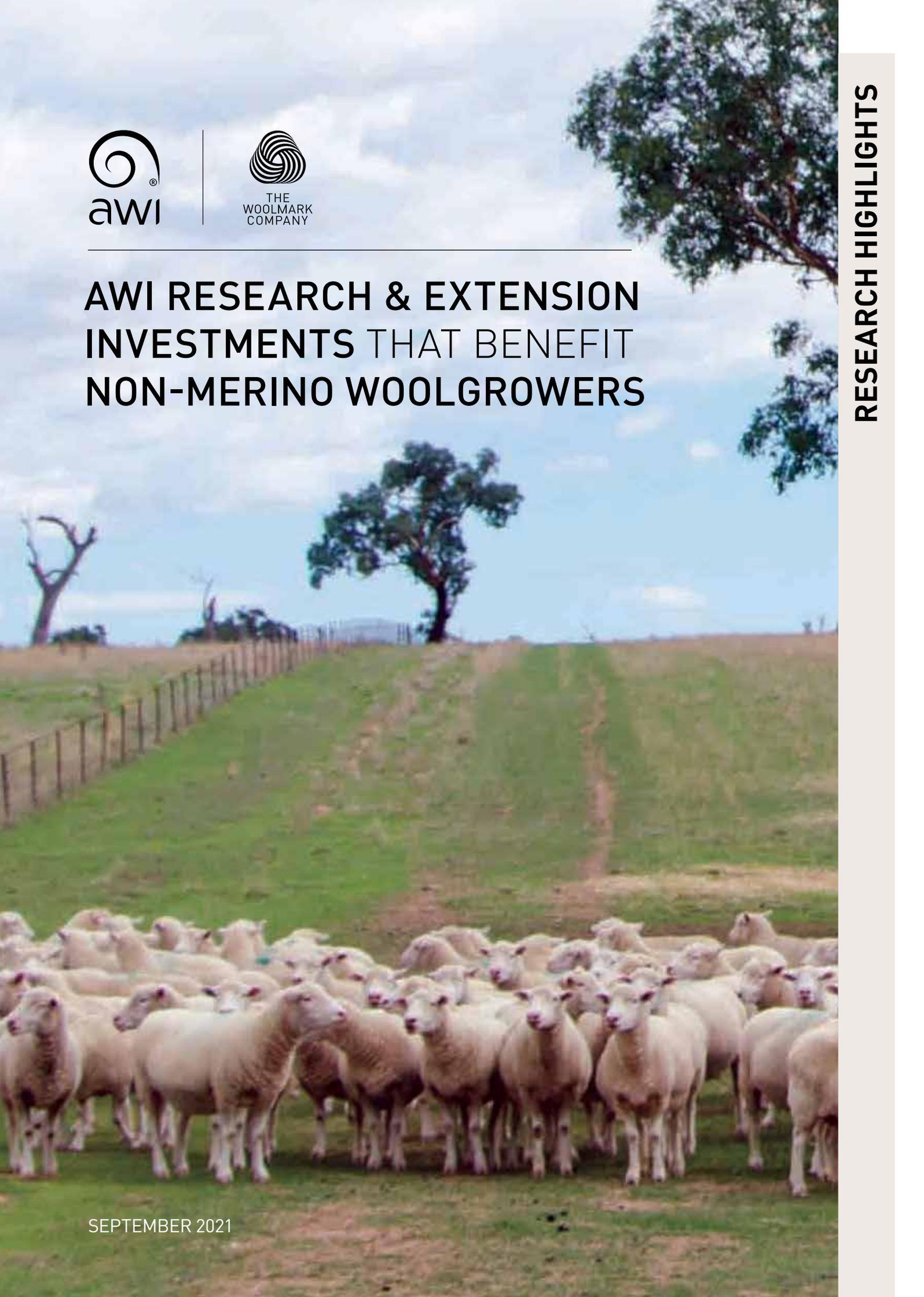




AWI RESEARCH & EXTENSION INVESTMENTS THAT BENEFIT NON-MERINO WOOLGROWERS





Most of AWI's on-farm R&D and extension investments benefit producers of broad wool just as much as producers of Merino wool.

