle); and
- broad backs with minimal breech wrinkle.

"Using an independent classer is very important as they can be more objective in their assessment of some traits," Peter said.

"Moving to non-mulesed has changed the way we look at our sheep and requires attention to particular traits that improve their ability to resist flystrike."

Monitoring is undertaken to ensure any fly struck sheep are identified and treated as quickly as possible. If a number of sheep in a mob become struck, the Schuster's work to identify the underlying cause of the flystrike.

The future

"We're constantly learning and refining our plan based on our experiences. We don't assume we have it right or apply a set and forget policy as that is sure to deliver a poor result. We're constantly reviewing what happened each season, and our plan, and looking at what we can do better next time," Peter said.

Market opportunities are starting to open up for the Schusters with increased demand for non-mulesed wool and accreditation opportunities. While this is not the motivating factor, the Schusters welcome the opportunity to present their wool to the market and take advantages of premiums

which may follow from being accredited as non-mulesed.

"In response to enquiry via our broker and their encouragement, our wool is currently marketed through the Authenticity integrity scheme and declared as non-mulesed via the National Wool Declaration (NWD). We will continue to monitor marketing opportunities as the non-mulesed sector expands and present our wool accordingly," Peter added.

KEY POINTS

- Be proactive rather than reactive.
- Get the tail length right.
- Use an independent classer.
- Use the full range of flystrike management tools.
- Don't set and forget.
- Select for traits that improve the sheep's ability to resist flystrike.

More information

View the full **case study** at www.wool.com/schuster.

	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Move to lambing paddocks	Lamb	Dicyclanil (breech) Class maiden ewes	Class (wet/dry)	Crutch Drench	Non-Dicyclanil (breech) Wean Condition score	
			WEC Dicyclanil (breech)		Drench		
		Lamb	Mark Dicylanil (breech)		Vaccinate (booster) Dicyclanil (back)	Wean Drench	
		Dicyclanil (body and breech)			Purchase rams		Shear
	Planting					Irrigation Harvest	Irrigation Harvest

Case study 2 – Mulesed sheep

GRAHAM, HELEN, COL AND KAZ QUADE

Location:	Central West, NSW
Property size:	3000 hectares
Climate:	Temperate with hot summers and no dry season
Rainfall:	475 mm (annual mean)
Merino sheep:	Dual purpose, plain bodied, mulesed Merino ewe flock. Replacement ewes are sourced from one breeder and are joined to terminal rams
Merino wool:	Average 18 micron

Rethinking flystrike management

When Graham and Helen Quade joined Graham's parents, Col and Kaz, to farm together near Trundle, NSW, in 2010 it was as good a time as any to rethink how they would manage their flystrike risk.

"Harvest coincides with our key risk time for flystrike in spring and early summer, so we figured we should tweak things to make sure our sheep would be well protected if we got too busy," Graham said.

The Merino ewe flock of 2,000 head is crossed with terminal Border Leicester rams and the Quades purchase approximately 250-400 replacement, dual purpose Merino hogget ewes of a preferred bloodline each year, all of which have been mulesed.

"We look for replacement ewes with attributes that would reduce their risk of strike, like how they've been mulesed, their tail length, plain bodies and no conformation issues," Graham said.

"We really noticed that the ewes with tails that are too short, even if they are mulesed, are more likely to get struck because they generally have more stain which attracts flies," says Graham.

The Quades did their research to find a bloodline of productive plain bodied ewes with low wrinkle and bare breech, and with good fertility and conformation.

Proactive approach to flystrike

As the high-risk time for flystrike falls during harvesting, they choose to focus on actions they can take before this busy time of year.

"We really don't want to wait until we see flies to do something about them, so we try to time crutching, shearing and chemical applications to provide adequate protection while the other enterprises take up most of our attention," Graham said.

Ewes are crutched in early September which provides breech protection for about six weeks at the start of the fly season.

At crutching, the Quades check for lice and if they are observed, they apply ivermectin. This also provides about 12 weeks' protection against blowflies under low to moderate fly pressure. If there are no lice on sheep, the Quades apply dicyclanil to the backline and breech for a long period of protection over the harvest period.

By the time shearing comes around in mid-December, the wool harvest interval for dicyclanil has passed. The Quades will then apply imidacloprid for lice if needed. This has an added benefit of providing a further ten weeks protection from flystrike during summer.

Ewes are scanned in early January, and this is an opportunity for a final application of dicyclanil to the breech if it was not used at crutching in September, otherwise they use spinosad or ivermectin depending on seasonal conditions and fly pressure.

Lambs are marked in mid to late March. The Quades don't mules the lambs and use elastrator rings for tail docking and castration. They apply spinosad to protect lambs from any maggots that may infect the tail wound.

CONSIDERING CHEMICALS FOR OTHER PARASITES

The Quades check the Animal Health Statement that comes with the replacement ewes to understand what chemicals have been used to control both lice and flies.

"If they haven't had any flystrike protection applied, the new ewes will be given a hit of dicyclanil when we are scanning the old ewes and

applying it to their breech," Graham said.

MONITORING AND TREATMENT

The Quades increase monitoring of their flock mainly based on weather conditions. "Very warm, moist or humid weather, especially if there is little wind, really brings in the

flies. During these conditions, we step-up monitoring as much as possible," Graham said.

Struck sheep are removed from the mob and treated in the shearing shed by shearing around the strike and dressing the area with an application of diazinon.

"We've got into a pretty good habit of bagging all wool and maggots from struck sheep and cooking them in the sun to make sure these can't hatch into the next lot of flies," Graham said.

"We also keep a mobile hand piece run with a 12-volt battery in the vehicle to shear off wool and maggots if we spot a struck sheep in the paddock."

CONCERNS ABOUT CHEMICAL RESISTANCE

"We are trying to use appropriate practices as best we can and know that we will eventually have to rethink what chemicals we use for lice and blowfly prevention, and when we use them, because we may see a shortening in the protection period provided," Graham said.

"Before this happens, we will need to lay out all our options and work out the best combination of activities to provide protection from flystrike for our sheep, just like we did in 2010." B

KEY POINTS

- Don't wait for the first sign of flies or strike to do something.
- Time prevention activities to provide protection during high-risk periods or when you know you will be busy, such as harvest.
- When choosing chemicals, consider what is used for lice control and wool harvest intervals.
- Be prepared to revise your flystrike management plan on a regular basis.

More information

View the **full case study**, including the Quades' month-by-month operational calendar for their sheep enterprise, at www.wool.com/quade.



Graham Quade.



AWI investing more on fighting flystrike

AWI announced in October that it will spend an extra \$950,000 to accelerate research into flystrike genomics and new extension workshops on breeding for natural flystrike resistance.

This takes AWI's investment in research, development and extension projects related to breeding for flystrike resistance since 2005 to \$9.9 million. In August, AWI also announced an additional \$650,000 to fast-track further investigations into the development of a flystrike vaccine.

"The breeding of more profitable naturally resistant sheep to flystrike is a core research project for AWI and we are putting more money into it," said AWI Chairman Jock Laurie.

"As the industry's Wool2030 strategy highlighted, growers want to have confidence and tools to manage flystrike without mulesing.

"Evidence of increasing blowfly resistance to chemicals and the shortage in shearers are extra reasons why AWI will speed up this work."

AWI flystrike-related workshops

The new **Breeding for Flystrike Resistance workshop** is expected to have a similar format to existing successful AWI workshops 'Ramping up Repro' and 'Winning with Weaners', with a practical approach.

The workshop resources will draw on existing information, including from AWI's

Breeding for Breech Flystrike Resistance flocks, the Merino Lifetime Productivity (MLP) project and MERINOSELECT.

The new workshop builds on another AWI workshop that is currently being piloted. **SimpliFly**, a one-day workshop for woolgrowers looking to implement strategic flystrike control on their property, introduces the concept of breeding for flystrike resistance as part of a holistic whole of farm plan.

SimpliFly participants will explore the many short- and long-term flystrike management tools and strategies, including breeding, that are available to them to help combat flystrike. They will also work through practical activities that enable them to combine these strategies and tools on their own property according to a customised annual flystrike management plan that best suits their specific circumstances.

The six planned pilot SimpliFly workshops were delayed by COVID-19, but the first two have now been held in NSW, and further pilots are to be held early next year in Tasmania, Victoria and WA. Learnings from the SimpliFly pilots will in turn inform the development of the Breeding for Flystrike Resistance workshops, which are expected to be piloted from mid-2022.

The workshops will draw on the information and interactive decision tools that are available on ParaBoss.com.au.

Flystrike genomics R&D

While the immediate focus to reduce the risk of flystrike is on lower wrinkle, dags, urine stain and cover, further genomic R&D provides the opportunity for these traits to be genomically enhanced, to create a stand-alone Breech Strike ASBV and provide genomic tools to assist woolgrowers that are not part of the ASBV system. The search for variations in the DNA associated with flystrike risk (or alternatively susceptibility) has long been a vision for the wool industry. All existing flystrike phenotypes and genotypes need to be pooled and analysed and further data needs to be collected to achieve these outcomes.

AWI is building on its earlier sheep genomic flystrike resistance work by increasing the human resources dedicated to wool issues. The additional investment will now create two post-doctoral positions targeted at flystrike, working on the MLP project and a range of further refinements to Merino genetic benchmarking technology. B

ERADICATE FOOTROT

NOW - WITH THE

'FOOTROT SOLUTION'

1300 856 563

RADICATE

www.radicate.com.au

YES, IT WORKS!



Breeding productive, naturally flystrike resistant Merinos – Rules of thumb

AWI is often asked: “I know you have done R&D into breeding for breech strike resistance, and I get that it can get a bit complicated, but can you just give me some quick dot points?”
Yes, yes and yes. Here are some rules of thumb, but because flystrike is complicated, each might need massaging for some sheep types, in some environments.

General

- Cull struck animals.
- Have a breeding objective, set production targets, and monitor progress. This can be via raw wool and reproduction measures, target visual scores or average ASBVs.
- Get your breeding objective right for the future, stick to it, don't chase fads.
- Don't overly complicate your breeding objective, keep it as simple as possible.
- It is important to balance the key traits that are in a performance index with those not in an index.
- The larger the number of traits in your breeding objective, the larger the number of non-visual traits and the larger the number of antagonistic traits (traits that work against each other) the more likely quality ASBVs and indexes will assist progress.
- Choose a ram source that has a similar breeding objective, similar environment and condition score targets. Choose a sheep classer and agents to match.
- If you run high, medium or low stocking rates, buy rams from breeders who have a similar outlook.
- Have as few management groups as possible and large numbers in management groups; it leads to better results for both visual and objective assessments. If not, good linkage between management groups is critical for ASBVs.
- A five-week, or less, joining is an important management and genetic evaluation tool.
- Transparency rules; tell the supply chain your story, put your business up on WoolQ and let ram buyers and wool buyers know your story.

Breech strike

- To reduce the risk of breech strike to moderate levels, every sheep needs to be 2 score or less for breech wrinkle, 2 score or less for dags and urine stain and 3 score or less for breech cover, during the months when there is a risk of strike.
- The lower the scores the lower the risk.

- Wrinkle is the most important trait to reduce first. Dags are a higher risk factor but they are much more difficult to manage on high breech wrinkle sheep and more difficult to make progress on. A well timed crutch or bunghole may mean you can take some pressure off inherited 'dags'.
- Wrinkle and fleece weight are traits that can be visually assessed. Good progress can be made without ASBVs and monitored over time.
- If you are in a low dag environment, selecting to reduce dags reduces selection pressure on more important traits as it is difficult to find the top sires and ewes for low dags; you are better off putting more pressure on other traits.
- Similar to dag, if you are in a low worm environment, selecting to reduce worms reduces selection pressure on more important traits as it is difficult to find the top sires and ewes for low worms; you are better off putting more pressure on other traits.
- High fertile sheep can make up for lower fleece weights and still have high index performance, but low wrinkle does not automatically result in high reproduction.
- Particularly for early maturing, low wrinkle Merino types, be careful of 'inflated' Post Weaner or Yearling fleece weights. Request your ram breeder to display hogget or adult age fleece weight, as adult performance can be relatively much lower. This older data is obtained from their retained sires, ewes and progeny testing. Keep checking the ASBVs of your previously purchased rams; they are updated every two weeks as more data is obtained on their relatives.
- Target ASBVs for wrinkle, fleece weight and index depends on your target fibre diameter and preferred Merino type. R&D shows that in all types, progress can be made to both reduce wrinkle and strike and increase fleece weight and indexes, but it is easier to meet aggressive targets with SA – WA Merino types and progressively more difficult at lower microns.
- While many NM growers don't want 'high adult fleece weight for micron' types, they still don't have to be low fleece weight animals.
- The target ASBV for breech wrinkle, in high wrinkle country is minus 0.9, moderate wrinkle country minus 0.6 and low wrinkle country minus 0.3, to produce all progeny 2 or less for wrinkle score.
- The target ASBV for dag in high and moderate dag country is minus 0.4. In low dag country, avoid high dag animals >0.2.
- But every 0.1 reduction in wrinkle and dags reduces reliance on mulesing, chemicals and crutching, and over time significant progress can be made towards highly profitable naturally flystrike resistant animals.
- Breeding for profitable natural breech strike resistance without increased reliance on chemicals so that mulesing can cease, can take a few years for some sheep types in some climates, but several decades for other sheep types in high-risk regions.

