

2023-24

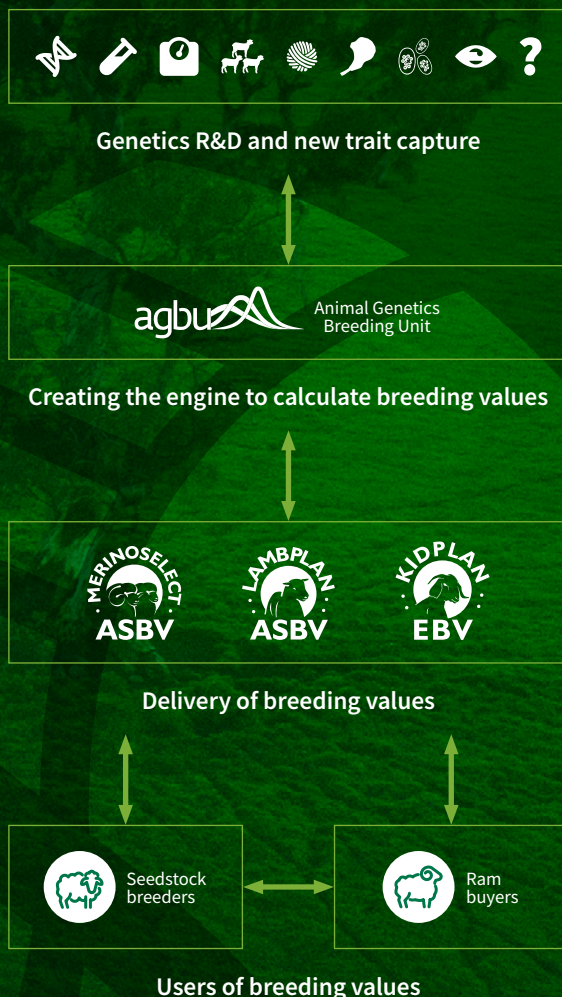
# Sheep Genetics Annual Outcomes Report

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Sheep Genetics provides genetic evaluation services for Australia's sheep and goat industries. It assists producers in breeding or purchasing animals by offering Australian Sheep Breeding Values (ASBVs) through LAMBPLAN and MERINOSELECT, as well as Estimated Breeding Values (EBVs) via KIDPLAN. Since its establishment in 2005, this service, operated by Meat & Livestock Australia, has been providing tools and information to help improve animal breeding.



For more information visit:  
[sheepgenetics.org.au](http://sheepgenetics.org.au)

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# Sheep Genetics Manager's report

**I am proud to present you with the annual MLA *Sheep Genetics Annual Outcomes Report*. The report outlines the breadth of activities delivered by the Sheep Genetics team and our partners in 2023–24.**

Sheep Genetics has continued to work closely with ram producers to increase the number of animals in the genetic evaluation whilst also driving genetic progress. Genetic progress has continued to increase in 2023–24 with an average of 4% genetic gain achieved across the three major evaluations. This is a testament to our ram breeding clients who have continued to make genetic progress despite increasingly complex breeding objectives. An enabler of this has been the world-leading evaluations delivered by Sheep Genetics and driven by the research and development (R&D) at the Animal Genetics and Breeding Unit (AGBU) at the University of New England. Another key enabler

has been the adoption of genomic testing, allowing genetic progress to be made for traits that are hard-to-measure, or are recorded later in life such as eating quality, adult fleece and reproduction. 2023–24 was another record year for genotyping volume, with 250,000 new genotypes being submitted into the database.

Key highlights for the program this year have included the introduction of the Sheep Genetics *Ewe-niquely Genetics* podcast, launched in April 2024, which coincided with the annual Analysis Enhancements for 2024. It is exciting to see the launch of the final versions of the MERINOSELECT indexes as part of this year's Analysis Enhancements. These indexes include new welfare

and sustainability traits whilst still enabling genetic progress for key production traits.

The Sheep Genetics team delivered a range of training, workshops and information sessions across the country, reaching more than 1,400 direct Sheep Genetics clients and commercial sheep producers.

Thank you to everyone who has been involved with the Sheep Genetics program over the last 12 months. The team and I look forward to working with you all during 2024–25, which is set to be a special year as we celebrate 20 years of Sheep Genetics.

**Peta Bradley**

**Manager – Sheep Genetics**

**Genetic progress has continued to increase in 2023–24 with an average of 4% genetic gain achieved across the three major evaluations.**

# 2023–24 Sheep Genetics highlights



**4.1M**  
animals in  
the database



**2.8M**  
animals in  
the database



**3.9M**  
animals in  
the database



**4%** average  
genetic gain  
across the three main analyses



**30K** animals  
evaluated  
for KIDPLAN members



**>1,400** seedstock and  
commercial  
producers **attended events** hosted/  
supported by Sheep Genetics



**19%** reduction in  
genomic pedigree  
inconsistencies across evaluations



**113%** increase  
in knowledge for MateSel  
training attendees

**2/3** of the data provided  
to Sheep Genetics  
was submitted  
through the **self-managed portal**



**66%** of active  
flocks  
impacted by service provider  
training – **31 attendees**,  
representing **314 flocks**



The launch of Ewe-niquely  
Genetics – a Sheep Genetics  
podcast, debuted in the  
**top 15** science podcasts  
on Spotify