This includes R&D into optimising sheep health and welfare, combatting wild dog and fox attacks, increasing the reproductive efficiency of ewes, funding of in-shed shearer and wool handler training, and harnessing opportunities for on-farm automation.

In addition, AWI delivers practical training programs through its extension networks in each state to increase producers' adoption of best practice on-farm production and management. AWI also provides timely market intelligence to producers, holds many face-to-face industry events, and runs projects to encourage the next generation into the industry.

This document contains a snapshot of the some of these areas of investment.

**DID
YOU
KNOW?**

**Currently, 16.0% of
the Australian wool
clip is broader than
24.5 micron.**



Photo: Grant Faint

Sheep health & welfare

AWI investments are aimed at improving the lifetime welfare of producers' sheep, whatever the sheep type, environment or enterprise mix.

Lice and worm management – ParaBoss is a suite of three web-based products (WormBoss, LiceBoss plus FlyBoss) containing detailed management information to help sheep producers manage risks related to worms, lice and flies.

Analgesics and anaesthetics – The development of effective and practical anaesthetic and analgesic treatments for lambs has been a critical advance in alleviating the distress lambs experience with husbandry procedures such as tail docking and castration.

Post-farm biosecurity – AWI helps ensure the Australian wool industry has effective plans and tools in place post-farmgate to minimise the potential impacts on the selling and trade of wool should an Emergency Animal Disease occur in Australia.

Reproduction and nutrition

AWI research is focused on the main factors influencing the productivity of sheep reproduction, including producer education and best practice management, ewe nutrition and supplementary feeding, mob dynamics and climate variability on sheep reproductive health.

Lifetime Ewe Management – This course provides hands-on on-farm training over a year, for small groups of producers (about 5-7) in the management and nutrition of breeding ewes to maximise reproduction rates and lamb and ewe survival.

RAMping Up Repro – This workshop is designed to give producers the skills to improve ram health, performance and longevity in their sheep breeding enterprises.

Feed On Offer library – AWI provides a web-based photo library of Feed On Offer (FOO) standards contains 650 images to enable producers to estimate the FOO and nutritive value of grazed pastures, by comparing their own pastures to reference photos.

Dryland legume pasture systems – AWI is working in a collaborative project to develop recently discovered pasture legumes together with innovative management techniques to improve profitability for mixed farms in the low and medium rainfall areas of WA, SA, Victoria and southern NSW.



Agri-technology

AWI invests in trials and research within several areas of agri-technology. The focus is on automated data collection and analysis systems, fully or semi-autonomous wool harvesting, novel applications for technology within the wool industry and digital awareness and adoption.

AWI Smart Tags – Automated data collection and analysis systems, such as AWI Smart Tags, can provide woolgrowers with real time information regarding their flock and property operations, enabling them to make more informed decisions to increase their enterprise's profitability.

Farmers 2 Founders – Technology is rapidly changing many areas of agriculture; through the Farmers 2 Founders program AWI aims to ensure Australian woolgrowers are on the front foot to take advantage of the latest opportunities.

Mechatronics – AWI is investigating how mechatronics (a combination of mechanics and electronics) and especially robotics and automation can be applied to the wool harvesting industry.

Vertebrate pests

AWI works with producers and other stakeholders to help achieve sustained control of wild dogs and other vertebrate pests.

Wild dogs, foxes and pigs – AWI invests in a comprehensive suite of projects to help prevent attacks and sheep loss. Notably, AWI funds wild dog coordinators to help landholders and communities work together to combat wild dog attacks; they also help coordinate on-ground wild dog control activities.

Rabbits – AWI invests in rabbit biocontrol, most recently in trying to get an RHDV2 biocontrol agent registered and the development of a vaccine for RHDV2 (so commercial and pet rabbits are protected when the biocontrol agent is released).



Wool harvesting

AWI funding of shearer and wool handler training ultimately aims to improve returns to producers by increasing the value and quality of their wool clip.

Training – AWI funds hands-on practical in-shed 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. AWI has also produced a series of training videos to help advance the skills of novice, improver and professional shearers and wool handlers.