Poll strike

- Select for polled animals.
- If you prefer horned animals, select for a wide distance between the horn sites on the poll and good clearance from the eyes and jaw.

Body strike

- Select for low wool colour and low fleece rot (AMSEA site reports list these traits).
- Minimise the risks of dermatitis (or lumpy wool) by good dip and shearing board hygiene.
- Minimise handling animals when they are wet on the skin.
- A lower fibre diameter and fibre diameter variation helps reduce the risk of body strike.

B

More information

Contact AWI Program Manager Genetics and Animal Welfare Advocacy, Geoff Lindon, at Geoff.Lindon@wool.com

Breeding for natural flystrike resistant Merinos - publications

www.wool.com/flystrikelatest/#breeding

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.

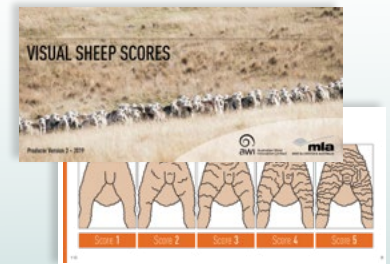


BREEDING AND SELECTION – INDUSTRY TRENDS

RATE OF GENETIC GAIN IN REDUCING BREECH FLYSTRIKE

(May 2020)

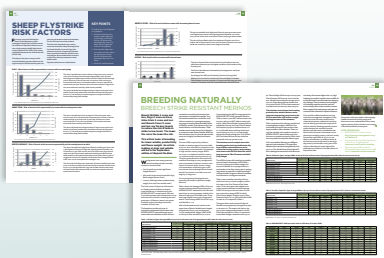
RD&E Technical Updates, by AWI's Geoff Lindon and the University of Adelaide's Forbes Brien.



VISUAL SHEEP SCORES – PRODUCER VERSION

(Updated 2019)

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



SHEEP FLYSTRIKE RISK FACTORS

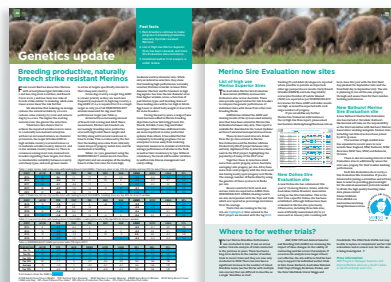
(March 2020)

BREEDING NATURALLY BREECH RESISTANT MERINOS

PART 1 – June 2020
PART 2 – September 2020

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

Plus an update in the June 2021 edition.



GENETICS UPDATE

(June 2021)

Breeding productive, naturally breech strike resistance Merinos.

A summary article from *Beyond the Bale*.



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

(June 2019)

LOW WRINKLE-HIGH FLEECE WEIGHT PRODUCTIVE SIRES EASIER TO FIND

(June 2019)

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



The new ParaBoss Certificate in Sheep Parasite Management was developed and is delivered by the University of New England.

UNE
University of
New England

ParaBoss sheep parasitology course

An Australian sheep advisor world-first

The ParaBoss Certificate in Sheep Parasite Management will raise the quality of advice given to sheep producers by rural merchandise staff, veterinarians, consultants and extension staff, resulting in improved sheep health, profit, sustainability and chemical compliance.

Parasites, collectively, are the biggest animal health cost for the Australian sheep and wool industries. The ParaBoss resource: WormBoss, FlyBoss, LiceBoss (and TickBoss for cattle), is already the envy of other sheep and cattle producing countries, and the new ParaBoss Certificate in Sheep Parasite Management, developed and delivered by the University of New England, has raised the bar yet again.

Development of this comprehensive course, the only one of its kind, was funded jointly by AWI and MLA over the past three years of the ParaBoss project. Its aim is to improve parasite management practices

on-farm by providing the right advice to sheep producers through the advisors they are using every day.

Rural merchandise staff, in particular, are highly influential, and although they may not consider themselves advisors, it's a role they are thrust into. Located in every town, face-to-face with their clients, selling a range of parasite prevention and treatment products, every day they are asked for opinions on parasite control and treatment.

This new and contemporary online course teaches and assesses at the same time. The three units encompass the core information from WormBoss, FlyBoss and LiceBoss, which is essential to build the skills and knowledge of advisors who can then provide expert advice about effective integrated parasite management of sheep.

But sheep producers have a direct and critical role to play if they are to benefit from this initiative funded by their wool and sheep levies. Graduates of this course will be first-rate parasite management advisors, so recognition from producers will be a prime driver for more advisors to do the course and motivate rural merchandise companies and other advisory service providers to

have ParaBoss-certified staff in stores across Australia's sheep production areas. Therefore, producers should request, seek out, and value the course graduates, and recommend them to other producers.

While the course has just opened, ten advisors have already graduated and are ParaBoss-certified. You can find graduates listed on the ParaBoss website, or ask your store when their staff will be ParaBoss-certified.

The industry-endorsed 'ParaBoss Certificate in Sheep Parasite Management' is issued by the University of New England and ParaBoss, and is an indispensable qualification for first-rate sheep health advisors. It's also a great qualification when applying for a job or promotion involving sheep health, and veterinarians gain significant continuing education points from this study.

Does your advisor provide the right advice? Demand ParaBoss-certified. **B**

More information

Look for the course information page or ParaBoss-certified advisors under the 'Training' tab on the ParaBoss website www.paraboss.com.au

Graduate feedback



The valuable knowledge was well complemented through the use of on-farm examples and the use of web tools. I would highly recommend this to re-sellers or any person looking to better their understanding of parasite management.

Georgia Adams, Rural Products Sales, Elders Williams, WA

The questions and information were thorough, and inspired thought to answer the questions correctly.

Victoria Buck, veterinarian

Learning from the best is always the way to go. Get the lead on your competitors and enrol today.

Noel O'Dempsey, Sheep veterinary consultant, Texas, Qld

Great initiative. The tools are unique and extremely useful, with up to date theory to explain the whole picture. Completing the course is valuable time spent and will benefit many decision makers in the industry.

Luke Wiggan, Professional Sales Representative, Zoetis, NSW



A fantastic course for new employees.

Leah Haworth, rural merchandise, Victoria

paraboss

Best practice advice for managing sheep parasites

With flies, worms and lice impacting sheep across the country, the popular ParaBoss parasite management website and extension program is receiving a significant makeover to ensure it remains Australia's leading parasite resource for sheep producers across Australia.


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

The website upgrade and delivery of extension services to livestock producers will be led by Animal Health Australia which has received more than \$1 million worth of funding from AWI and Meat & Livestock Australia to deliver the project over the next three years.

The project will include designing a new producer-friendly website interface, making information easily accessible with improved regional information available at your fingertips, along with a revamped extension program which will involve face to face workshops and a series of webinars tailored for producers.

The University of New England, which played a major role in establishing ParaBoss, will continue their important contribution to the program, ensuring delivery of enhanced extension services to livestock advisors and service providers.

AWI General Manager Research, Dr Jane Littlejohn says ParaBoss is a leading source of information on tailored parasite management for sheep producers, particularly flystrike.

"ParaBoss was originally developed through the Sheep CRC funded by both AWI and MLA. This new funding will continue to make consistent and accurate information available to all producers, to improve the health and welfare of their livestock," Jane said. 

Tap into best practice parasite management



Web

The collective ParaBoss website, including the FlyBoss, WormBoss and LiceBoss websites and tools are available at www.paraboss.com.au.



Newsletter

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



Facebook

Join ParaBoss on Facebook at www.facebook.com/paraboss.com.au to see regular posts on flystrike, lice and worm control.

Boost Sheep performance

with year-round nutrition supplements

Deliver protein and minerals to your sheep to better your production!

Performance Feeds provides convenient, customised nutrition supplements that help producers increase the performance, production, and profitability of their herd.

Anipro

Liquid Supplements

- Molasses based liquid supplement
- Provides essential protein, minerals & vitamins
- Up to 27% improvement in forage intake

WeatherPro

ALL WEATHER NUTRITION

- Waterproof and highly palatable loose lick
- Manage mineral and vitamin deficiencies
- Suits all classes of grazing sheep
- Improve fertility, growth and immunity

1800 300 593 | performancefeeds.com.au



PERFORMANCE FEEDS

New gear to attract and retain learner shearers

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



The new AWI project, titled 'Breaking down the Barriers', was introduced earlier this year to enable new and committed entrants in the shearing industry to be equipped with effective tools for the trade, at no cost to the shearer. The gear in the AWI Learner Shearer

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

"With less overseas staff in Australia, AWI is very aware of the shortage of wool harvesting staff," said AWI Program Manager, Wool Harvesting Training and Development, Craig French.

"The toolbox provides an extra incentive for budding shearers to build up their skills and stay in the industry. The gear is not a simple handout; the shearer must first pass certain strict criteria, consistent across all states. But, if successful, they will own the tools at the end of their training in 6-12 months' time."



The contents of the AWI Learner Shearer Toolbox (above) and it also on display during AWI-funded training at Kellhaven at Walbundrie in NSW (left).

The strict criteria include the requirement that the shearer must have completed at least one novice wool harvesting training course, must take on a learner's pen with a local service provider/contractor as a learner shearer, enrol into a competency-based Certificate II in shearing and undertake assessment tasks. The learner shearer must also take part in a minimum of two AWI 'in-shed training' days which will support and help them continue building their skills in the critical first three months of shearing.

"Launched mid-year, there were already more than 60 learners working

LIVESTOCK LURES

SAVE TIME AND LABOUR IN THE SHED AND YARDS

A Livestock Lure is a decoy that encourages sheep to quickly and instinctively move location to where you need them to be, such as a catching pen, end of a race, or a stock truck.

- A life-sized picture of a sheep, displaying the side profile of the animal including the face.
- Printed on 90cm x 60cm weather resistant plastic corflute.
- Available in any quantity, with minimum purchase of two lures (\$40 + P&H).

Livestock Lures are proven to be an effective and low stress tool for moving sheep.

"The Livestock Lure has been used in both our shearing sheds and sheep crates. The biggest advantage has been the ease our young sheep have been lured. They practically sprint to the decoy!"

Cameron Munro,
Egelabra General Manager

Developed and sold by Spike and Kirsty Wall of 'St Hilary' near Inverell, NSW.

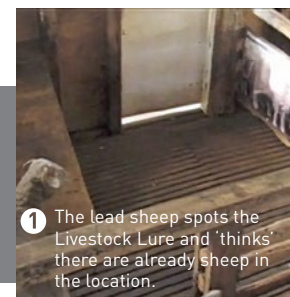
www.livestocklures.com

p. Spike Wall 0459 255677 or (02) 6725 5677

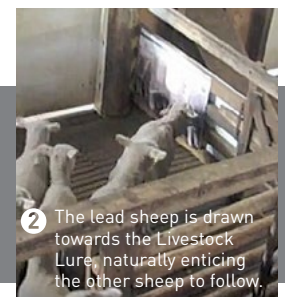
e. sthilarymerinos@outlook.com



A Livestock Lure positioned in a shearing shed.



1 The lead sheep spots the Livestock Lure and 'thinks' there are already sheep in the location.



2 The lead sheep is drawn towards the Livestock Lure, naturally enticing the other sheep to follow.

on stands across Australia by the end of October. AWI aims to have 200 learners on stands by the end of the 2021/22 financial year," Craig added.

The AWI initiative has been well received by shearing contractors and woolgrowers alike, with some very positive feedback.

"This initiative from AWI is excellent; the toolbox provides learners with the necessary tools for the start of their career and gives them more confidence."

**Rob Carter, senior wool lecturer,
TAFE WA**

"We have two learner shearers on and these tools are a great support for them, as is the in-shed training from AWI to get them going in a very busy season ahead of us. Thanks AWI," said Kojonup shearing contractor Lowanna Jury of Jury Shearing.

CEO of the Shearing Contractors' Association of Australia, Glen Haynes, said the toolbox has definitely proven to encourage learner shearers to join and remain in the industry. "It also allows us to access more free training from the government to add to the AWI in-shed training, which also increases retention," he added.

AWI-funded in-shed harvesting courses

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

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

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

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



An AWI-funded training course with SCAA Shearer Woolhandler Training at **Dookie** in Victoria.

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

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

More information

To arrange training in your state, phone AWI on 1800 SHEARS or email swt@wool.com.

Is your Shearing Shed SAFE?

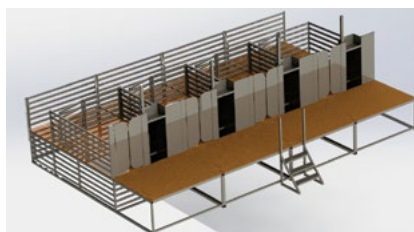
The team at Stockpro have designed a modular shearing board that ticks all the boxes.