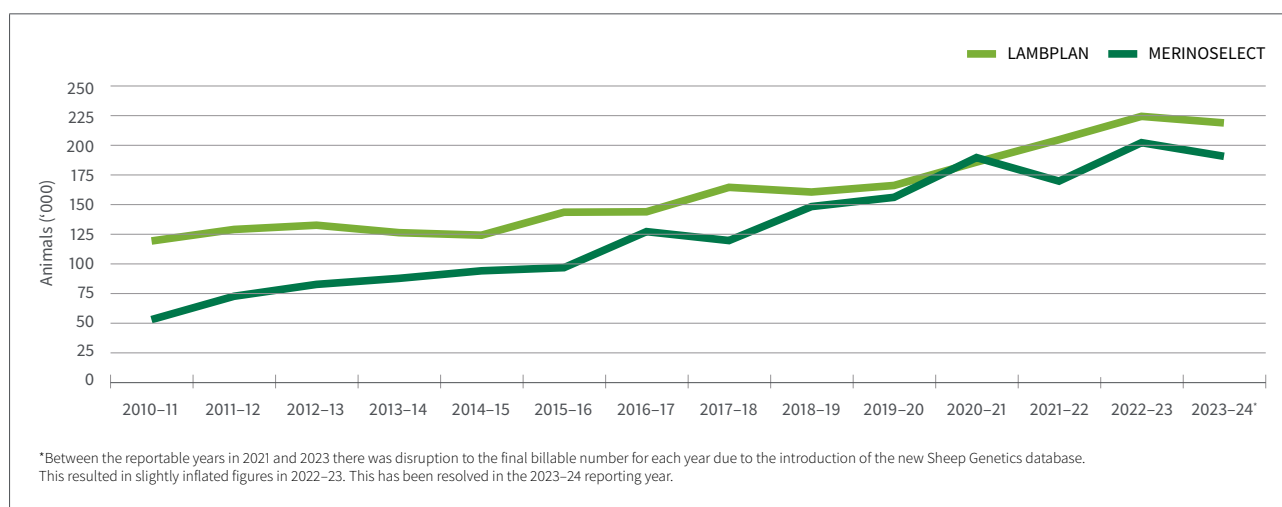
# Sheep Genetics analyses

## Membership

Twice a month, Sheep Genetics runs large scale genetic evaluations which involve the inclusion of pedigree, on-farm measurements, genotypes and research information to generate Australian Sheep Breeding Values (ASBVs) across a suite of trait groups.

At the end of June 2024, the MERINOSELECT evaluation included 4.1 million animals, while LAMBPLAN Terminal and Maternal evaluations included 3.9 million and 2.8 million animals, respectively.

**Figure 1: LAMBPLAN and MERINOSELECT animals (FY 2011–FY 2024\*)**



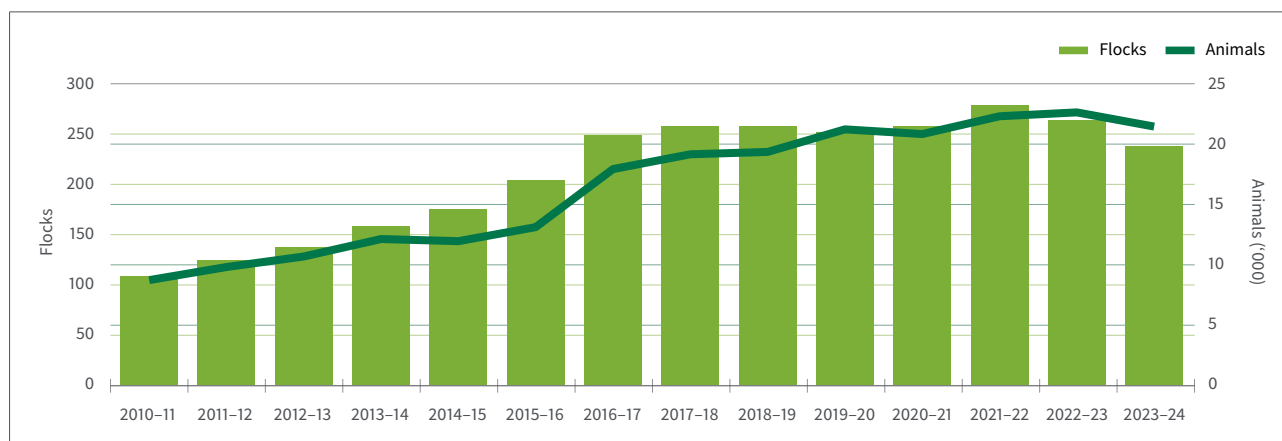
The Sheep Genetics analysis, while predominately consisting of Australian flocks, also has a strong international membership. These international flocks use Australian genetics so they are genetically linked in the Sheep Genetics evaluations (Figure 2).

Sheep Genetics also provides routine analysis for the National Sheep Improvement Program (NSIP) in the United States of America. This provides Estimated Breeding Values (EBVs) for 10 breeds as part of independent evaluations for NSIP (Figure 3).

**Figure 2: Number of flocks by country 2023-24**

Region	Number of flocks
Australia	992
New Zealand	34
South America	7
Asia	6

**Figure 3: Number of flocks and animals submitted as part of the NSIP independent evaluations (FY 2011–FY 2024)**



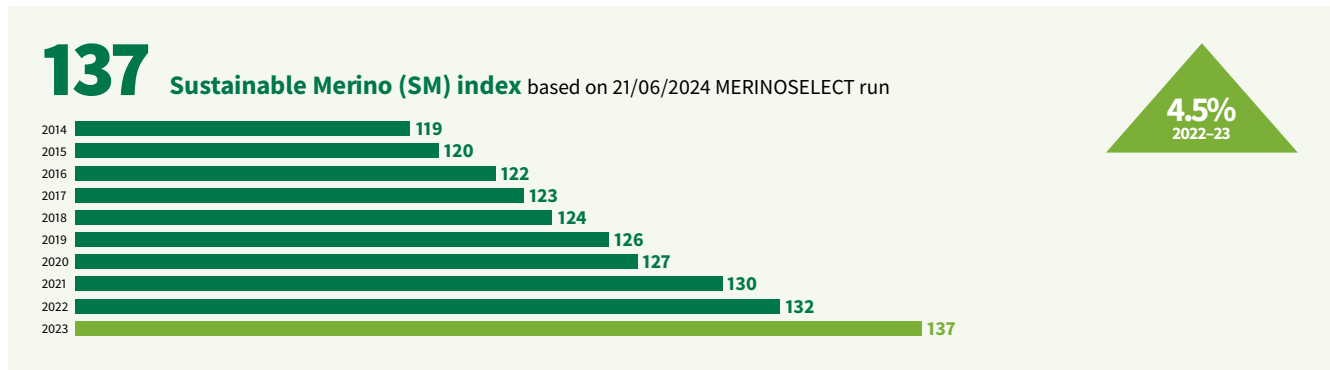
## Genetic trends

Selection indexes combine several important production traits into a single number and are an important tool to drive genetic improvement where there are a range of traits of economic or functional importance. Index trends are used as a gauge of the genetic gain industry is making.