Shearing shed safety program – The *SafeSheds* program, which includes a best practice guide and checklists, is available to producers to assess and improve safety in their shearing sheds, improve working conditions and comply with modern workplace standards.

AWI shearing shed design – Working with shed staff, contractors and woolgrowers, AWI designed a shearing shed which addresses worker safety and animal welfare concerns, while also achieving improved shed efficiency and wool quality. The designs of the shed are available from AWI free to all producers.

Modular sheep delivery unit – A mechanical system is under development that delivers the sheep to the shearer, thereby eliminating the catch and drag from the pen. This minimises the chance of injury to the shearer and the sheep whilst also maximising productivity with significantly reduced handling times.

Genetics

AWI aims to assist producers optimise their rate of genetic gain in their chosen breeding objective. While LAMBPLAN's terminal and maternal benchmarking service is most relevant to producers with a prime lamb breed focus, AWI continues to focus on a range of genetic projects that are relevant to all sheep producers.

Non-invasive cervical artificial insemination – With increasing concern about invasive laparoscopic AI and use of an animal-based cycling product PMSG, AWI funded a five-year \$1 million project with the University of Sydney seeking to solve the low conception rates using frozen/thawed semen by the non-invasive cervical AI method. The project isolated three proteins that are impacted on freezing and thawing that reduces the 70% conceptions gained when using fresh semen by cervical AI compared to the 20% conceptions using frozen/thawed semen. Further work is continuing in the UK and Europe and more work in Australia is planned when funds are available.

Sexed semen – Two recent projects have improved the semen diluents that better allow the semen to be 'drafted' into male and female sperm. This service is now available through Total Livestock Genetics. To date this has been adopted more by prime lamb breeders as they already have sufficient ewes and are looking to breed and sell more males.

Support for Elmore Ewe Trial – The Elmore Ewe Trial has compared a range of sire and dam types, including (1) Border Leicester x Merino Cross, (2) Multibreed x Merino Cross, (3) Composites and three Merino types, (4) Loddon Valley Stud Merinos, (5) Centre Plus Merinos, and (6) Leahcim Merinos. AWI assisted with the reproduction analysis of the trial and the results are on AWI's website and the Elmore Field Days website.

Extension, education and leadership

AWI aims to help improve the engagement and motivation of producers, especially young people, in the industry, thereby developing and retaining skills the industry needs to be innovative in response to new challenges.

AWI extension networks – Through the AWI-supported networks, which are present in each state, AWI extends its R&D and training to producers across Australia, delivering localised industry information and events, and ultimately achieving measurable adoption and practice change. The networks are Sheep Connect NSW, Sheep Connect SA, Sheep Connect Tasmania, BESTWOOL/BESTLAMB (Vic), The Sheep's Back (WA) and Leading Sheep (Qld).

Making More From Sheep – This best practice package of information and tools for Australian sheep producers contains the very best information on sheep and wool production.

Young producer initiatives – AWI supports several initiatives including the Breeding Leadership course, Nuffield Farming Scholarships, AgriFutures Horizon scholarships, Science and Innovation Awards for Young People in Agriculture, Hay Inc rural traineeship program and the Young Farming Champions program, amongst others.

Market intelligence and communication

Market intelligence – AWI disseminates a range of market intelligence information via various channels including: daily wool market reports available via SMS, weekly wool market reports and prices via email, monthly market intelligence reports, market intelligence on Wool.com, and Australian Wool Production Forecasting Committee Reports.

Communication – Producers can keep up to date via regular communications from AWI: *Beyond the Bale* quarterly magazine, *The Broader View* (for non-Merino producers), AWI Grower App, *The Yarn* weekly podcast, Woolgrower monthly e-newsletter, Wool.com website, social media (Facebook, Twitter, Instagram, YouTube) and in person at the many sheep and wool events that AWI attends.

Consultation – AWI has two forums through which it engages with woolgrower representative bodies. The AWI Woolgrower Industry Consultation Panel (WICP) comprises a core group of members from seven national woolgrower organisations, including a broad wool representative. The AWI Woolgrower Consultation Group (WCG) is a broader group comprising 28 representatives of state and regional production-based woolgrower groups, as well as the members of the WICP.