'Built from Experience'



SHEARING MODULE

- Economical. No need to build a new shed, simply slide a prefabbed module into your machinery shed!
- **Raised board**
- Holding pens, count out pens
- **Exit chute**
- Provision for machine mounting and back support
- **Bolt together on site**
- Provides a safe modern shearing facility
- **Slide swing gates, ramps, stairs**
- Split catching pen doors
- **Flexible—we can custom make to suit your requirements**



Stockpro™
Livestock Handling Equipment

SEE OUR FULL RANGE ONLINE
www.stockpro.com.au

Toll Free Ph **1800 354 415**

Top technique provides Danielle's girl power



Boyup Brook shearer **Danielle Mauger** celebrated her 23rd birthday at this year's Perth Royal Show, taking second place in the intermediate shearing final. PHOTO: Mal Gill, Farm Weekly

Following in the footsteps of her father, 23-year-old Danielle Mauger from South West WA is an established shearer in the Boyup Brook area and is also proving to be a skilled competitor.

Shearer trainer **Kevin Gellatly** teaching Danielle best practice technique at an AWI-funded shearing school a few years ago.

With an ambition to shear in the open category of competitions, Danielle has shown she might not be far off achieving this goal. She has put in a string of impressive performances lately and most recently beat the men to win the intermediate competitions at Dinninup and Boddington.

"I'd love to make the Nationals once COVID settles down, but the big goal is to one day be shearing in an open final with the best," Danielle said.

"For me, one of the main reasons I love competing is the people that are a part of it. The judges and more experienced shearers are always really supportive and help by telling you what you're doing right or wrong and how you can improve.

"There are definitely more females in shearing competitions now and at a higher level too, which is great to see. When I first started doing competitions about six years ago, I mainly saw females in the novice but now it's really common to see them in under 21s, intermediate and senior – and hopefully in the open soon."

Although Danielle started competing in shearing competitions when she was at the WA College of Agriculture Harvey, shearing has always been in her blood. She grew up on an 80-hectare sheep farm

at Balingup run by her parents Linda and Ross who is a semi-retired shearer.

"Dad used to be a shearer and shored in the Wheatbelt and at Boyup Brook in the shearing run that I'm currently working in. He also travelled around the world shearing in places like New Zealand, Europe and America, which is something that I'd love to follow his footsteps doing," Danielle said.

"My brother Scott is a shearer too, also in the Boyup Brook district, and he shears in open competitions."

Danielle started shearing full time when she was 19 and currently works for a local contractor, Shear Pride.

"I love the freedom of shearing, how you can push yourself as much as you want. I also like the people; everyone has a different story and there are so many different personalities in the industry. I've never had a job that's had the same camaraderie or atmosphere. It's fast paced and intense but there's always lots of banter as well," she said.

"I look up to a lot of people in the industry. I have a lot of respect for shearers like my brother and Luke Harding who've worked their way through the competitions to get into the open, and speed shearers like Koen Black and Floyd Neil.

"But then there's also humble everyday people in the industry that have bought houses, had families and are just genuinely amazing people that I look up to and want to be like every day."

Although Danielle acknowledges that shearing is hard work and puts a lot of strain on the body, it is definitely a job that she recommends.

"I think people that like hard work, working in a team and that like a challenge would like the shearing industry," she said.

With shearer trainers focussing on shearing technique and balance rather than brute strength, there are an increasing number of women willing to pick up a handpiece and join the shearing industry.

"From what I've seen there are definitely more females that are keen to learn how to shear and slowly more that want to actually take it on as a job," Danielle said.

Danielle cracked her first 200 two years ago but she has ambitions to develop her skills and productivity further.

"My short-term goals right now are to shear 300 in a day and to travel Australia and the world shearing. I really want to stick with shearing for another ten or so years, depending on how my body is handling it!"

Dealing with shearing cuts

Shearing is a dynamic process in which sheep and human are continuously moving – therefore skin cuts can occur. However, careful preparation before shearing begins will ensure a better outcome for any sheep that is inadvertently cut.

Shearing cuts can impact welfare immediately post shearing and in rare instances have long term consequences for the animal. They must be treated appropriately. Here we provide some key points to consider **prior** to shearing.

1. Select your team well

Where possible, select a shearing team you know will provide a good service and treat the sheep well. A slightly slower shearer who does not cut sheep is preferable to a fast one who is also careless. Your sheep and your wool clip will be better for it.

2. Consult your veterinarian

Vets have an important role in any sheep enterprise and are particularly valuable at shearing time. Sedatives for use on rams can only be obtained under prescription from

vets. When obtaining these sedatives, discuss other requirements around shearing. This may include prescriptions for pain relief medications and antibiotics to have on hand to treat injured sheep. You or a member of your staff, or the contractors, should have high level skills in animal first aid. Talk to your vet about developing these skills.

3. Vaccinate

There is a strong and well-established link between infection of wounds and the development of arthritis. Because small cuts are inevitable in shearing, vaccination with Erysipelas/arthritis vaccine before shearing is a good preventative measure.

4. Obtain supplies

Ensure adequate supplies of veterinary medications and over-the-counter antiseptic sprays. Wound treatment sprays that contain antiseptic and insecticide (fly repellent) are preferable (eg Centrigen or Extinosad).

5. Set up pens

Set up a 'hospital pen' and 'recovery pens' before shearing starts. The hospital pen will be used to hold cut sheep until you can reassess them. The initial assessment should be done on the board by the shearer. Recovery pens will need shelter, water and feed. They are only for very ill sheep that need to be closely watched. Other injured sheep should be held in a small paddock close to the yards where they will be less stressed.

6. Euthanasia protocols

If you intend to euthanise severely injured sheep yourself, ensure you have an appropriate (licensed) firearm or bolt gun on



Shearing usually goes to plan, but preparing for cuts will help ensure your sheep are always treated with best practice care during the harvesting of the wool. Read the new **AWI factsheet** (above) and pin up the new **poster** (below left) in your shed.

hand (and securely stored). When sheep must be killed, the primary consideration is preventing the animal from suffering pain and distress. Killing should be done promptly and safely by a competent person. Follow best practice guidelines. Euthanasia is a major responsibility.

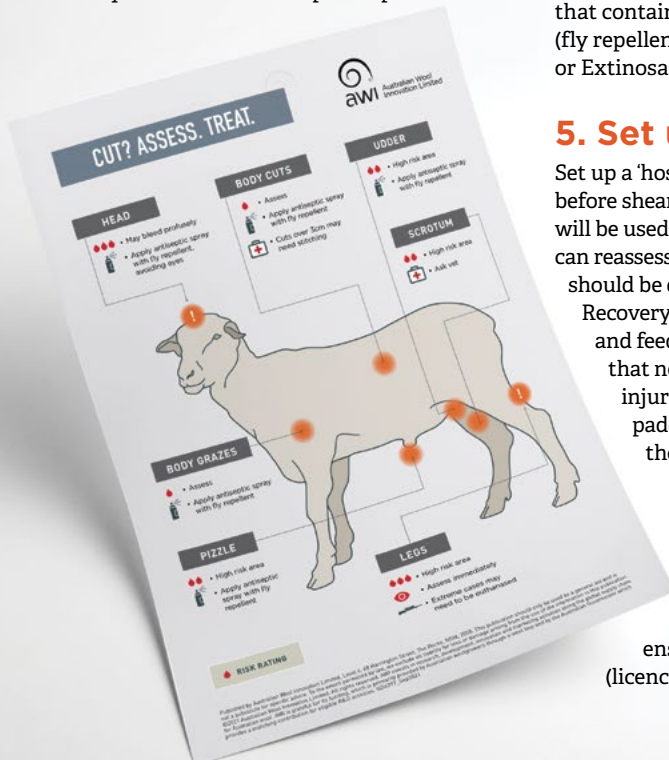
7. On the day of shearing

At the beginning of shearing, ensure all shed staff know how to implement your plan for managing shearing cuts. For severe cuts, shearers should notify you immediately. All sheep with cuts or grazes need to be placed in the hospital pen for you to assess and treat accordingly. This can be communicated as part of your general shed induction when you discuss occupational health and safety and any other matters you need to cover.

Ensure all shed staff understand that animal welfare is everyone's responsibility.

More information

View and download the new AWI 4-page factsheet *Dealing with shearing cuts* and related poster for sheep owners and managers, which include details of how to prepare for, assess and treat cuts. They are available on the AWI website at www.wool.com/shearingprep or on request from the AWI Helpline at 1800 070 099.



Digital tally counter being developed through ag tech program

Woolgrower Scott Leslie from the Riverina of NSW is developing a digital tally counter for use by shearers, with the assistance of the Farmers2Founders program supported by AWI.

It was over a couple of beers at a BBQ that Scott Leslie from Euston in the Riverina of NSW and co-founder Sam Thompson, who is a school teacher with an interest in electronics and programming, started to think about developing a digital tally counter.

Scott subsequently applied to join the Farmers Founders (F2F) Ideas Program (now named the Hatch program) which was a three-month program that aims to equip primary producers with the skills to not only test their ideas but also build producers' capability and confidence to launch new products and services.



Scott Leslie, who is pursuing the development of his idea for a digital tally counter.

Out of more than 50 applicants from across Australia, Scott was selected as one of the 11 farmers to join this year's program, providing him with access to the likes of workshops, a business coach and an IP lawyer.

Scott and Sam's idea is known as Sheepo, a robust bluetooth tally counter for shearers in the shed to keep track of how many sheep they have shorn. It logs the sheep count and time data to the shearer's mobile phone, thereby helping them track and potentially improve their shearing performance. It could also help in shearers estimating their future income and could potentially automate the invoicing process.

During the F2F program, Scott and Sam conducted more than 25 interviews with shearers of various ages, as well as contractors and farmers, to primarily

determine whether there would be a demand for a digital tally counter.

Sam and Scott learned that younger shearers are more interested in new technologies, and see more value in the data they could gain from a counter (eg benchmarking, wages etc). They also learned that shearing contractors are interested in knowing which shearers work consistently as well as having a record of which shearers are shearing more sheep on average.

Based on these insights, Scott and Sam have gained confidence to build an initial prototype for Sheepo which will be tested with some shearers for feedback and then evolve the product. It is planned for a commercial release towards the end of next year.

"I found the F2F program to be fantastic. I see it as my 101 into co-founding an ag tech company. It taught me that you have to do your research if you want to stand a good chance of succeeding, and that good ideas are worth giving a go!" Scott said. **B**

More information

www.farmers2founders.com
www.sheepo.space



Hear more about Sheepo in Episode 198 of AWI's *The Yarn* podcast at www.wool.com/podcast

Connecting investors and farmers to ag innovation opportunities

grow^{AG} is an online listing of Australian agricultural research, technology and commercialisation opportunities. It aims to drive collaboration and attract capital investment.



Collaboration with grow^{AG} has provided AWI with broader opportunities for seeking commercial interest in its smart tag technology.

Managed by AgriFutures Australia, grow^{AG} is a collaboration between the Department of Agriculture, Water and Environment (DAWE) and Australia's 15 Research & Development Corporations (RDCs) including AWI.

All the information on the grow^{AG} platform is free to access and allows investors, corporates, start-ups, researchers, industry, government and universities from Australia and across the world to locate research projects, organisations, technologies and opportunities that will deliver innovation back to the farm and the supply chain.

Equally, RDCs can upload to grow^{AG} a research project and commercial opportunity. For example, the grow^{AG}

platform has provided AWI with greater exposure of its pioneering smart tags for sheep, which have attracted early interest from investors and woolgrowers alike.

"The first week after the grow^{AG} launch was amazing. We had six contacts responding to this commercial opportunity," explained AWI's Program Manager of Agri-Technology, Carolina Diaz.

"They were mostly tech companies wanting to collaborate to use our tags. While they weren't the right fit for AWI just yet, it was good for AWI, because we started to think about how this product could look in the future. And it gave us contacts for technology providers who we can call on to establish a partnership or collaboration once the product is closer to market."

The woolgrower audience of grow^{AG} has also seen the potential of this new tech and enquired through grow^{AG} to partake in on-farm trials.

"It's always good to have woolgrowers interested, because they'll be the early adopters," said Carolina.

"We took the opportunity to discuss with woolgrowers where we are heading with the smart tags with regards to

analysing grazing, reproductive and disease behaviours, to get their insights and validate that we are on the right pathway. So grow^{AG} has been useful for that." **B**

How will Australian farmers benefit from grow^{AG}?

- Access to current and completed research projects across all rural industries, on one platform.
- Increased opportunities to learn more about research and technology that is currently being developed, and participate by testing these in real-world conditions (on their own farms).
- Increased investment in Australian research and commercial opportunities by local and global investors, means that Australian farmers retain access to intellectual property and innovation that may otherwise never have made it on-farm or to the Australian market.
- Attracting global investment and innovation to Australian R&D exponentially increases the total investment into rural research.
- Investors are actively looking for viable commercial opportunities – if they can't see the industry need, they can't provide a solution.

More information

www.growag.com

MerinoLink - Linking the Merino industry via engagement, education, exploration and exchange

MerinoLink is a link-point for all in the Merino industry to connect to Merino-relevant information, people, research and innovation. MerinoLink is a not-for-profit, apolitical, member organisation run by a Board of Directors that facilitates projects, events and training with communication networks for its members as well as the Merino industry at large.

MerinoLink's focus is on networks, innovation, technology, genetic opportunities and research to improve the commercial production and profitability of Merinos across Australia. MerinoLink is committed to assisting its members to make better use of research.