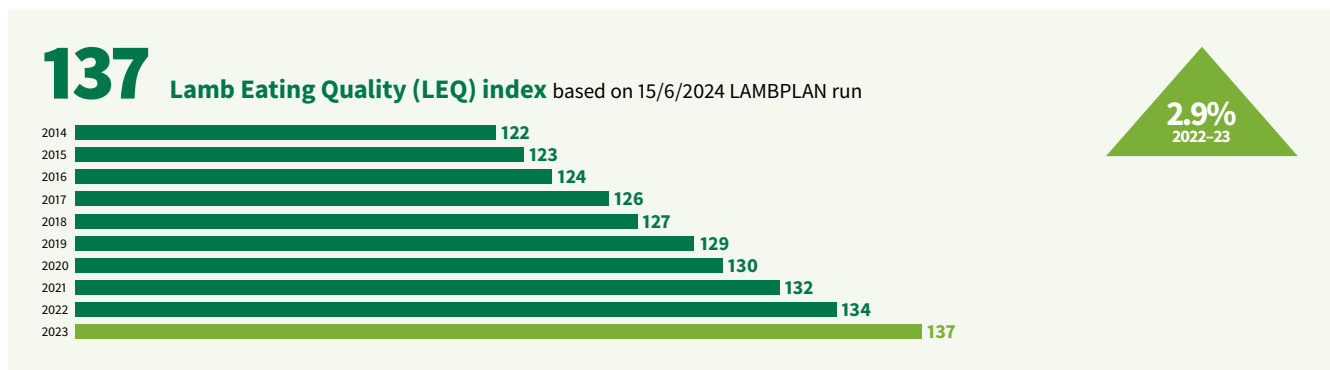
In 2023–24, all reported indexes increased across all major analyses. There was also notable, continued improvement in:

- reproduction for both Merinos and Maternal breeds, assisted by the introduction of the component reproduction traits and weaning rate (WR) in recent years (**Figures 4 and 6**)
- a plateau in the adult weight (AWT) genetic trend for Maternal breeds whilst early growth and reproduction continue to improve (**Figure 6**)
- early breech wrinkle (EBWR) for Merinos, which has additionally been included in all the new MERINOSELECT indexes (**Figure 4**)
- eating quality traits and lean meat yield (LMY) for Terminal breeds (**Figure 5**).

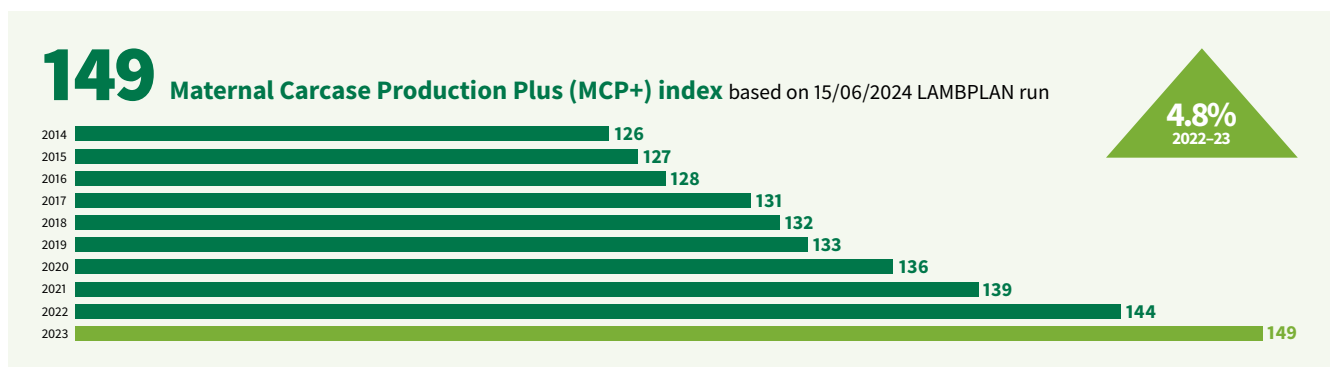
**Figure 4:** Merino indexes (2014–23)



**Figure 5:** Terminal indexes (2014–23)



**Figure 6:** Maternal indexes (2014–23)

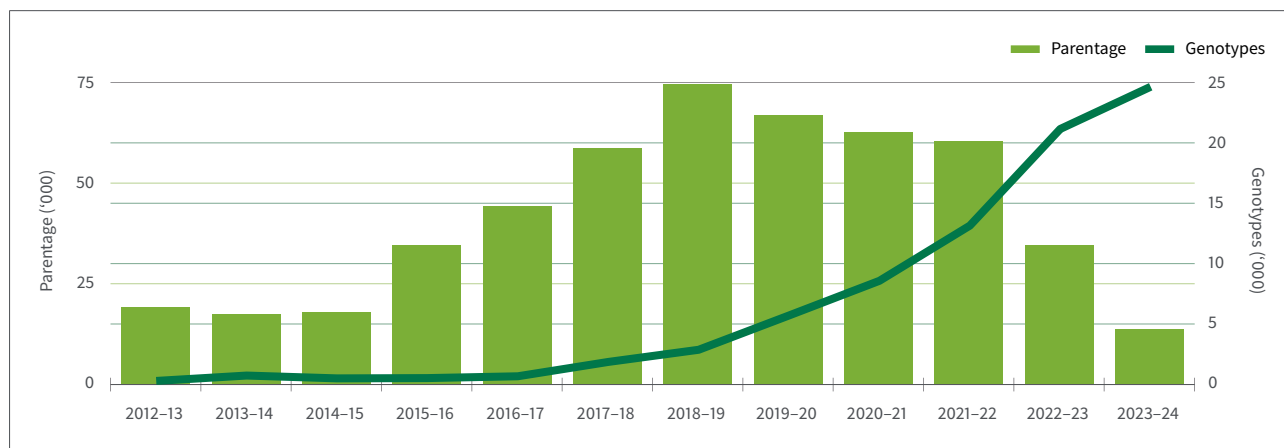


## Genotyping

Sheep Genetics, through the service provider, AGBU, maintains and delivers the Sheep Genomics database. This database is responsible for the storage and processing of three genomic services used by sheep producers:

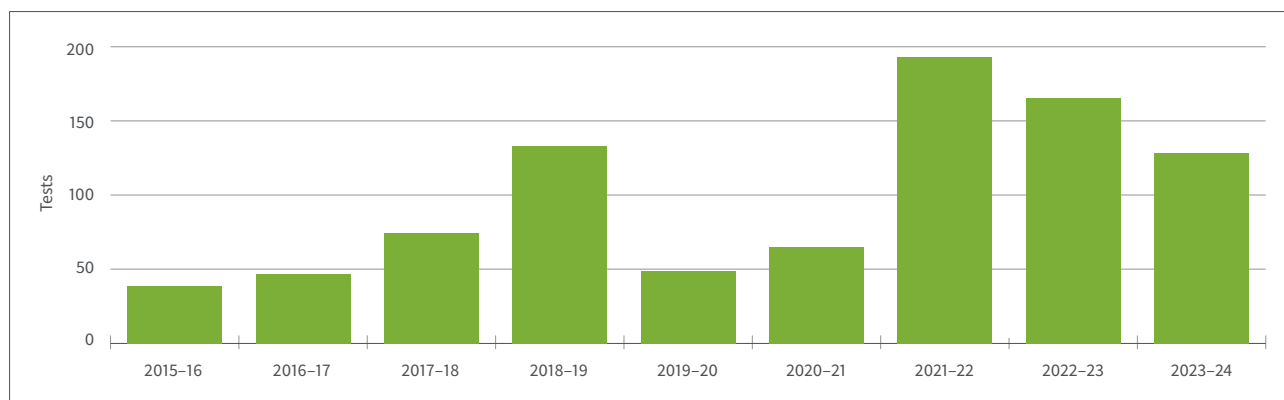
- DNA parentage
- Genotyping for LAMBPLAN and MERINOSELECT
- Flock Profile.

**Figure 7:** Number of genomic samples processed (FY13–FY24)



Sheep Genetics delivers Flock Profile, a genomic tool available for commercial Merino producers. It provides a set of ASBVs which reflect the average genetic merit of their flock. This can then be used to inform ram selection, ensuring producers are purchasing rams that will meet their breeding objective.

**Figure 8:** Number of Flock Profile tests (FY16–FY24)



# Sheep Genetics engagement

Throughout 2023–24 the Sheep Genetics team engaged with more than 1,400 seedstock and commercial producers at events supported or hosted by Sheep Genetics.

During this year, a renewed Sheep Genetics Engagement Strategy was created and implemented to better plan how Sheep Genetics engages with users and supports events.

The Engagement Strategy is focused on tailored communication between breeders, service providers and the Sheep Genetics team. This has resulted in engagement with a greater portion of the Sheep Genetics' client base and has supported other industry events.

Since January 2024, the Development Officer team has worked with more than 680 individual flocks and their service providers (January–June 2024) (Figure 9). This represents approximately 66% of all active flocks.

Engagement activities included:

- working with industry service providers who assist and communicate with industry about genetics
- interacting directly with Sheep Genetics' clients
- working with the upcoming and next generation of Agricultural students
- conducting industry presentations and seminars, workshops and conferences around Australia.

**Figure 9:** Combined number of clients who interacted with the Development Officer team during the Engagement Strategy (January–June 2024)

Month	Clients	Month	Clients
January	186	April	166
February	247	May	255
March	173	June	283



