

# Merino Lifetime Productivity Project Newsletter No.11

## Lambs, lambs + more lambs

**There are F2 lambs on the ground across all the MLP sites following the 2021 lambing season. The earlier lambing programs at the Macquarie, MerinoLink and Pingelly sites mean they have recently weaned their F2 lambs, while the later programs at the Balmoral and New England sites will shortly undertake tagging and DNA sample collection with weaning scheduled later in 2021.**

This year was the last Balmoral lambing and the second last for Pingelly and MerinoLink. Macquarie and New England have two lambing cycles remaining. The total projection is that 24,600 F2 lambs will be born into the MLP.

The 2021 lambs will total approximately 5,900 and they join the previous 11,800 lambs weaned in earlier F2 year drops. The project has reached halfway point for the expected number of lambs born. Collecting DNA samples and weaning weights on these F2 lambs adds to the reproduction results of the MLP ewes which are reported within the reproduction results of MLP Site Reports. Some sites are collecting additional details such as birth records and F2 breech scores. These are generally Add-On projects.

Add-On lambing projects include those at the New England CSIRO-hosted site with the CSIRO team focusing on lamb survival with reference to birth weights, lambing ease, maternal behaviour, udder-teat traits and growth to weaning. More information via [merinosuperiorsires.com.au/newenglandfieldday](http://merinosuperiorsires.com.au/newenglandfieldday) or [jen.smith@csiro.au](mailto:jen.smith@csiro.au). Further 2021 lambing details are in [Around the Sites](#) (pg 3).



## MLP quick facts

- The Australian Wool Innovation (AWI) funded MLP project is a \$8M (plus \$5M from partners), 10-year partnership between AWI, the Australian Merino Sire Evaluation Association (AMSEA), nominating stud Merino breeders and site hosts.
- The MLP project runs at five sites where sire evaluation trials operate for the first two years and then continue tracking performance of ewe progeny as they proceed through four to five joinings and annual shearings.
- **Balmoral, VIC** Host: Tuloona Pastoral  
Committee: Balmoral Breeders Association
- **Pingelly, WA** Host: Murdoch University / UWA  
Committee: Federation of Performance Sheep Breeders (WA Branch)
- **MerinoLink, Temora NSW** Host: Moses & Son  
Committee: MerinoLink Inc.
- **Macquarie, Trangie NSW** Host: NSW DPI  
Committee: Macquarie Sire Evaluation Association
- **New England, NSW** Host: CSIRO  
Committee: New England Merino Sire Evaluation Association
- A full suite of assessments will be undertaken during the MLP project including visual trait scoring, classer gradings, the objective assessment 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.



MLP F2 lambs at tagging - Pingelly, August 2021 (left) and Macquarie, July 2021 (right)  
Photo credit: Bronwyn Clarke, Murdoch University and Tracie Bird-Gardiner, NSW DPI



## Non-lambing ewes: To cull or not to cull?

When ewes fail to rear a lamb, this question of whether to cull or not is highly contested, especially in seasons when many stud and commercial breeders are working to rebuild flock numbers following drought conditions.

The MLP project is in the unique position of retaining all ewes across their lifetime and can assess the impact of various ewe culling strategies. Recently, a preliminary data-to-date snapshot applied general industry culling strategies to the 2016 drop F1 ewe reproduction results at Balmoral, Pingelly and MerinoLink. This provided a preliminary indication of impacts on flock reproduction rates.

Once all ten MLP drops from the five sites have a complete collection of lifetime lambing records a full analysis will be undertaken. Reproduction, wool and carcase results will be combined into a comprehensive economic analysis which will consider and compare the impact of breeding and selection strategies on whole flock productivity and profitability.

In the interim, this early snapshot reports flock reproduction rates as percentages of the number of lambs weaned to the number of ewes joined or LW/EJ.

At MerinoLink, 308 ewes from the 2016 drop have been joined as maidens and then again at the two subsequent joinings. They averaged 106 lambs for every 100 ewes joined across the 3 years, or 106% lambs weaned/ewes joined (LW/EJ). Balmoral joined 724 ewes and Pingelly 357 ewes as maidens, and then again for two subsequent joinings, with Balmoral averaging 94% and Pingelly 114% LW/EJ.

The first three reproduction cycles are explored with general industry selection (or culling) strategies applied to calculate the flock reproductive rate.