Members are from a wide range of sheep businesses with varying production systems. They include producers, breeders, service providers, researchers and extension practitioners. Members have been brought together by a common enthusiasm for profitable Merino sheep and a desire to continue to build their businesses and the sheep industry as a whole.

Merino information engagement and exchange currently happens via:

- an annual conference including workshops, conference sessions and a field day visiting behind-the-scenes areas of the Merino industry

- field days focused on MerinoLink projects and industry topics
- monthly member emails including a round-up of industry insights, MerinoLink happenings and industry events
- social media notices and connections.

The MerinoLink Board is currently considering facilitating industry forums and roundtables to provide a platform for industry to connect on topical items. Plans are afoot to provide easy access to new and current information in formats that best suit Merino people. MerinoLink is also working on opportunities for industry to meet and exchange their current knowledge plus engage with industry experts, including from MerinoLink's own research projects.

The projects that MerinoLink is currently involved in include a Merino Sire Evaluation trial site on the Central Tablelands, the Temora site of the AWI-funded Merino Lifetime Productivity (MLP)



MerinoLink conference attendees on a tour of the ProWay manufacturing facilities, with a focus on the latest in livestock handling equipment.



AWI Director **Don Macdonald** (centre) addressing the large crowd at the opening session of the MerinoLink Annual Conference in June at Wagga Wagga NSW. He is pictured (from left) with Chair of the Sheep Sustainability Steering Group, **Professor Bruce Allworth**; MLA Managing Director, **Jason Strong**; Chair of MerinoLink, **Rich Keniry**; and conference moderator **John Francis** of Agrista agricultural consultancy.

project hosted by Moses & Son, the DNA Project run in collaboration with MLA and the University of New England, as well as an MLA Producer Demonstration Site focussed on pregnancy scanning in extensive sheep flocks. Updates and outcomes from these projects are provided to members with priority event tickets and entry discounts.

MerinoLink membership is now open for application or renewal for the 2022 financial year.

More information
www.merinolink.com.au
admin@merinolink.com.au



MEMBERSHIP INVITATION

The Merino industry is invited to join the MerinoLink network. Scan QR code for details:



Membership for FY22 includes:

- Exclusive communications
- Conference discounts
- Field day & events free or at cost
- Project entry / partnership opportunities & discounts



FY22 Membership Packages	
Individual membership	\$220
Corporate membership - 3 members	\$550
Corporate membership - 5 members	\$900
Corporate membership - 5+ by negotiation	
Student members	\$55

- Engagement - Education - Exploration - Exchange -

WWW.MERINOLINK.COM.AU



Profiling the Pingelly MLP site

Exciting insights are emerging from the Pingelly MLP project site, as the site heads into its last year of MLP data collection. After a successful October 2021 Field Day with the 2016 and 2017 drop MLP ewes on display as four- and five-year-olds, their results are providing insights into ewe and flock performance.

On 22 October, the 870 Pingelly MLP project ewes were on display at their host site, which is managed by Murdoch University and located at the University of Western Australia's Future Farm. The ewe's wool, carcase and reproduction results were reported for each sire progeny group

including the preliminary 2021 reproduction data. With five sets of classing and wool results for the 2016 drop and four for the 2017 drop, these ewes have just two more shearings and one more year of reproduction data to be collected within the MLP project.

The Pingelly site chairman, Brett Jones of Ejanding Merinos, provided an introduction to the sire groups and their results. Of special note were the sires' number of lambs weaned results when reported as within-site and within-drop flock breeding values (FBV).

These FBVs are based on results from the first two and three reproduction cycles (2017 and 2016 drops respectively) and, in the 2016 drop, display a 45% variation between the trait leading and lowest sire progeny groups. (The project selected sires to mirror the diversity in Merino sires.) To date, the sires at Pingelly are showing that despite a

known negative correlation, it is possible to select for ewes that are both productive for fleece weight and reproduction.

This variation translates through to the individual ewe productivity, and is being observed across all five MLP sites. For instance, there are two 2016 drop Pingelly ewes who have each weaned nine lambs across four joinings; in direct contrast, two other 2016 drop ewes have not yet weaned a lamb. The 2016 drop average is 4.7 lambs weaned per ewe across the four lambings.

Every producer knows that one or two ewes do not make a flock! However, once the full dataset for this drop and the remaining nine other MLP drops nationally are complete, an analysis using the full project data set will be undertaken to examine the implications of these top performers and their variation. This will provide answers and sharpen the current breeding and

“ He’s been around, he’s worked
in many a run-down shed.
And he ain’t afraid of hard yakka....
but he loves shearing here.
It’s safe. It’s efficient.
And he’s still grinnin’ at the end of the day.
That’s what matters. ”

(LEFT) Stud breeders **Allan Hobley** of Wiringa Park, **Gavin Norrish** of Angenup, **Craig Dewar** of Woodyarrup, **Brett & Sharon Jones** from Ejangding and **Michael Campbell** of Coromandel Poll gather at the Pingelly 2021 MLP field day.

selection tools, which will lead to enhanced lifetime productivity and profitability.

A snippet into this profitability was presented at Pingelly's field day with Dr Bronwyn Clarke, Pingelly's site manager from Murdoch University, giving an introduction to preliminary gross margin analysis. The Murdoch University work, undertaken by agricultural economist John Young, revealed a wide range in gross margins across the Pingelly MLP sires.

John's analysis was based on a production scenario of a 1,000 hectare farm of similar flock structure to the Pingelly MLP site, shearing first at 10 months (then annually) and selling surplus ewes plus all wethers after the first shearing and then older ewes sold at 5.5 years.

Each drop's raw data averages were used as the base, with flock breeding values for fleece weight, micron, liveweight and number of lambs weaned, used to calculate a gross margin for each sire group.

Based on 2021 prices, the outcome was a range in gross margin of \$204 per hectare difference between the top and bottom sire progeny groups and \$115 using 2017 prices. With more data to be collected and the full analysis still to be done, this work gives an early glimpse into what the MLP project is looking to provide for producers' bottom lines.

The MLP project has collected 85% of its data points, with the Pingelly site scheduled to finish alongside the MerinoLink site in late 2022. Balmoral's data collection will be completed in early 2022, with the Macquarie and New England sites running through to 2023 and 2024.

B

MLP fast facts

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

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

2022 MLP FIELD DAYS

Balmoral: 17 February, followed by a general sire evaluation field day on 18 February.

Macquarie: 30 March

For more information visit www.wool.com/MLP



STOCK-PROOF WATER TROUGHS

- ✓ Float Covers Hinge on Stainless Steel Bar
- ✓ Solid Brass Water Inlets
- ✓ BIG Drains = Fast cleanout
- ✓ Lifting Pins = Easy to move
- ✓ Range of sizes 400-700mm high



Water troughs with hollow base for plumbing

FEEDLOT TROUGHS

- ✓ Best Design = Easy to clean
- ✓ Curved edges prevent injury
- ✓ Withstand high stock pressure
- ✓ Precast to last = Great investment
- ✓ Deliveries in VIC, SA & NSW

GRAIN BUNKERS & RETAINING WALLS

- ✓ Easily sling or fork into place!
- ✓ No footings required
- ✓ Repurpose existing sheds
- ✓ Construct loading ramps
- ✓ 1-4m high



Upgrade with **AG-CRETE** Call (03) 5450 4400 www.agcrete.com.au



South Australia's 2020 Sire Evaluation field day with the 2020 drop on display. MerinoLink's 2021 drop progeny at the Central Tablelands Bathurst site.

Merino Sire Evaluation

Advancing industry's genetic gain

Sire entrants in the national Australian Merino Sire Evaluation Association (AMSEA) program are benchmarking their genetic gains across wool, carcase and visual classing traits. The genetic advancements are highlighted in a recent report to AWI on Australian sire evaluation.



Sire evaluation entrants in the AMSEA program benchmark their sire's genetics through the performance of their progeny against the best in the industry. Since 2013, 929 sires from 704 ram breeders have entered across 10 sites spread out across the major wool-growing regions of Australia.

Each site is managed by a local committee with 170+ committee members currently overseeing the sire evaluation trial designs and management across the 10 sites. These trials undertake objective wool and

carcase measurements as well as a broad range of visually scored traits on the progeny of entered sires. These results are then collated by AMSEA, analysed by the Animal Genetics and Breeding Unit (AGBU) to produce Site Reports, submitted to the Sheep Genetics MERINOSELECT database, and ASBVs are reported in the annual Merino Superior Sires (MSS) publication. The 27th edition of MSS was issued in October.

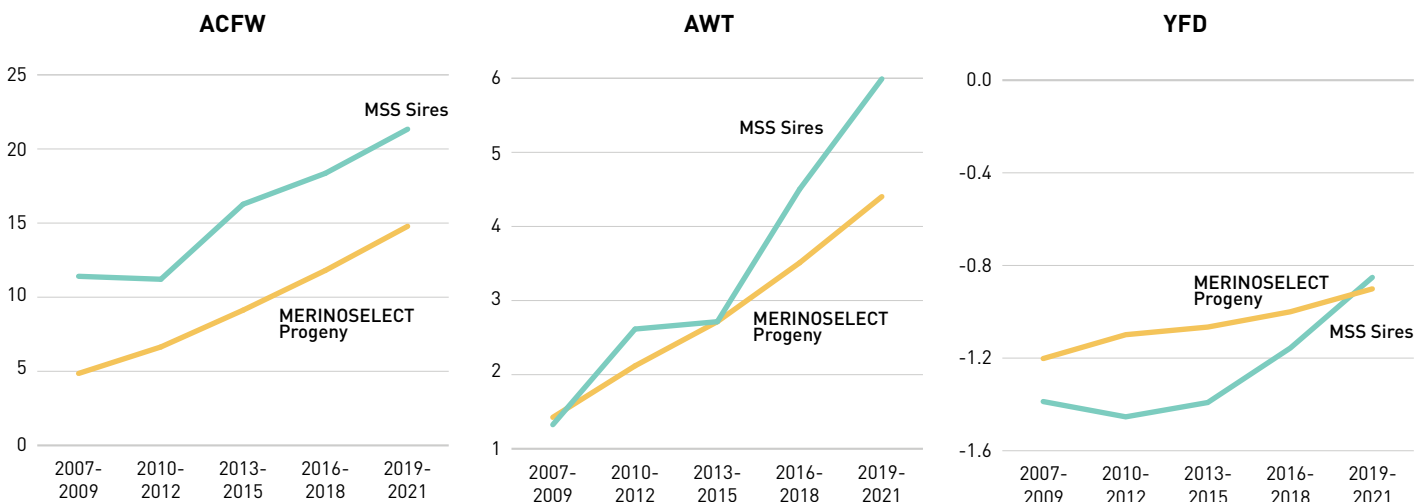
Trends in these results have recently been profiled within an AMSEA

project report showing genetic gain across the sire evaluation entrants for key production traits.

The first set of charts report the trendline of the full MERINOSELECT population against the corresponding grouped Merino Superior Sire entrants' results (MSS Sires) since 2007. These are reported as Australian Sheep Breeding Values (ASBVs). (MERINOSELECT data acknowledgment to Sheep Genetics.)

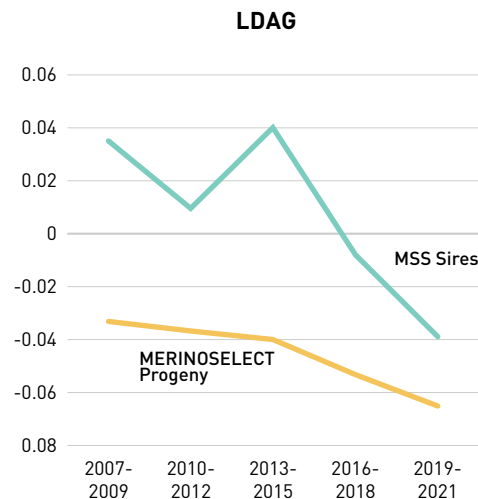
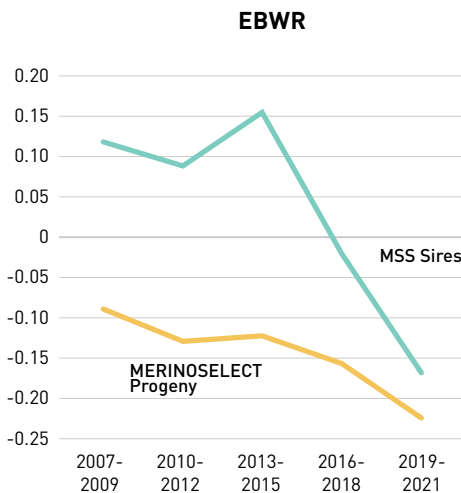
Key wool and carcase traits

The key production traits of *adult clean fleece weight (ACFW)* and *adult body weight (AWT)* shown in the following charts have both seen increases since the 2007-2009 period. *Fibre diameter at the Yearling age (YFD)* has also seen a slight increase, during a period of limited micron premiums when the focus of many woolgrowers has been to increase fleece weight.



Flystrike indicator traits

Sires entered have trended towards decreases in the key flystrike indicators of *early stage breech wrinkle (EBWR)* and *dag (LDAG – at late stage)* with the majority of the gain having been made in the past 10 years. This reflects the industry focus on increasing the reliance on breeding for breech strike control and away from mulesing and prevention chemicals. The decrease in *breech wrinkle* and *dag* has occurred while *clean fleece weight* has been increasing, showing that breeders are achieving gains in these normally antagonistic traits.