## The Sheep Genetics Engagement Strategy

More personalised breeder visits and online one-on-ones – request a meeting



Release of Ewe-niquely Genetics, a Sheep Genetics podcast – listen on Spotify



Supporting group-led workshops

Option to request a Sheep Genetics speaker to attend events – request a speaker



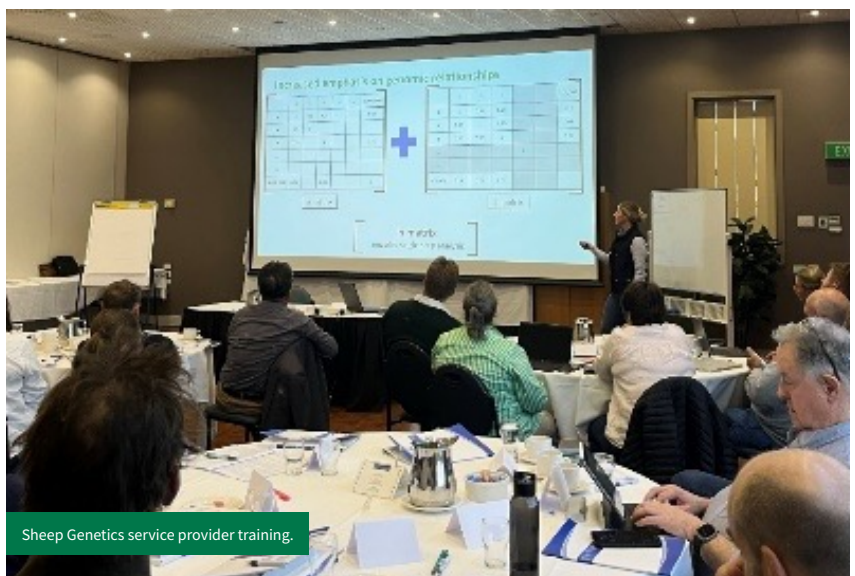


**Figure 10:** A selection of Sheep Genetics events and their impact (2023–24)

<b>Sheep Genetics Carcase Scanner Accreditation</b>		March 2024 – Wagga Wagga, NSW
<ul style="list-style-type: none"> <li>■ Six (of the 14 accredited) Sheep Genetics scanners</li> <li>■ ~166,000 animals</li> <li>■ ~375 flocks</li> </ul>	This accreditation is part of the Sheep Genetics data quality assurance protocols. All fat and muscle scans informing ASBVs must be measured by an accredited scanner. Each Sheep Genetics accredited scanner must pass accreditation every second year.	
<b>Sheep Genetics Service Provider workshop</b>		May 2024 – Melbourne, Victoria
<ul style="list-style-type: none"> <li>■ 31 attendees</li> <li>■ 314 flocks</li> </ul>	This annual workshop is a great information and networking event in the Sheep Genetics calendar. Service providers ranging from data managers to genetic advisors to software and genomic providers all gather to get the latest updates, discuss prominent issues and learn from each other and the AGBU and Sheep Genetics presenters about Sheep Genetics analysis.	
<b>Association for the Advancement of Animal Breeding and Genetics (AAABG)</b>		July 2023 – Perth, WA
<ul style="list-style-type: none"> <li>■ ~200 breeders, researchers and industry representatives</li> </ul>	AAABG held its 25 <sup>th</sup> conference in July 2023. This is a conference attended by research scientists, livestock breeders and other service providers to the animal breeding industries. Held over three days, scientists presented their latest research in the breeding and genetics fields, which spans across many production species and countries from around the world. Sheep Genetics was in attendance to stay up-to-date with the research taking place in the industry, and to engage with Sheep Genetics’ clients from WA. The AGBU sheep researchers and Sheep Genetics team published almost 20% of the total number of animal breeding and genetics conference papers (accounting for 70% of the sheep specific research presented).	
<b>MLA Updates</b>		November 2023 – Bendigo, Victoria
<ul style="list-style-type: none"> <li>■ ~400 producers, seedstock breeders and industry representatives</li> </ul>	<p>Sheep Genetics and Livestock Genetics representatives attended and ran the genetics display for the MLA Updates event in Bendigo. This year’s theme was ‘Sustainability from paddock to plate’ with the display highlighting how genetics play a crucial role in sustainability through the supply chain.</p> <p>The genetics display showcased ASBVs, EBVs, commercial tools such as Flock Profiles, the progress of research projects including shedding and methane capture – which were all highlighted by the sheep and cattle on display. Resources were available for those in attendance to take home, encouraging better understanding and insights into how to achieve more genetic gain from their flock or herd.</p>	



Sheep Genetics Carcase Scanner Accreditation.

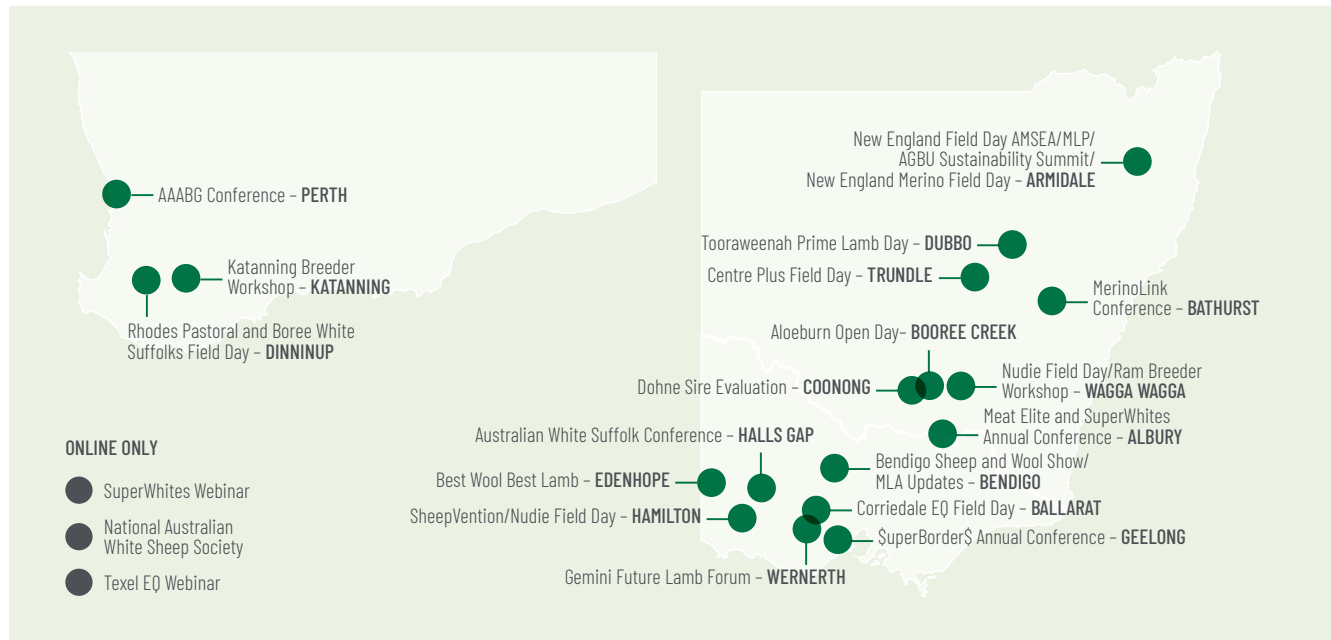


Sheep Genetics service provider training.

## Around the grounds

Sheep Genetics staff are heavily involved with and support a number of events across the industry each year (Figure 11). These include field days, opens days, conferences, workshops and more. They are a great opportunity to catch up face-to-face with clients and discuss Sheep Genetics updates and breeding programs.

**Figure 11:** Sheep Genetics hosted/supported events (2023–24)



## The next generation

Sheep Genetics is involved in several programs fostering an interest in genetics and genetic selection in the next generation. This year saw Sheep Genetics staff members engage with students from the early years of high school up tertiary education.

Having an understanding of genetics as they enter the workforce is becoming increasingly important to industry graduates. Sheep Genetics met this need by conducting guest lectures to agriculture and science students at the invitation of the University of New England, Charles Sturt University and Marcus Oldham.

Sheep Genetics was also invited to participate in a showcase of agricultural career opportunities through the University of New England's Farming Futures school program. Aimed at high school students with an interest in science and agriculture, this showcase provided students with a taste of different careers in Australian agriculture. Students gained a better understanding of how genetics tie in with the entire agricultural sector from sustainability to adoption, research and technology, markets and more.



## Industry training

Sheep Genetics offers a number of training opportunities, information webinars and resources each year to assist clients to improve their genetic gain year-on-year.

### New member workshops

New member workshops aim to provide knowledge about the steps involved in collecting and submitting data to Sheep Genetics, as well as how to interpret and use ASBVs in their selection decisions to drive genetic merit. This includes what information is used to calculate ASBVs (pedigree, fixed effects, trait measurements, groups etc.) and how best to record that data, for different management systems. New member workshops are run online, once a month, and are free for all members alike to join and learn how to better implement performance recording and ASBV use.