The culling strategies applied were:

1. Remove scanned dry maidens (Dry Maiden)
2. Remove lambled and lost as maidens (L&L Maiden)
3. Remove scanned dry at first two joinings (Double dry)
4. Remove lambled and lost at first two joining (Double L&L)
5. Remove ewes that fail to rear a lamb for first two joinings (Failed twice)

For these three drops, the calculated difference between the various culling strategies on the flock reproduction rate was generally small to nil. However, these calculated outcomes are very early indications based on just three lambings for three of the ten MLP drops and have not been analysed for statistical differences.

This information is an extension of that presented at the 2021 MerinoLink Conference and in September's edition of [Beyond the Bale](#).

Selection strategy*	MerinoLink (308 ewes joined)		Balmoral (724 ewes joined)		Pingelly (357 ewes joined)	
	No. of ewes culled	Flock lambs weaned/ewes joined (%)	No. of ewes culled	Flock lambs weaned/ewes joined (%)	No. of ewes culled	Flock lambs weaned/ewes joined (%)
No culling	-	106	-	94	-	114
Dry Maiden	53	111	99	95	21	115
L&L Maiden	20	105	110	94	35	114
Double Dry	25	107	17	95	5	114
Double L&L	2	106	27	94	3	114
Failed Twice	33	107	68	95	12	114

**Table 1:** Ewe selection/culling strategies with the calculated impact on flock reproduction rates, or lambs weaned per 100 ewes joined (LW/EJ) across three drops of the MLP ewes based on their first three reproduction years. \*Ewe mortalities and welfare culls have been excluded from calculations.



**PINGELLY 2021 MLP FIELD DAY**

Register via: [sheepsback.com.au/events/993](https://sheepsback.com.au/events/993)

**OCTOBER 22**  
1pm-5pm  
UWA Farm 'Ridgefield'  
Field Day entry via Lamard Rd, Pingelly WA

Logos: MLP, awi, Murdoch University, The Federation of Performance Sheep Breeders, Western Australia

**Job Opportunity  
- Research Fellow -  
MLP and Genetic Evaluation R&D**

Located within the Animal Genetics and Breeding Unit at the University of New England, this position will be focused on the analyses of the MLP data and Merino genetic evaluation.

**Download Information and application here**

Location: Armidale, NSW  
Closing date: October 10, 2021

## Around the sites

### Balmoral

Seasonal conditions remain good although rainfall has only been moderate. Ewes were split into their lambing paddocks late in July. At that point, the 2015 drop averaged 62.6kg and CS 3.3 for single bearing ewes while the 2016 drop averaged 60.5kg and CS 3.4 for single bearing ewes. The twin bearing ewes averaged CS 3.4 in both drops. Lambing started in mid-August with F2 lamb tagging set for October. An updated report is in development for the Balmoral site.



An overview of Balmoral's MLP ewes and lambs, September 2021.  
*Image credit: Sean Harvey, Tuloona Pastoral*

### Pingelly

Above average rainfall continued across the winter with very good pasture growth. A pre-lambing measure saw the 2016 drop single bearing ewes average 81.4kg and CS 3.3 and twin bearing ewes 87.0kg and CS 3.1. The 2017 drop single bearing ewes averaged 74.2kg and CS 2.9, with the twin bearers at 83.5kg and CS 3.0. A July lambing saw the F2 lambs weaned in late September. Weaning results were 124% / 25.7kg F2 WWT for the 2016 drop and 118% / 23.2kg F2 WWT for the 2017 drop. October 22 Field Day registration: [www.sheepsback.com.au/events/993](http://www.sheepsback.com.au/events/993)



Pingelly's MLP ewes and lambs, August 2021  
*Image credit: Bronwyn Clarke, Murdoch University*

### MerinoLink\*

Winter saw a continuation of the wet conditions and with historically low soil temperatures the site saw reduced pasture growth. Ewes were given a hay supplement over lambing, however the prevailing conditions including on-farm flooding between lambing and weaning resulted in worm pressure on both the MLP ewes and the F2 lambs. Tagging of the F2 lambs occurred in late July with a result of 116% of lambs tagged to ewes joined; this result was recorded prior to the worm burden.

*\*Note, due to COVID the planned October Field Day is cancelled.*



MerinoLink's MLP F1 ewes at weaning, September 2021.

### Macquarie

Regular rainfall has continued with 587mm received for the year-to-date as at September 15. Lambing finished in late June, tagging of the F2 lambs was undertaken in mid July and weaning in late August. A total of 1222 lambs were weaned equating to 128% of lambs weaned to ewes joined. At weaning the 2017 drop ewes averaged 77.1kg and CS 3.6 and the 2018 drop averaged 71.6kg and CS 3.5. A rise in worm levels post-weaning enabled individual WEC results to be collected in mid September.