Visually classed traits

There are more visually scored traits assessed than objective traits measured in sire evaluation. These scores are completed according to the AWI MLA *Visual Sheep Scores* publication. The table below shows the drop averages for all sire evaluation progeny across Australia for the 2009 and 2019 drop progeny for a number of visually assessed traits.

The changes in these traits reveal a positive outcome with visual wool quality traits remaining consistent, during a time when fleece weights and fibre diameter have increased.

These results over the past decade point to sire evaluation progeny and thus sires tending to have less body wrinkle, with more open faces, whilst retaining or slightly improving wool quality. Body structure has remained relatively constant, however feet and leg structure appears to have regressed. This aligns with an increasing industry

concern regarding feet and has prompted a review of the feet and leg visual scoring system along with cause to take greater notice of feet conformation in general.

Entrants and AMSEA

The entrants in AMSEA's sire evaluation program are accelerating genetic gains and productivity across the Merino industry. Sire evaluation entry is open to any ram breeder or purchaser (with breeder permission) with entrants gaining a benchmark of a sire's genetics, plus very important assessments at older age stages including for some hard to assess traits. Due to the strong link sire requirement, entry also assists the development of a flock's linkage with other sires at a site level and also MERINOSELECT in general.

With ram breeders entering their top sires, the work of AMSEA continues to highlight the top sires and the sale of their

semen and progeny, thus driving genetic gain for the industry. During the past three years, 183 breeders who have not been previously involved have entered sires. The work of the 10 Site Committees and AMSEA's oversight, analysis and publication of results enable breeders and producers to stay up to date with currently available superior sires across a range of traits and breeding approaches. **B**

More information

- Download 'Merino Superior Sires No. 27 October 2021' and the 'Annual Sire Evaluation Site reports using within Flocks Breeding Values' via www.merinosuperiorsires.com.au
- Nominate a sire for entry in AMSEA's Sire Evaluation program via email merinosireevaluation@bcsagribusiness.com.au
- Subscribe to trial results and upcoming field day notices via www.bit.ly/AMSEA_Subscription

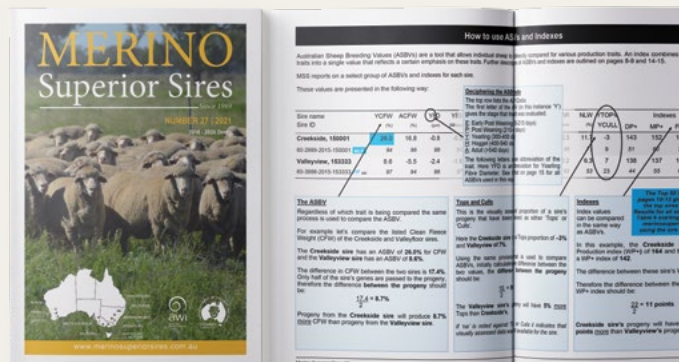
Table 1: Comparison of 2009 and 2019 Sire Evaluation drop progeny averages for Visually classed traits.

Average	Number of sires	Wool colour	Wool character	Conformation – legs and feet	Conformation – back and shoulder	Face wool cover	Body wrinkle
2009 Drop	79	2.3	2.5	1.7	1.6	2.7	2.3
2019 Drop	104	2.1	2.5	1.9	1.5	2.4	2.0

Merino Superior Sires No.27 released

Released in October, Merino Superior Sires No.27 (MSS27) includes sections on: All time top 50 sires, Top sires - last 2016-2020, Top 25 high use sires (2016-2020) and trait average, Percentile bands, Sire and contact details and a full report on all sires entered in the past five years.

MSS27 reports ASBVs for each sire entered between 2016 and 2020 on a range of measured traits including *clean fleece weight*, *fibre diameter*, *staple strength*, *body weight*, *eye muscle depth*, *fat depth*, plus *worm egg count*. Also included are ASBVs for the visual trait of early breech wrinkle, the reproduction trait *number of lambs weaned* and the percentages of progeny classed as *Tops and Culls*. Three standard industry indexes are reported DP+, MP+ and FP+, plus WP+ (Wool Production Plus) - the index developed specifically for AMSEA.



Exclusion fencing providing a DeFence against wild dogs

A multi-partner project has resulted in the construction or retrofit of 75km of wild dog exclusion fencing in East Gippsland, benefiting local producers' productivity and wellbeing.

AWI-funded wild dog coordinators in 2019 saw an opportunity through the Federal Government's Drought Program to help landholders in drought-affected areas of East Gippsland to construct wild dog exclusion fencing.

They collaborated with the East Gippsland Shire Council, East Gippsland Landcare Network and the Victorian Department of Environment, Land, Water and Planning (DELWP) to develop and apply for funding for the Wild Dog DeFence project. Successful applications resulted in 36 farmers receiving

a total of \$370,000 in funding, to build or retrofit 75km of exclusion fencing.

Construction began immediately and was quickly and efficiently carried out, with some fences operational within three weeks. Fencing companies Gallagher, Waratah, Clipex and Datamars were invaluable to the success of the project.

"In the Wild Dog DeFence program, AWI coordinators provided essential expertise in wild dog fencing requirements and information on best practice methods to reduce wild dog attacks. Without this expertise, this project may not have delivered the significant reduction in sheep losses that we are hearing about from landholders as a result of this program," said East Gippsland Landcare Network coordinator, Erin Weir.

Fences provide turnaround in farmers' productivity

Prior to the construction of his new fencing, sheep and beef farmer Doug Cameron from Mt Delegate, joined 1,200 ewes and marked 700 lambs. After the fence was built, he joined the same number of ewes but marked more than 1,400 lambs – a number he'd never have imagined when he was "in the thick of it" with wild dogs.

Doug says that prior to the new fence, they had very limited success with controlling wild dogs, especially because the property was bordered by pine forest

and gumtree country. He also admits he wasn't confident at first that the new fence – which comprises eight wires with five hot to exclude wild dogs, including a hot wire on top to deter kangaroos – was really going to work, and retained the old fence to be sure.

It's a decision he now acknowledges was unnecessary as the new fence is "doing all it was required to do, and more".

"It was the best investment. The dog fence has taken away the problem of us worrying about wild dogs taking our sheep. My mental health improved immensely when



As part of the DeFence project, sheep producer **Doug Cameron** from Mt Delegate in Gippsland has benefited from new electric exclusion fencing.

we knew there wasn't a dog problem. I went back to sleeping right through, not waking up at three o'clock wondering what I could do to try and save my sheep," Doug said.

Fellow Mt Delegate sheep farmer, Peter Guthrie, said his property had been suffering wild dog attacks relentlessly for two and half years.

"It was demoralising, some days you'd drive around there and there might be one dead sheep but you'd come back another day and you'd see the crows flying about and wool everywhere and another one dead – and that just went on and on and on," Peter said.

"I was going to give the sheep away and just have cattle, that was what I planned. Then the idea of this Weston fence came up. Since its construction, I've never had any trouble, it's made such a big difference. I would have lost \$35,000 worth of sheep here over two and half years and it just stopped overnight when I turned the fence's power on."

Increased farmer and sheep wellbeing

Through the construction of exclusion fencing and a program of targeted baiting, these farmers in East Gippsland have worked collaboratively to find solutions to the wild dog problem. Although the results can be measured in terms of the absence of wild dog attacks and a decrease in stock losses, equally important is the increase in the farmers' mental wellbeing.

"Yeah, the stress is gone. Wondering what you'd find in the morning, it used to be what everyone talked about at community gatherings; now that topic rarely comes up. The stress levels are down for sure," said sheep and beef farmer Trevor Howden from Iguana Creek.

Sheep and beef farmer Phillip Neven from Tubbut says he has also observed a positive change in animal behaviour.

"They graze a lot freer and they don't bunch up like before. When you get them into the yards to handle them, they're a lot calmer. Rather than bunching up into the corner of the yard, they'll flow through the yards," Phillip said.

New videos explain benefits

Doug, Peter, Trevor and Phillip – along with other producers that benefited from the DeFence project – feature in a series of four new videos produced by Landcare, East Gippsland Shire and DELWP as part of the DeFence project: (1) New fencing, (2) Retro-fit fencing, (3) Creeks and gullies and (4) Farmer wellbeing. They contain insights into the farmers' significant productivity gains and, being unscripted, are at times very raw and revealing at a personal level.

View the four videos on the DELWP YouTube Channel at www.youtube.com/DELWPVicGovAustralia and click on Playlists.

More information

www.wool.com/exclusionfencing

Trust the
proven
performers

Protect lambs from pigs & foxes!



Time to fight back!



HOGGONE® meSN Feral Pig Bait

- Fast acting
- Carcasses near bait sites
- Mechanism is quick & humane
- Safe to environment, no residues
- Safe to scavengers
- No special permit required (S6)
- Cost effective

FOXOFF® Fox Bait & Econobait

- Foxes take up to 30% of lambs born
- Highly effective bait
- Shelf stable for good control programs
- Protects native wildlife
- Benefits are up to 50 times the costs!
- Available only to permitted users (RS7)
- Leaves no residue



The real cost of doing nothing!



Credit Ivan Reynolds



The South Australian Dog Fence being rebuilt with the help of the AWI-funded exclusion fencing construction unit.

SA Dog Fence rebuild going well

The 1,600-kilometre rebuild of the SA Dog Fence is progressing well with reports of pastoralists in the north-east of the state now having the confidence to move sheep back into paddocks that have been sheep-free for some years.

The Dog Fence that stretches from the Great Australian Bight to the NSW border aims to protect South Australia's livestock industry by stopping wild dogs from migrating into land used for sheep production. However, with more than two-thirds of the Dog Fence more than 100 years old and many parts of it degraded and brittle, a process of rebuilding sections of the fence began in May last year.

"The AWI-funded exclusion fencing construction unit (EFCU), which was previously used in Queensland, continues to be used as part of the rebuild, currently rolling out prefabricated wire mesh between the fence posts in 'stage 3' of the rebuild, a 130-kilometre section near Marree in the state's north-east," said AWI Program Manager Vertebrate Pests, Ian Evans.

"The EFCU can run out up to a kilometre of fencing already strained to the correct pre-set tension before the Ezy-Wire® spinner has to be reloaded."

The rebuild of the Dog Fence is being funded by the Commonwealth Government (\$10 million), the State Government (\$10 million) and the SA livestock industry (\$5 million). The project is a real collaboration, with two well-known South Australian resources companies, Santos and OZ Minerals, so far donating more than 4,000 lengths of drill rod to the project, which is being cut and used for fence posts.

"The resources and pastoral industries have long been partners in our northern rangelands and we thank these businesses for coming forward with an offer to help rebuild this important infrastructure," said

SA Minister for Primary Industries and Regional Development, David Basham.

"Similar to the loan of specialist fence building machinery by Australian Wool Innovation, the donation of drill rod is another example of industry working with government on a project of great benefit to South Australia."

To date, more than 340 kilometres of the rebuild have been finished and another 420 kilometres are under way. In the north-east of the state, the project recently completed a section of the fence from below Lake Frome through to the NSW border, and is continuing on a large section east from near Lake Eyre South.

"There are reports that pastoralists in the north-east of the state have already

or will soon move sheep back into paddocks that have been sheep-free for some years, because they have the confidence to do so," said PIRSA's Manager of the Dog Fence Rebuild, Lindell Andrews.

"Aside from the contribution made by the rebuilding of the Dog Fence, wild dog activity across the state is low, due to strategic ground and aerial baiting, the wild dog trapping program, the wild dog bounty, all helped along by the drought."

The \$25 million Dog Fence Rebuild project is estimated to deliver net benefits to South Australia of between \$56 million and \$113 million over 20 years. **B**

More information

www.pir.sa.gov.au/dogfence

Land use agreement gives green light to WA barrier fence

The long-awaited extension to the historic WA State Barrier fence is due to begin in January to create a 660km boundary protecting south-eastern farming properties from the impact of wild dogs.

The project was backed by a \$6.9 million State Government investment and was part of a broad range of measures to support the Western Australian livestock industry combat wild dogs.

The project will allow the State Barrier Fence to run 1850km from Zuytdorp cliffs north of Kalbarri to Condingup east of Esperance.

Issues surrounding native title

brought the project to a standstill two years ago but an agreement was brokered in October with Esperance Tjaltjraak Native Title Aboriginal Corporation's authorisation of the Indigenous Land Use Agreement for the extension.

The Esperance Tjaltjraak Services fencing team had already constructed the first 63km in the Jerdacuttup/Cascade area in 2019, starting at the termination of the existing 1190km long State Barrier fence, before the project stalled.

The project is expected to take about two years to complete from the time new construction contracts are awarded.

Novel scents and lures to catch wild dogs

Horse hoof, synthetic fermented egg and vanilla essence were among the novel odours tested for luring in wild dogs to Canid Pest Ejectors in a project carried out in the WA rangelands.



Felt lure heads were impregnated with a range of novel odours to lure wild dogs in the WA rangelands.