## MateSel

MateSel is a very powerful breeding tool designed for increasing genetic gain while managing co-ancestry and inbreeding.

To receive access to the program, breeders undertake two training sessions and need to pass an assessment.

**Figure 12:** Number of MateSel runs (August 2023–June 2024)

Month	Runs	Month	Runs	Month	Runs	Month	Runs
Aug 23	1	Nov 23	46	Feb 24	89	May 24	7
Sep 23	4	Dec 23	47	Mar 24	49	Jun 24	3
Oct 23	37	Jan 24	101	Apr 24	23		

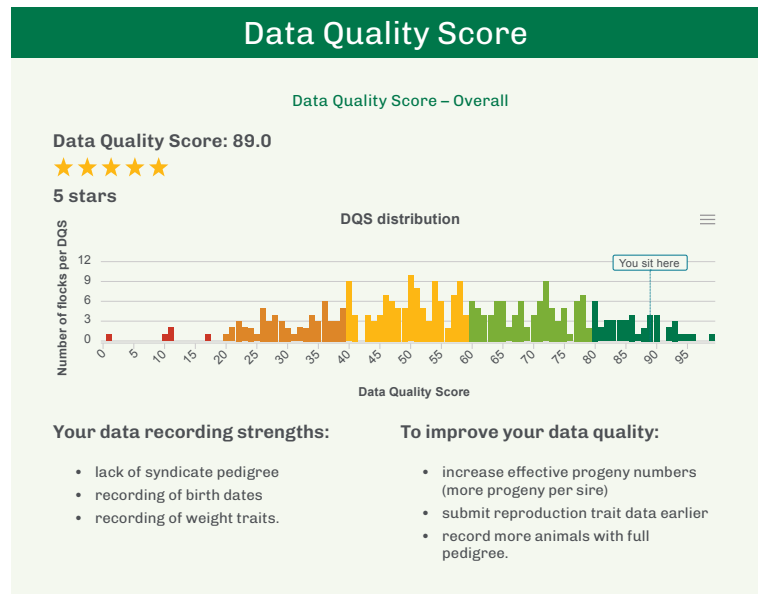


# Achievements in data quality

Data quality is the cornerstone of Sheep Genetics' evaluations. Optimal data quality is vital in enhancing the reliability of ASBVs to make accurate selection decisions and therefore maximise genetic gain. Breeders have had access to the Data Quality Score (DQS) report since 2022. This report provides insights into the overall quality of a flock's data and is a useful tool for evaluating and improving data collection (Figure 13). The report provides a single combined score for the flock, evaluating data from the last five years. A numeric and star rating are provided, as well as a distribution graph which highlights where flocks sit compared to the rest of the analysis.

Sheep Genetics recognised the flocks that had 5-star Data Quality Scores in December 2023 and again in June 2024 with a data quality award. These flocks received a certificate acknowledging their hard work and dedication to collecting and submitting high quality data.

Figure 13: Example Data Quality Score (DQS) report



**110**

5-star flocks recognised (Dec 23)



**136**

flocks recognised (Jun 24)



**99**

flocks maintained 5 star DQS





### Data Quality Improvement program

In order to help improve the overall data quality of the evaluation as well as to highlight some important and impactful exclusions that were occurring across flocks, the Development Officers started working with producers in a targeted way in late 2023 to improve overall data quality.

This involved contacting producers and their service providers whose flocks had a large number of exclusions, updating and creating resources to better understand the impact of these, and helping producers to correct these exclusions.

Key topics have included:

- updating genomic pedigree inconsistencies where applicable
- updating pedigree exclusions
- identifying orphan genotypes (genotypes that existed but were not matched to a Sheep Genetics ID)
- accredited scanner numbers missing on fat and muscle scans.

The Data Quality Improvement program came about after a pattern of exclusions impacted ASBVs prior to the sale season of 2023. Being proactive and raising awareness about these exclusions earlier in the year saw some great conversations and corrections to data occur with breeders and service providers in time for the 2024 sale season.

In **AUGUST 2023** >12,460 animals were identified by genomics as having a different sire or dam to what was submitted. After contacting over 80 affected flocks the number of pedigree inconsistencies reduced by **19%**

In **DECEMBER 2023** >18,370 exclusions were impacting the pedigree of animals across the Sheep Genetics evaluation. After client engagement, by February 2024 pedigree exclusions reduced by **~10%**

### Data submission

Sheep Genetics evaluations are updated every two weeks to recalculate ASBVs as more animals and data become available. In 2022, Sheep Genetics implemented a new database system which included the development of a file upload portal on the Sheep Genetics search site. This portal allows breeders and service providers to upload data directly to Sheep Genetics and receive feedback on the submission in real-time.

The data submission portal went live to Sheep Genetics clients and service providers in February 2023. While files can still be sent to the Sheep Genetics team for upload, many users have taken the opportunity to utilise the new system with the added benefit of receiving more timely feedback.

In FY23-24 more than 6,440 files were submitted to the Sheep Genetics database (Figure 14). Approximately two-thirds of those files were uploaded by breeders or service providers.

**Figure 14:** Files submitted to Sheep Genetics database (2023-24)

Client	Files
Sheep Genetics admin	2,206
Service provider	2,140
Breeder	2,098

# The eating quality success story

ASBVs can be used to target improvement in eating quality and ultimately the consumer eating experience of Australian sheepmeat. This is achieved by focusing on the key indicators of eating quality as determined by consumer testing including intramuscular fat (IMF) and shear force (SHEARF5).