MLP F1 ewes at tagging of their F2 progeny, July 2021.  
*Image credit: Tracie Bird-Gardiner, NSW DPI*

### New England

The site experienced a very wet and cold winter with 648mm year-to-date rainfall as at September 15 and surface water is evident in most paddocks. Following shearing in late June, the MLP ewes went into their lambing paddocks in mid August. Lambing is set to finish in early October with marking scheduled for mid October.

The MLP gives its thanks to Duncan Lance, the site committee chairman, who is stepping down from his role as he relocates away from the New England. We look forward to Duncan's MLP involvement in his new location!

**MLP 2022 Field Days**  
*SAVE - THE - DATE*

**Balmoral - February 17**  
**Macquarie - March 30**  
**New England - March (TBC)**



## Profile series: Meet the MLP onfarm team

At each MLP site there are on-farm teams including farm managers and technical staff who provide on-the-ground management and expertise to the project. This series introduces the main on-farm personnel at each site.

### Sean Harvey, Balmoral VIC

Sean grew up immersed in agriculture in the Northeast of Victoria and the Southeast of South Australia before following his father's footsteps into farm management. After several years managing mixed farming operations throughout Southern South Australia, Sean joined the Craig Family at Tuloona in 2012. As Tuloona's property manager, Sean oversees the farm operations including the Balmoral MLP project ewes and their F2 progeny.

#### **What's an enjoyable aspect of being an MLP host site?**

Sean describes the most valuable aspect as being the ability to track and monitor the outcomes of changes through the data collected in the project.

"Prior to the project, we thought we were joining ewes at reasonable condition scores where ewes were roughly at 2.8 - 2.9. To meet the project requirements, we had to lift joining up to condition score 3.2. Because we track and record the outcomes from joinings, we quickly saw the benefit for conception and litter size from this change.

"I've really enjoyed the accountability and evidence that measuring everything can bring."

#### **Which MLP activity do you most enjoy?**

Sean lists weaning and getting the DNA results as the most rewarding activities in the project.

"Being able to track a ewes prejoining condition score and her previous lambing history with what she produces in a year is pretty exciting. The DNA results allow that to be tracked accurately."

#### **What's challenging about managing an MLP site?**

The introduction of the project's diverse genetics has certainly been a management challenge given the farm's mules free status.



Sean Harvey in the yards with the MLP ewes, July 2021.  
Image credit: Tom Silcock, Balmoral Breeders

"The farm had spent several years selecting our flock to be mules free, and then suddenly we had to contend with all sorts of Merino types. Plus, without the opportunity to cull the animals with off-type wool, bad feet or backs, the level of management needed did increase."

Although Sean takes great lengths to emphasise the benefits of being part of the project, he also notes the challenge of having so many interested parties following the management of the ewes - the industry scrutiny adds another element to the hosting of an MLP site.

#### **What are the environmental and regional challenges to your site management?**

Sean suggests that worms are one of the trickier elements of the Victorian Western Districts environment. The cold winter conditions mean that managing the ewes to get a worm count for the project, without compromising production, can be very complex to manage.

#### **What is your go-to tool for farm management?**

The farm has a yearly planner that sets out the farm activities from month-to-month, it is essential when running a mixed farming operation.

#### **What questions are you hoping the MLP project will answer?**

Sean is keen to understand what needs to be done to wean more lambs, especially from a management and selection perspective. He's also hoping the MLP project can provide more information about fine tuning condition score targets for different production environments.

The MLP project thanks Sean for his committed efforts in the management of the Balmoral MLP site and ewes.



Sean Harvey, his twins Makenzie and Jaxon and the MLP ewes and lambs, September 2021. Image credit: Sean Harvey, Tuloona Pastoral

## Further information

Download MLP Reports from [www.merinosuperiorsires.com.au/mlp-project-reports](http://www.merinosuperiorsires.com.au/mlp-project-reports)

Feel free to contact the Site Managers, Project or AMSEA staff who are listed in reports for assistance with interpreting reported results.

Contact MLP Project Manager Anne Ramsay on 0400 368 448

The Merino Lifetime Productivity Project is being undertaken in partnership between the Australian Merino Sire Evaluation Association Incorporated (AMSEA) and Australian Wool Innovation (AWI). AMSEA and AWI would like to acknowledge those entities who also contribute funding, namely Woolgrowers through sire evaluation entry fees, site hosts, site committee in-kind contributions, and sponsors of AMSEA. A special acknowledgement is also made to the Australian Government who supports research, development and marketing of Australian wool.



[www.wool.com/MLP](http://www.wool.com/MLP)