Spring activated Canid Pest Ejectors (CPEs) are very effective at delivering poison (1080 or PAPP) directly into the mouth of a target pest animal. The firm upward pulling action required to trigger the poison delivery is easily achieved by wild dogs (and foxes) but much less so by most non-target species.

However, what is the best way to attract wild dogs to a CPE? An important consideration is the likely location of wild dogs and the corridors they travel, such as trail intersections, fences, tracks and ridge lines. Another important consideration is the use of lures and the wind direction so that the wild dogs can easily find the CPE.

Research Scientist Dr Tracey Kreplins at the WA Department of Primary Industries and Regional Development has undertaken testing

of a range of eight novel odours at a large scale to improve lure uptake by wild dogs.

The large-scale trial of 100 CPEs and camera traps was conducted over 2018-2020 in the southern rangelands of WA on three properties. Eight different lure head odours were trialled, comprising liver treats, dried meat, synthetic fermented egg, vanilla essence, horse hoof, animal fat, Government Call and fish oil.

The felt was soaked in the lure for about a week before deployment to ensure the scent was maintained on the lure head for more than four weeks of deployment.

"We used thin ziplock ties to secure felt impregnated with the different odours to the plastic lure heads as well as the traditional bait meat head," Dr Kreplins said.

"With the felt, we had almost no non-target interference with the CPEs. The

traditional bait meatheads attracted non-target species, not unlike dried meat baits.

"Six different lures on felt brought wild dogs in and we saw wild dog population changes."

The most attractive odours were any of those on the felt lure heads: fish oil, horse hoof, Government Call, animal fat, synthetic fermented egg and vanilla essence.

CPEs do require checking at least every two months (or otherwise as set out in the relevant state regulations) and with the lure heads being interchangeable, it makes it more attractive to wild dogs.

Dr Kreplins said similar work is to be conducted in the WA agricultural zone where wild dogs and foxes are an existing problem.

Baiting can complement other wild dog management tools such as trapping, fencing and shooting. The success of control relies on a co-ordinated effort of all landholders working co-operatively with private and government wild dog controllers.

Dr Kreplins worked on the project with biosecurity officer Jim Miller and Dr Malcolm Kennedy of the Queensland Department of Agriculture and Fisheries. The research was funded by the Western Australian Wild Dog Action Plan 2016-2021 and supported by the Centre for Invasive Species Solutions.

Wild dog control also benefits native wildlife

Wild dog and fox control programs not only support the livelihoods and emotional wellbeing of livestock farmers, they also help conservation efforts for endangered native wildlife.

Woolgrowers primarily undertake wild dog and fox control programs to minimise attacks on their flocks, thereby improving the welfare of their animals and reducing the financial and emotional impact on themselves and their families. However, control programs also have a positive environmental impact, reducing predation on Australia's native animal species.



When it comes to food, wild dogs are not fussy diners, they prey on 229 native animals including mammals, birds and reptiles of all sizes from insects to water buffalo. However, they prefer to eat small and medium-sized mammals when available, including native animals.

Research undertaken over seven years by the Queensland Parks and Wildlife Service at Astrebla Downs National Park has revealed a diverse range of native species were eaten by wild dogs.

"Bilbies were consumed by wild dogs at a higher rate than most other species and contributed to an average of 84% of prey volume within scats," said Queensland's Department of Environment and Science senior ecologist, John Augusteyn.

However, a concerted wild dog and feral cat management program by park rangers, and favourable conditions in 2019, has resulted in a record number of bilbies and kowaris in the National Park.

"The high numbers of bilbies and kowaris on Astrebla Downs National Park is a strong testament to the value of the predator control efforts," Mr Augusteyn said.

Department of Environment and Science staff have also recorded bilby burrows across vast areas of south-west Queensland in both protected areas and neighbouring grazing land. Wild dogs were controlled over some of this as part of the Barcoo Shire aerial baiting program.

"The work undertaken on Astrebla Downs National Park highlights the fact that, as a generalist predator, wild dogs can severely impact rare and threatened species under certain conditions," said National Wild Dog Management Coordinator, Greg Mifsud.

"Wild dogs have been directly implicated in the rapid decline of some of



The high numbers of bilbies (left) and kowaris (right) on Astrebla Downs National Park is a strong testament to the value of the predator control efforts.

Australia's most iconic species including 14 native mammals, reptiles and birds listed under the national *Environment Protection and Biodiversity Conservation Act 1999*.

In addition to direct predation, wild dogs carry hydatid worms (*Echinococcus granulosus*), a zoonotic disease (transmittable to humans) that has severe implications for native species, particularly macropods such as the rare bridled nailtail wallaby thought to be extinct for most of the 20th century.

"Woolgrowers and other landholders undertaking wild dog and fox control programs are rightly proud that they are not only protecting their flocks, but are also helping native wildlife to survive and thrive," added AWI Program Manager Vertebrate Pests, Ian Evans.

More information

www.wilddogplan.org.au/research/

Students take up the Merino Wether Challenge

Students from schools across SA, NSW and WA have once again this year gained practical hands-on sheep management experience by looking after teams of Merino wethers as part of state competitions.

Merino wether competitions for school students are run each year in SA, NSW and WA with the aim to educate them about the commercial production of Merino sheep. The initiative provides the students with a memorable 'hands on' experience covering a broad range of sheep and wool production skills.

Initiated eleven years ago in SA by the SA Stud Merino Sheepbreeders Association (Merino SA), similar competitions are now held in NSW by the NSW Stud Merino Breeders' Association and in WA by the Stud Merino Breeders Association of Western

Australia. The competitions are supported by AWI, as well as individual studs, schools, teachers and students.

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

By attending training days and the

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

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

B



The shearing at the school wether competition in Adelaide.



NSW students at a training day in Dubbo in March.



Western Australian College of Agriculture Harvey was the overall winner.

SOUTH AUSTRALIA

More than 200 students from 38 schools participated in the 11th annual **School Merino Wethers Competition**. Despite the cancellation of the Adelaide Royal Show, 70 teams of three wethers (210 wethers) were brought into the Stud Sheep Pavilion at the Adelaide Showgrounds in September for judging under COVID-safe conditions. It was a hugely successful event with the students greatly enjoying the experience. The judges noted that the students' presentation and husbandry of their sheep continue to get better each year and the competition is getting tighter and tighter.



Hear from Stephen Kellock of Merino SA in Episode 196 of AWI's *The Yarn* podcast at www.wool.com/podcast

NEW SOUTH WALES

In NSW, 65 schools from across the state participated in the **School Merino Wether Challenge**, each running two teams of three Merino wethers for six months. Unfortunately, COVID this year again prevented the schools from attending the judging, which was held at a shearing shed in a country town free of COVID in August. However, digital technology still allowed the students to participate in the judging event by filming the parade of their sheep before they were sent for judging. Despite the restrictions for the judging event, this year's competition was still the biggest yet; nearly 720 students attended training days with industry leaders across sites including Dubbo, Jerilderie, Orange and Mudgee.

WESTERN AUSTRALIA

Now in its sixth year in WA, teams from five schools and colleges took part in the **AWI Future Sheep Breeders Challenge**, held in September at the Perth Royal Show. Similar to the competition in NSW, this annual competition is a bit different to that in SA in that only one bloodline is used, to educate students on the impact that the environment can have on sheep genetics and therefore the importance of making ram purchases from a breeder with a similar climate to their own. This year, teams looked after six wethers (from Barloos stud in Gnowangerup) but showed four at judging. The students were very keen and competition was outstanding.

AWI Graduate Training Program welcomes new intake

The AWI Graduate Training Program began in 2018 and since then has provided six keen graduates with a thorough understanding of the wool supply chain from fibre to fashion. Two outstanding new graduates have recently been selected to start the program in 2022.

The 18-month AWI Graduate Training Program is based primarily at the AWI office in Sydney, where the graduates gain exposure to many areas of the AWI business from on-farm and off-farm R&D through to marketing. The graduates are also given the opportunity to gain a global exposure to the wool supply chain through international rotations.

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

Four of the graduates who have already completed the program are still employed by AWI, in the following roles:

- Ellie Bigwood – Industry Relations Officer (based in her native WA)
- Miles Barritt – Business Analyst, Risk & Recovery
- Emma Murphy – Marketing & Communications Coordinator
- George Lehmann – Project Coordinator, Training & Education

After a competitive recruitment process for the 2022 program, AWI has selected two new excellent graduates to start their journey with wool at AWI in March next year. **B**



Chris Watt

Hailing from Central West NSW, Chris grew up on a mixed enterprise farm, where he spent many a season assisting in the sheep yards and shearing sheds.

Currently residing in the ACT, Chris will graduate this year from the Australian National University with a double degree in Commerce and Science, majoring in Marketing and Psychology.

In starting his career in the wool industry, Chris is looking forward to gaining even more essential experience to complement his university learning and home-grown knowledge to thrive within the industry.



Tom Hersee

Originally from Bowning, NSW, Tom's family has been producing wool for three generations throughout NSW and Victoria.

He recently graduated from Marcus Oldham College in Victoria, with a Bachelor of Agribusiness.

Tom joins the graduate program with some unique experiences already under his belt, having been a qualified carpenter, a farmhand, and project manager, before setting his sights on furthering his knowledge and expertise within the wool industry.

Feedtech Auto Feeders



Induction, Containment and Feedlot Feeding

FROM
\$6600
INC GST

- 240v or 24v DC Solar Option
- Solid galvanised construction
- Troughs sold in 3-metre increments
- Adjustable PVC heights
- Wire retainers standard to pen off either side
- Fit to silo, field bin or Feedtech hopper
- Manual or auto on/off - 24hr timer
- Easy to install or installation can be arranged
- Bluetooth connectivity on solar units for solar & battery status
- Different size options available 3-metre - 5.7-metre

DATA CENTRE APP NOW AVAILABLE FOR LIVE DATA ON YOUR PHONE

MOBILE TROUGH AUTO FEEDER 6MT & 12MT - HOOK STRAIGHT IN FIELD BIN

DESIGNED, ENGINEERED AND BUILT BY FEEDTECH EST 1995



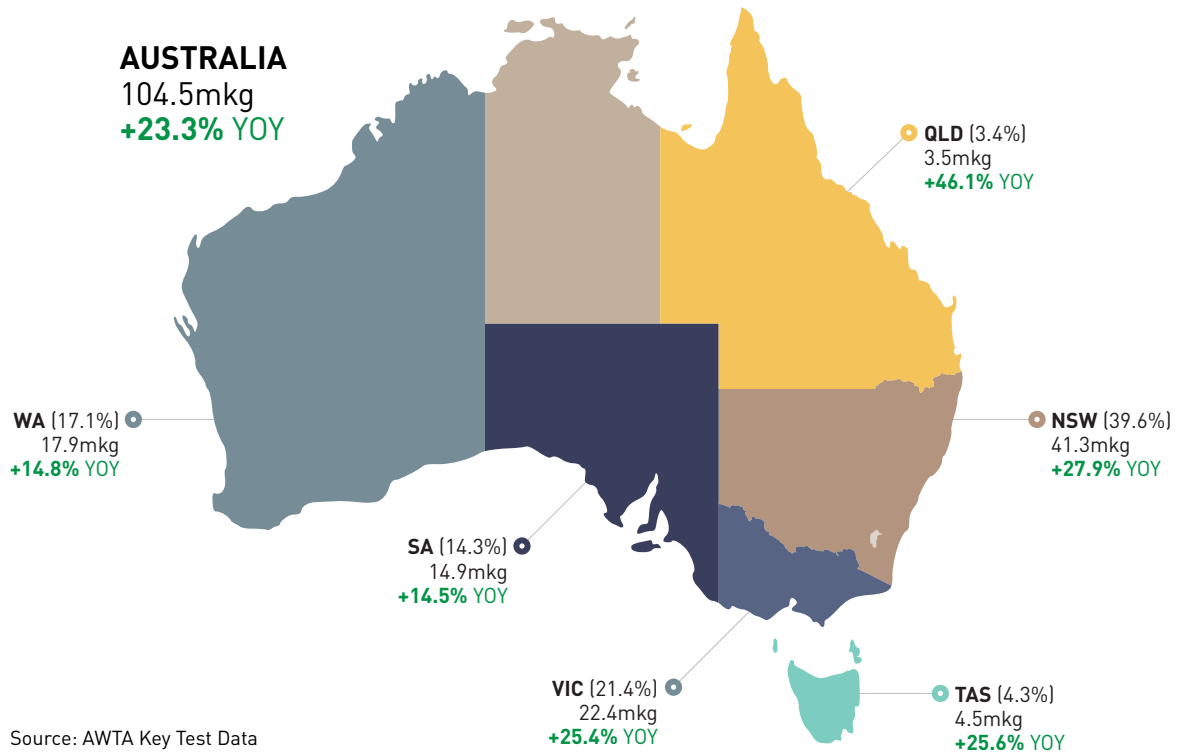
Call David Collier on 0437 225 016 for further information
16-18 Edgar Street, Tatura VIC 3616 | Phone 03 5824 1466
Check us out on Facebook, Twitter & Instagram | www.feedtech.com.au



Market Intelligence

Australian wool production levels continue to recover

FIGURE 1: AUSTRALIAN WOOL PRODUCTION JULY-OCTOBER 2021



With a third of the season passed (July to October), the trend in testing is showing that the forecast of the Australian Wool Production Forecasting Committee (AWPFC) of 310mkg for the 2021/22 season should easily be met.