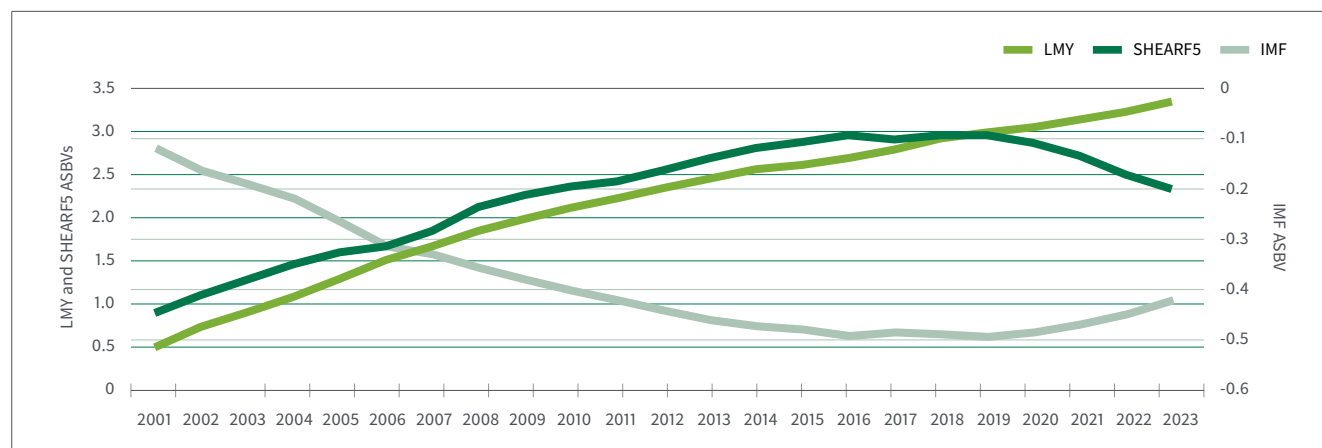
Historically, with industry focused on growth and quicker turn-off, the genetic trend for these indicator traits were heading in an unfavourable direction due to negative genetic correlations (and EQ not being in selection indexes/directly selected for). IMF was decreasing (less IMF in the meat) and SHEARF5 was increasing (meat was less tender and required increased force to cut through). Changes were needed at a ram breeder and industry level to reduce the decline of eating quality in Australian sheepmeat.

Eating quality is measured through taking meat samples from carcasses, which makes it a hard to collect and expensive phenotype, but it also makes it an ideal trait for genomic selection. The Sheep CRC Information Nucleus Flock, MLA Resource Flock and satellite flocks have been the main contributors of these measurements to the analysis.

Eating quality traits were first introduced to Terminal LAMBPLAN indexes in 2016. These indexes were eating quality (EQ) and lamb eating quality (LEQ). In 2019 all reportable Terminal indexes included some degree of emphasis on eating quality while still driving genetic gain for other growth and carcass traits.

The inclusion of eating quality in the indexes for the Terminal analysis has not only slowed the decline in eating quality but has started to turn it around in a more favourable direction (**Figure 15**). This demonstrates how genetic selection, underpinned by our world-leading genetic evaluations, are simultaneously increasing genetic gain for LMY and improving IMF and SHEARF5.

**Figure 15:** Terminal lamb genetic trends for shear force, lean meat yield and intramuscular fat ASBVs (2001–23)



Meat science samples on the carcass have been the main method used to measure eating quality traits. As part of analysis enhancements implemented in May 2024, Sheep Genetics now accepts data for LMY from DEXA, and IMF from SOMA and Meat Eating Quality (MEQ) devices from processors taken on consignment kills.

The information collected at the processor can be sent to Sheep Genetics and if all the data quality assurances are met, included into the analysis for MERINOSELECT and LAMBPLAN. When these animals are also genotyped, it will allow the further expansion of the genomic reference population for these typically hard-to-measure traits.



**Dual-Energy X-ray Absorptiometry (DEXA)** generates high and low energy X-ray images and determines the quantity of lean meat, fat and bone in a carcass for LMY%.



SOMA Optics **Near Infra-Red (NIR)** lens probe utilises near infra-red lights and reflectance spectra to predict IMF% on a cut surface in lamb.



**MEQ probe** utilises laser spectroscopy to capture data in the loin of hot lamb carcasses and uses this data to predict IMF%.

For more information on eating quality technologies for carcasses, scan or click the QR code.



# Livestock Genetics research and development

Outcomes from Livestock Genetics sheep R&D projects that MLA invests in are delivered through the Sheep Genetics evaluations. This connection with commercialisation means that sheep genetics R&D has a clear pathway for adoption. Below are current investments that directly interact with the Sheep Genetics current and future services.



**24 projects**

with sheep and/or  
northern/southern beef



**\$86M invested**

aligned to National Livestock Genetics  
Consortium (NLGC) strategy



**10**

R&D  
partners

## MLA Resource Flock

The MLA Resource Flock has enabled the development of a large genomic reference population for hard-to-measure traits from progeny from a diverse range of sire breeds. The Resource Flock underpins the Sheep Genetics evaluation by providing linkage across flocks and breeds, and genotyping progeny that are recorded for traits such as carcase and eating quality. The benefits of the Resource Flock are seen across the Sheep Genetics evaluation and directly impact each flock submitting phenotypes and/or genotypes to the analysis, as well as producers undertaking a Flock Profile in Merinos.

The cohort of 2022 drop lambs born in the MLA Resource Flock had 1,975 lambs measured for shear force and intramuscular fat. These phenotypes have been added to the Sheep Genetics evaluations. The 2023 cohort has been genotyped and meat science phenotypes have begun to be recorded. These phenotypes will be added to the Sheep Genetics evaluations in early 2025 once all animals have been measured.

The MLA Resource Flock provides a valuable genetic resource of animals that may be used in additional projects and recording for other new and novel traits.



MLA Resource Flock at University of New England's Kirby SMART Farm – Armidale, NSW.

## Adding sustainability traits to the MLA Resource Flock and selecting for more methane efficient sheep

The R&D portfolio has two projects working on collecting methane records within sheep flocks. One, a joint project between MLA and the Department of Primary Industries and Regional Development (DPIRD), aims to collect phenotypic data on sustainability traits from the MLA Resource Flock animals at the Katanning site. The second is a joint project between MLA, the University of New England (UNE) and New South Wales Department of Primary Industries and Regional Development (NSW DPIRD) and aims to collect methane and feed intake from the Kirby Resource Flock site and methane from breeder flocks around Australia.

Methane is measured using Portable Accumulation Chambers (PACs), where the animal is measured for 45 minutes in the chambers with temperature, carbon dioxide and oxygen levels measured every 15 minutes.



Kirby MLA Resource Flock lambs in PAC chambers.