MORE INFORMATION: www.wool.com



What about AWI marketing broad wool?

AWI markets Australian wool of all microns, including the broader wools.

Projects such as the Campaign for Wool have been active in reconnecting consumers to the multitude of wool's uses including hardwearing interior products for the home as well as apparel and accessory products. Similarly, AWI's Woolmark Learning Centre and Learn About Wool education initiatives provide resources to students and textile professionals about the broader as well as finer microns.

AWI is also working to ensure that European Union (EU) policy makers rate wool's environmental credentials appropriately in its Product Environmental Footprinting (PEF) methodology, to prevent the introduction of a poor environmental score for wool on clothing labels across this very important market for Australian wool.

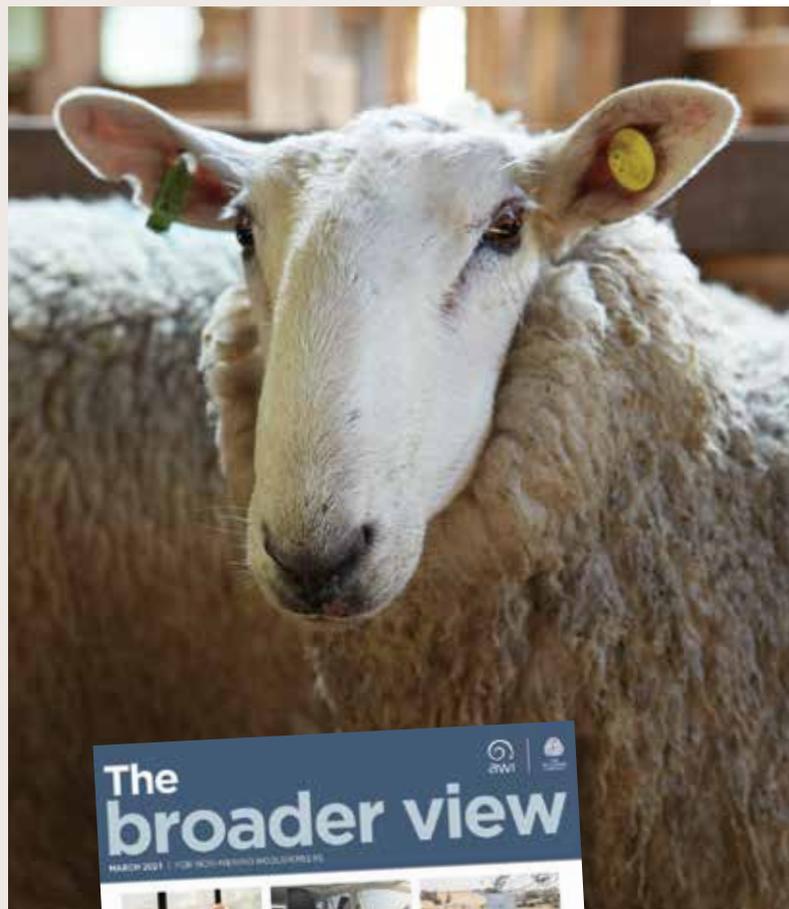
Many Woolmark licensees produce products made from broad wool and use the Woolmark logo in their marketing activities. For instance, there are more than 130 Woolmark licensees worldwide that are bedding companies that market their wool products with the help of the Woolmark brand. Similarly, there are a number of Woolmark licensees that manufacture and market wool carpets and we are also starting to see an increase in the use of Woolmark-certified car interiors.

AWI's promotion of all Australian wool, irrespective of the micron, and the Woolmark brand is beneficial to all wool including broader wools.

The new 10-year strategy for Australian woolgrowers, 'Wool 2030', which was developed following extensive consultation, includes activities to "develop new products, for wools of all microns, that build on wool's strengths, in conjunction with commercial partners" and "grow the presence of Australian wool of all microns in markets (geographical and by segment) that deliver the highest returns".

MORE INFORMATION

Read the 2021 edition of AWI's *The Broader View* at www.wool.com/broaderview2021





WOOL.COM