The Australian Wool Testing Authority (AWTA) Key Test Data of wool (by weight) for the end of October 2021 revealed:

- The amount of wool tested during July-October 2021 was 23.3% greater than during July-October 2020. However, AWTA noted that testing volumes for July-October 2020 were affected by COVID restrictions across Australia.
- AWTA has so far tested 104.5 mkg (million kilograms) this season compared to the 84.7 mkg for the equivalent period of last season.

- Queensland show a 46.1% increase in wool tested year-on-year up to the end of October. NSW, Victoria and Tasmania all registered increases in production tested above the national +23.3% average, at +27.9%, +25.4% and +25.6% respectively.
- SA and WA recorded larger weights of wool tested for the period compared to last season, but fell below the national +23.3% average, at +14.5% and +14.8% respectively.

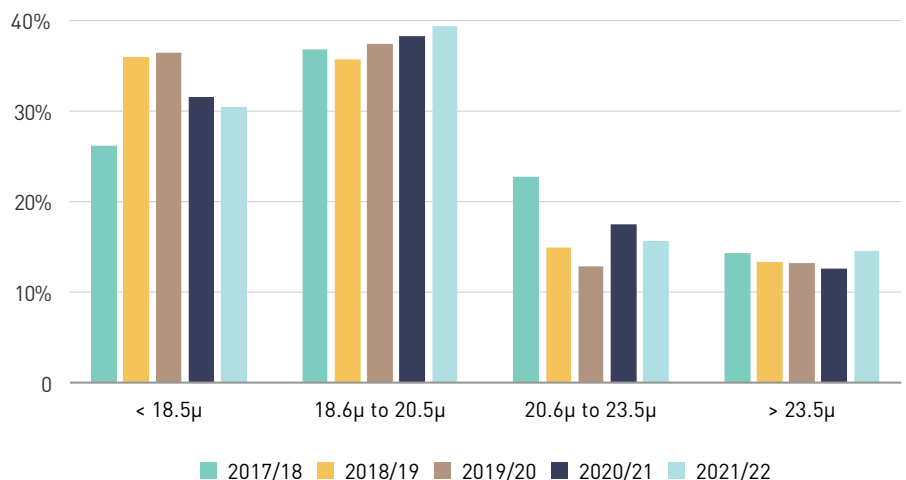
At auction, AWEX reports show that as at the end of week 19 (12th November) there have been 510,897 Australian grown bales sold at auction this season compared to 413,801 bales last season. This is an additional 97,096 bales, an increase of 23.5%.

Increase in fine wool Merino sector

Analysis of the micron profile data of wools tested so far this season shows the greatest increases within the fine wool Merino sector (18.6 to 20.5 micron) which is now 39.37% of the clip, and wools broader than 23.5 micron which are predominantly of the crossbred wool type.

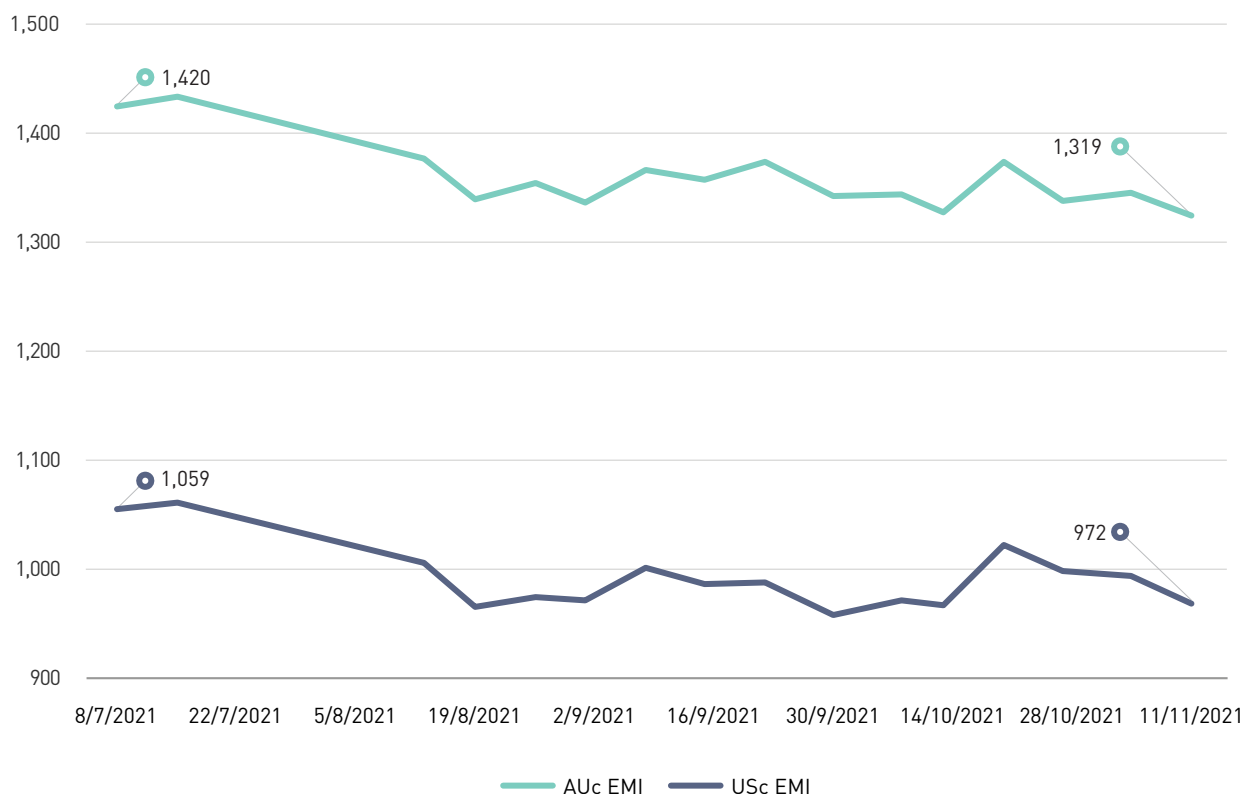
Somewhat surprisingly, the broad wool of mainly Merino types (20.6 to 23.5 micron) has shrunk to being 15.64% of the clip, despite the good seasonal conditions and breeding stock aiming at wool production traits.

FIGURE 2: TRENDS IN THE MICRON PROFILE OF TESTED DATA



nice report

FIGURE 3: EMI DURING 2021/22 SEASON



Prices relatively stable

Wool pricing has proven to be remarkably stable over the past few months, even though some strong gains and heavy losses have been recorded inter-week, and sometimes intra-week. Since the commencement of the 2021/22 selling season, the AUD EMI has lost 7.1% (101ac) and a similar 8.2% depreciation in the USD EMI has occurred. The season average EMI is currently sitting at a level of 1355ac/clean kg and 997usc/clean kg.

Prior to the negative COVID pandemic influences being felt across all global markets from March 2020 onwards, the AUD EMI was at 1,521ac and the USD EMI at 982usc. Compared to that level, current AUD wool values have depreciated by 13.3%.

Conversely, the US dollar value of wool currently is almost at pre-pandemic prices. With USD values considered by the trade in general a better barometer of the health of wool price, it can be considered that wool prices on average have recovered when using US dollar prices as a guide.

Electricity supply in China remains a significant hurdle for many Chinese

factories. Nearly all of China's Small to Medium sized Enterprises (SMEs) have been hit hard by that country's power shortage. Most wool textile mills fit that category. It is believed at least 67% of their provinces have been affected by the electricity-rationing measures. Power rationing is not a new phenomenon, but the increased frequency and magnitude of the cuts is new. China's SMEs account for more than 75% of jobs, up to 60% of GDP and a bit less than half of national tax revenue. They are vital drivers of China's economy. Almost all the textile companies using wool are situated on the East coast belt of mainland China.

Prices do remain on positive trends though in the medium term. The recovery part of the abnormal conditions that has prevailed over the past two years appears to be almost done, and retail markets now await the forecast consumer demand increases as all physical stores re-open fully.

Currently the wool prices appear to be stabilising around and comfortable at the 1000usc EMI mark, but better economic circumstances should see a positive change.

Colder than normal winter for Northern Hemisphere markets

The upcoming Northern Hemisphere winter is expected to be hit by a few different weather phenomena. La Nina-dominant patterns in the Pacific bring a forecast of cooler than normal weather across the U.S.'s Pacific Northwest and upper Great Plains. These formations also influence weather patterns all over the world, potentially chilling Japan and Korea.

In addition, an occurrence known as the Disrupted Polar Vortex is forecast to break free of the arctic and parts of Asia, Europe and North America will be blasted with bursts of cold.

With these historically cold weather forecasts across the Northern Hemisphere, consumers looking for warmth this winter will hopefully turn to warm wool products.

Average monthly EMI comparison

The chart opposite provides a snapshot of how the AWEX monthly Eastern Market Indicator (EMI) and a range of microns have performed for the past three months (August 2021 – October 2021) in Australian dollar terms compared with the previous five years August 2016 to July 2021 (circles) and the decade previous to that, August 2006 – July 2016 (squares).

While there had been a definite improvement in the EMI, and especially the finer microns, in the ten months following the low point in September 2020, there has been a slight easing of prices in the past three-month period.

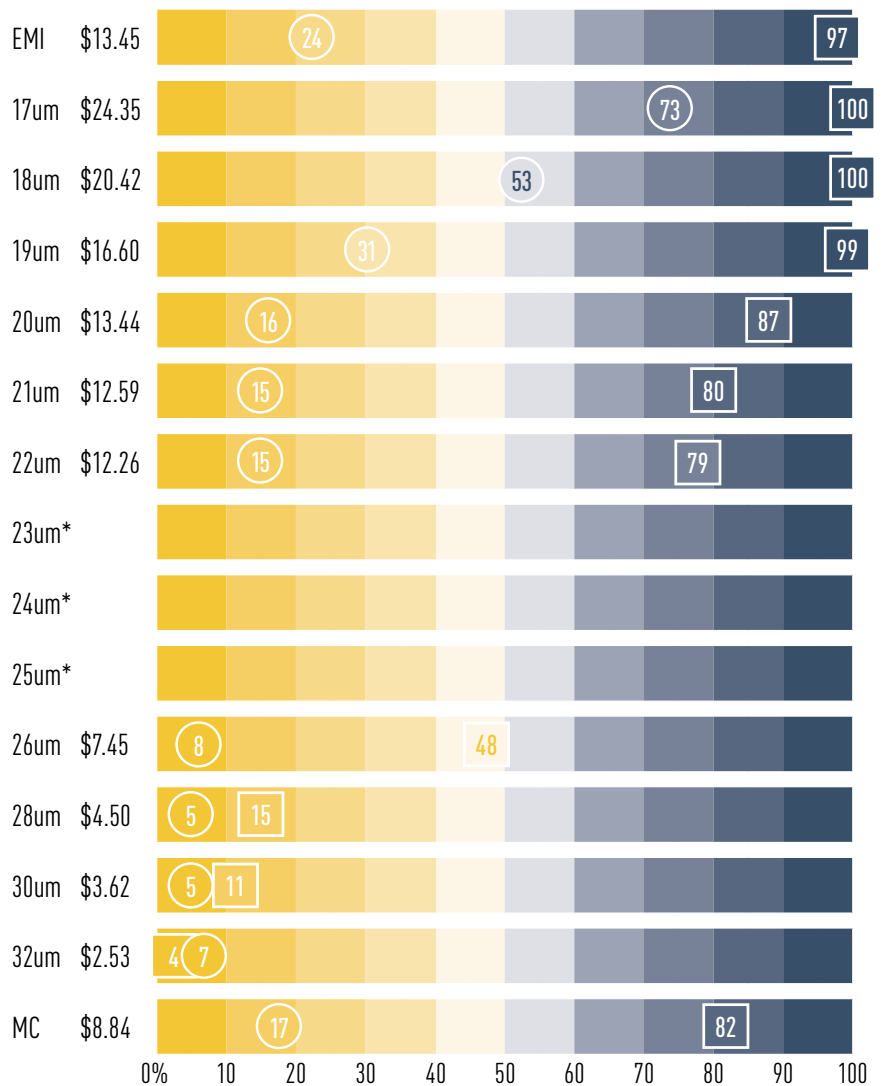
For the past three months, the monthly EMI averaged at \$13.45 which is a 39c fall from the average monthly EMI for the previous three months, and is tracking at the 24th percentile against the previous five-year monthly EMI. This means that in the previous five years the monthly EMI has recorded a lower price than the current \$13.45 (August 2021 – October 2021) for 24% of the time.

While the EMI is tracking at the 24th percentile over the previous five years, it is tracking at the 97th percentile when compared to the decade August 2006 – July 2016. This means the current EMI of \$13.45 (August 2021 – October 2021) is higher now than it was for 97% of that decade.

18 micron averaged at a monthly value of \$20.42 (53rd percentile for the previous five years and 100th percentile for the decade before that), 21 micron averaged at \$12.59 (15th percentile for the previous five years but 80th percentile for the decade before that), and 28 micron averaged at \$4.50 (5th percentile for the previous five years and 15th percentile for the decade before that).