Methane measurements collected to date:

**1,264** NSW breeder ewes measured  
**1,296** WA breeder ewes measured  
**732** Kirby lambs  
**932** Katanning lambs



## Understanding the genetic variation in shedding characteristics of sheep to develop a shedding breeding value

Sheep Genetics has seen growth in the number of self-shedding breeds in the evaluations. This three-year project, in conjunction with seed stock Maternal shedding sheep breeders and AGBU (Animal Genetics and Breeding Unit), will improve the understanding of the genetic architecture behind the trait. It aims to develop breeding tools to aid the selection for, and infusion of, shedding characteristics into commercial flocks. Increasing the number of animals with recorded phenotypes and genotypes will enable better estimation of shedding performance based on the genes of the animal and the development of an ASBV for shedding. This three-year project was put forward to and approved by the NLGC taskforce through the 2021/2022 project call.

The primary objective of the project will be to develop a phenotyping protocol and breeding values that describe the animal's ability to shed their fleece and the characteristic of the shedding pattern, including rate, location and extent of shedding. Multiple records were taken from the 2022 and 2023 drop animals and breeding ewes within the project. This resulted in more than 57,600 records of shedding being recorded.



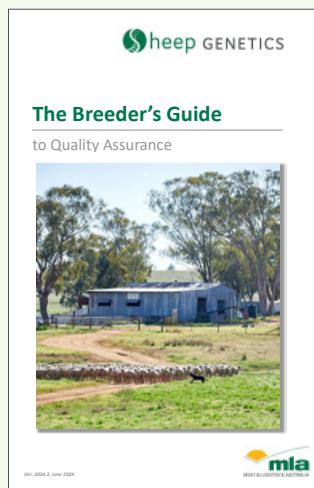


# Resources

## Breeder's guide

In May 2024, the new *Breeder's Guide to Quality Assurance* was released. This manual for producers and service providers steps through a range of topics and processes, including:

- submitting data
- animal identification
- pedigree
- fixed effects
- management groups
- linkage
- requirements of trait measurement.



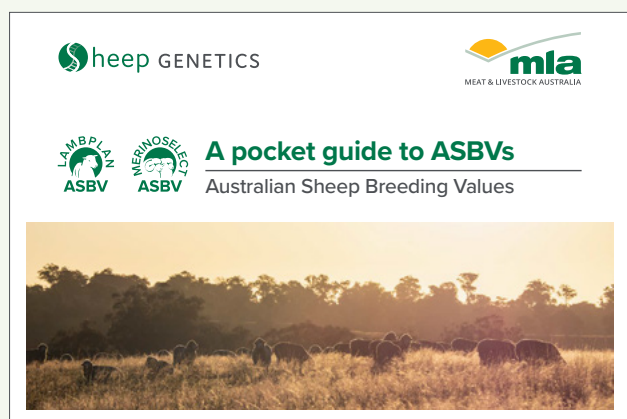
▶ This resource is an invaluable source of information for how to record accurate data for Sheep Genetics. Scan or click the QR code to download.



## New pocket guide to ASBVs

December 2023 marked the launch of the updated *A pocket guide to ASBVs*. This handy guide is a popular and well used resource for Sheep Genetics clients as well as commercial ram buyers. Key topics include:

- understanding and interpreting ASBVs
- understanding and using selection indexes
- ASBVs for key trait groups
- using percentile band reports.



▶ Scan the QR code to download *A pocket guide to ASBVs*.



## Ram buyer resources

Additional resources have been created to support commercial ram buyers – scan or click the QR code to find out more:

▶ A ram buyer's guide to sale catalogues and pencards



▶ Understanding percentile bands for selection decisions



▶ New tools available for setting a breeding objective and tracking genetic gain



## Introduction to Sheep Genetics eLearning module

Sheep Genetics updated an eLearning module designed to provide a brief overview of the requirements and processes involved in getting started with Sheep Genetics in December 2023. These updates mean the module now better reflects the current Sheep Genetics analysis.



**34**

completed  
training



**89%**

satisfaction  
rating



**55%**

knowledge  
increase

▶ To complete the eLearning module, scan or click the QR code.



## Ewe-niquely Genetics podcast

Sheep Genetics released *Ewe-niquely Genetics* in May 2024, a podcast that involves special guests discussing all aspects of Sheep Genetics, from research, the ins and outs of the analysis, adoption of genetics and more.

Each episode sees our host, Sheep Genetics Development Officer, Chloe Bunter and her special guest go in-depth and drill down into a particular topic, dedicating time to gain a better understanding of the topic, it's position in industry and how we can learn from or better utilise genetics.

The series started with a look back through history to the events that led up to the creation of Sheep Genetics as we know it now, from LAMBPLAN beginnings in the 1990s to the formation of MERINOSELECT and Sheep Genetics in the mid 2000s. Rob Banks and Alex Ball in Episodes 1 and 2 respectively, provide details of what the industry sentiments, concerns, triumphs and learnings were from this pivotal frontier period of our history as they reflect on their time in Sheep Genetics.

The series moves on in Episode 3 to focus on the integral but often overlooked aspects of Sheep Genetics – Reference Populations and Analysis Enhancements. Peta Bradley joins us to explain how these two aspects of the analysis have enabled the development and advancement we have seen, particularly in the last five years. Learn how new traits, genomic tools, upgraded processing, reporting and use of data are underpinned by these two pillars of work.



Following on in Episode 4, we discuss the committees and team that make up Sheep Genetics. Fiona McLouglin in her 23 years at the company, reflects on the changing roles and personnel that have influenced Sheep Genetics. Listen along as Fiona explains how the Advisory and Technical committees, that are made up of representatives across industry, provide feedback and support the advancements made to Sheep Genetics.

The podcast shares up-to-date information with breeders and aims to reach a wide audience with its in-depth and engaging discussions. Episodes are released monthly and will continue for FY25, with many more exciting guests and topics to dissect and gain insight into. Listeners will also have a better understanding of how all the puzzle pieces of the genetics evaluation within Australia fit together.

To listen to episodes of the *Ewe-niquely Genetics* podcast, scan or click the QR code.



Sheep Genetics Development Officers Chloe Bunter (host, left) and Kate Rummy (right) record an episode of *Ewe-niquely Genetics* at the Armidale, NSW studio.



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MLA's *Sheep Genetics Annual Outcomes Report 2023–24*  
is available online at **[sheepgenetics.org.au/outcomes-report](http://sheepgenetics.org.au/outcomes-report)**