For the past three months, Merino Cardings averaged at \$8.84, operating at the 17th percentile for the previous five years and at the 82nd percentile for the decade before that.

AVERAGE MONTHLY EMI FOR AUGUST 2021 – OCTOBER 2021 COMPARED WITH
 ● PREVIOUS 5 YEARS AUGUST 2016 – JULY 2021
 ■ THE DECADE AUGUST 2006 – JULY 2016



*insufficient data

Market intelligence at wool.com

An important part of AWI's Wool.com website is market intelligence information for woolgrowers.

As well as the Weekly Price Reports and Monthly Market Intelligence Reports, there is a graphical display of:

- Eastern Market Indicator – you can select to display AUD, USD, CNY or EUR.
- Offering – displays bales offered and bales sold.

- Currency movements – you can select to display AUD/USD, AUD/CNY or AUD/EUR.
- Forecast of bales sold – displays previous season, current season, current week and forecast.

For the first three categories above, you can select to display data from 3 months to 3 years ago.

AWI also continues to send wool prices

and market intelligence direct to about 5,000 woolgrowers' mobile phones. If you would like to subscribe to the free SMS service, visit www.wool.com/sms where you will be asked to input your name and the mobile phone number to receive the SMS. You can unsubscribe from the service at any time.

More information
www.wool.com/marketintel

Market insights

from Autumn in Europe

AWI Global Strategic Advisor Peter Ackroyd provides insights into the healthy market for knitwear and the prospects for the beleaguered formalwear and interiors sectors. Mr Ackroyd is a former President of the International Wool Textile Organisation and is Chief Operating Officer of the Campaign for Wool.

The months of September, October and November in the Northern Hemisphere have been consistently crucial for all in the wool textile manufacturing pipeline, from wool processing through to retail. These are the months when fashion magazines such as *Vogue*, both in print and online, expand to 'bumper issues' of up to 400 pages of advertising, advertorial and editorial.

Weekend newspapers, still the preferred medium of the spending classes, devote endless pages to highbrow fashion. Perhaps the leader in the English-speaking world is the *How to Spend It* glossy that intermittently drops out the *Financial Times*, published in London, New York, Tokyo and Hong Kong. Much to the delight of artisan style crossbred spinners, the September supplement's front cover featured grandfather and grandson in Fairisle sweaters.

Endless editorial over the last few weeks has been devoted to the anticipated post-lockdown return to the office and its sartorial implications after eighteen months of 'working' from home. Will this herald a gradual return of formalwear as wardrobes theoretically need urgent upgrades? Will this autumn see at least the beginning of a reversal of the misfortunes of the worsted sector, currently running at a totally unsustainable operational level of 30% to 40% of capacity?

Despite tiresome fashionista predictions of a flowery semi-androgynous casual future, early indications suggest something more positive is in the air as the 'new normal' sluggishly returns to the workplace. Nick Wheeler, the co-founder of Charles Tyrwhitt, a London based Jermyn Street men's wear retailer with 37 brick and mortar stores in the UK and USA, but with 70% of sales online, announced last month that sales of suits in the first two weeks of September had risen by +220%, a fact reported in the London *Daily Mail*

and several tabloid print and digital papers.

Speaking to some key players in the sector, the return to formality will be 'certain but selective', which means this autumn should see better, more expensive suits and jackets coming back into limited favour, as less wealthy consumers eschew any form of formal wear. This is good news for superfine woolgrowers, but less promising for mid micron producers, although 21 micron Merino lambswool fabric, spun and woven on the woollen system is having a particularly good autumn season, as the tweedy look in classic sports jacket designs complements the current boom in Merino and Shetland knitwear.

Abraham Moon, Johnstons of Elgin, Lovat Mill and Joshua Ellis, all specialist weavers on the woollen (as opposed to the worsted) system, report 'business back to normal' and in some cases better than 2019 levels. This is being sustained by strong demand for accessories such as capes, stoles, scarves, hats, gloves and blankets, a most welcome addition to the current tweedy look. It is worth noting that Moon and Johnstons have successfully moved into the interior business, using modified structures and finishes of the base cloths woven in their vertical woollen mills for apparel, a welcome boon in lockdown, as those 'working' from home tire of their surroundings.

The woollen look in knit and woven is set to stay for at least three more Northern Hemisphere winter seasons. Although this will not immediately correct the slump in crossbred prices across the world, the British Wool market is moving in an upward direction and the recent auction at the Marketing Board in Bradford cleared 1,192m kg, 99.1% of the offering. Prices were firmer at around £0.73 per kilo greasy and £1.058 clean.

More than 70% of British crossbred wool is destined for the carpet industry and twenty key wool carpet brands were at the



AWI Global Strategic Advisor,
Peter Ackroyd.

Harrogate Flooring Show in September, the first physical event in two years. Brintons, Adam, Ulster, Cavalier, Brockway, Headlam, Kingsmead, Manx Tomkinson and Hugh Mackay all report excellent domestic carpet business and are finally seeing the beginnings of a return to the all-important contract business which all but stopped some 18 months ago as hotels, entertainment, catering and transportation closed or dramatically slowed during the pandemic. The Campaign for Wool coordinated a section of the Harrogate event with a 'Back to Nature' theme in a central section of the particularly well attended show.

"Not until the contract business shows signs of significant growth will crossbred prices begin to return to levels acceptable to woolgrowers in UK, New Zealand and Australia," noted Danspin, one of the largest spinners in the sector based in central Denmark, with spinning mainly carried out in Estonia.

Australian woolgrowers will be heartened to hear of the strong seasonal return of lambswool in both wovens and knits. Hopefully current signs of a gradual return to formality, coupled with the reopening of offices across Europe, will herald a revival in the beleaguered suit business, a sector so important for the Merino sector.



WIN!!!

If you email or tag a photo that gets published in Readers' Photos, you'll receive from us a paperback copy of the Kondinin Group's 'The Story of Wool'.

Readers' Photos!

Have you got any interesting photos that you'd like to share with other readers of *Beyond the Bale*?

If so, please email the image and a brief description to the editor of *Beyond the Bale* Richard Smith at richard.smith@wool.com or you can tag us #beyondthebale on Instagram.



THE BLUEY GANG

Erin and Kaitlyn Rutledge of Woodstock in the central west of NSW, with their cousins Annabelle and Gemma Hackett, and pet lambs from 2021 autumn lambing. All the sheep are named and labelled: Bingo, Bentley, Bluey and Bandit, from the animated children's TV series Bluey.



BROLGAS TAKING FLIGHT

A pair of brolgas taking flight from amongst some rams at the Connewarran Merino Stud near Mortlake in the Western District of Victoria. Connewarran is a thriving Merino wool-growing property built by Richard and Jenny Weatherly and their son Hamish on respect for the land and its natural inhabitants. The Merinos at Connewarran happily share the land with a flourishing abundance of wildlife including a quarter of all bird species in Australia.



THE HIGH ROAD AND THE LOW ROAD

Faye Beswick sent in this photo of Irene Glover with her Merinos traversing the mountainside at The Springs in the Central Highlands of Tasmania.

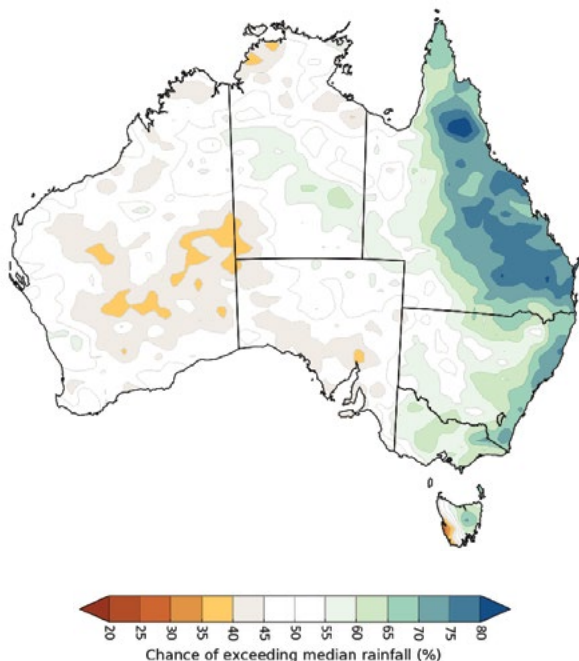


OUTBACK MUSTERING

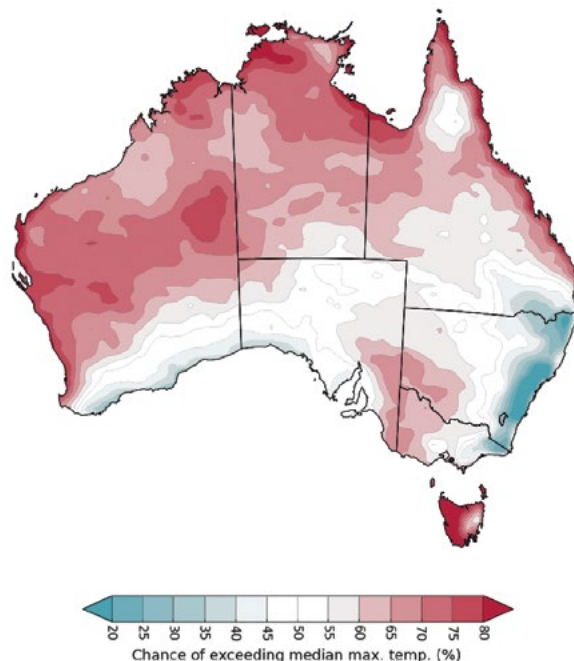
Jane Smith (@theshadybaker) lives on an outback NSW sheep station, baking and raising a family. Jane tagged this photo #beyondthebale on Instagram, saying: "Kids sitting on the tail of a mob of sheep, long may this tradition continue."

Seasonal conditions forecast

Chance of above median rainfall
December 2021 to February 2022



Chance of above median maximum temperature
December 2021 to February 2022



Source: © Commonwealth of Australia 2021, Bureau of Meteorology, issued 24 November 2021

New climate tools for farmers

The Bureau of Meteorology has issued new tools on its website that provide primary producers with access to information about potentially extreme climate conditions for their local area.

The user-friendly maps show the likelihood of the weather being:

- Unusually dry
- Unusually wet
- Unusually cool
- Unusually warm

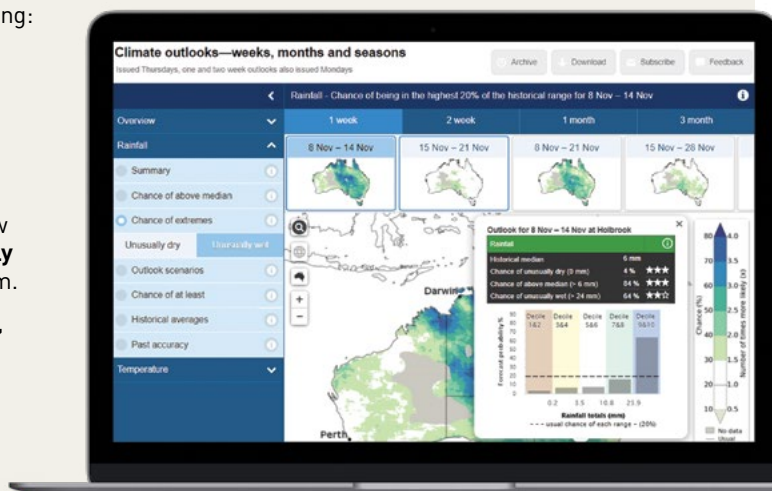
in the **weeks, months** and **seasons** ahead.

As well as providing a map for the whole of Australia, the new tool allows people to drill down and search for **specific, highly localised areas** so they can see what may be in store for them.

This new tool is part of the Forewarned is Forearmed project, a partnership between government, research and industry sectors, funded through the Rural R&D For Profit Program.

Minister for Agriculture David Littleproud says the new tools are in response to the increasing need for information about unseasonal and extreme weather events.

"Importantly, the maps have been tried and tested with farmers across Australia, who have found them helpful for anticipating climate conditions. They say the outlook maps will help them make decisions around purchasing and applying fertiliser, crop planning and stocking rates because they will have a better understanding of likely conditions in the coming months," he said.



View the new outlooks and features on the Bureau's website at www.bom.gov.au/climate/outlooks. Select the 'Chance of extremes' buttons in the left-hand menu bar to see the new outlook maps. Entering your town name using the search option, or clicking on your location on the map, will pop up additional climate outlook information.

Download the AWI Grower App

Easily access information for better decision making



Stay up-to-date with what's happening at AWI with the new AWI Grower App.

Get access to the latest weekly market reports, production forecasts, industry news, global marketing initiatives, research and more. A smartphone is all that's required – just scan the QR code on this page to download the App!

You can customise the App to prioritise the content you want to receive and, with continually updated and relevant content and functionality, the App is built to suit your needs.

The App complements AWI's other social media and digital communication channels that include the wool.com website, e-newsletters, The Yarn podcast, Facebook, Twitter, Instagram and YouTube.

Download the free AWI Grower App from the Apple App and Google Play stores now.

Download the App today



SCAN ME! 



wool.com