

# Merino Lifetime Productivity Project Newsletter No.13

## Field days all round

**Field days are back on the MLP agenda! Macquarie and New England held mid-project field days in March and June of 2022 respectively, following the last Balmoral field day early in 2022. The MLP is now lining up for the FINAL MerinoLink and Pingelly field days in October.**

October 14 looks set to be full of field day bustle at the MerinoLink Temora site, hosted by Moses and Son. The program for the day will focus on the display of the 2016 and 2017 drop ewes. Plenty of inspection time is scheduled and the accompanying presentations will be all about the ewes, their sire groups and their lifetime results thus far.

MerinoLink's ewes will be displayed in full wool with a final shearing the following week before exiting the MLP project.

As a celebration of the site's wrap-up, an industry dinner is planned to accompany the field day. It will be a chance for those involved in the site, and those attending the field day, to gather and hear of some of the MLP's preliminary insights from across the various sites.

Just a week later, the Pingelly site is planning for their final field day on October 21. Pingelly is managed by the Murdoch University team and hosted on the University of Western Australia's Ridgefield farm where the field day will be held. The day will also provide a great last display of the 2016 and 2017 drop ewes alongside their MLP results.

Pingelly's ewes will be displayed with 11 months' wool, as they are to be classed just prior to their final shearing in November. The Pingelly site will be the third site to finish the MLP, leaving only the Macquarie (Trangie, NSW) and New England (Uralla, NSW) sites still collecting MLP data.



Penside with the Macquarie field day crowd, March 2022.

## 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.

## 2022 MLP Field Days

SAVE-THE-DATE

**MerinoLink - October 14**  
**Pingelly - October 21**

**FINAL SITE FIELD DAYS**

Info: [www.merinosuperiorsires.com.au/events](http://www.merinosuperiorsires.com.au/events)

## Balmoral MLP Ewes - Aged, Assessed and Interesting

**As the Balmoral site undertook its last round of MLP classings, shearing and field day, the 2015 and 2016 drop ewes presented a fantastic opportunity – there they were at their full-age with a full accompanying lifetime dataset!**

The 2015 drop had been through five reproduction cycles and were shorn for the seventh time as they exited the MLP in February 2022. The 2016 drop were one year behind.

As each ewe left the MLP a late age DNA sample was taken to create a resource for future genomic work and a wool staple was collected for future use. A site image library was developed of the ewes in sire groups and special interest groups, i.e. highest wool cutters and lowest wool cutters, most lambs weaned and least lambs weaned. See images on following page.

These end-of-project activities were woven in around the final classings and field day which included an industry dinner where early preliminary insights were shared from the Balmoral dataset.

This dataset for the Balmoral ewes includes approximately 485K data points from birth through to full-age and includes wool, carcase, reproduction and classing data. Let's take a preliminary look at the 2015 drop's Clean Fleece Weight (CFW), kilograms (kg) of lambs weaned and lifetime average ewe joining weights.

A tally of the seven fleece weights (CFW) shows a range of performance: from 14.8kg to 30.0kg across the 450 ewes who were available at the end of the MLP project. Combined with this, ewes weaned between 0 and 250kg of lambs per ewe joined.

When these raw data results are graphed, a slightly negative relationship can be observed between CFW and kg of lambs weaned (Figure 1). The same relationship was also observed in the 2016 drop. This is not unexpected given the known impacts of reproduction on wool cut, but teasing apart the genetic, management, and environmental impacts on these lifetime productivity indicators will be an important task for the analysis team.

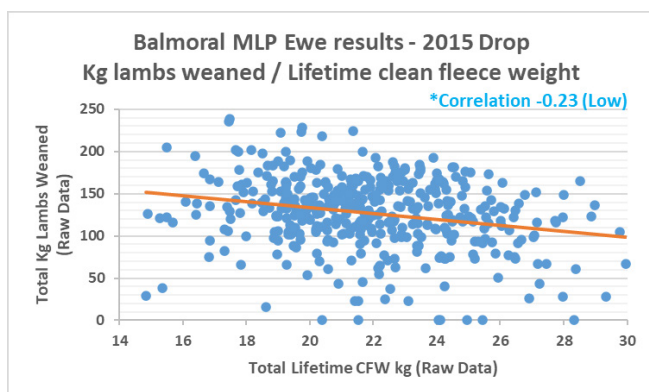


Figure 1: Balmoral's 2015 drop cumulative Clean Fleece Weight (CFW) and total kilograms of lambs weaned for each individual ewe (Data type: raw data).

When the total kilograms of lambs weaned across the lambings is graphed against the lifetime average ewe joining weight there is a nil correlation in the raw data, i.e. no relationship between a ewe's own liveweight and the kilograms of lambs she weaned (Figure 2).

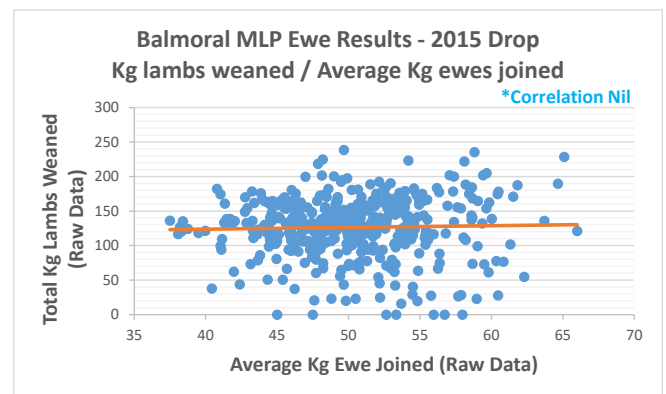


Figure 2: Balmoral's 2015 drop total kilograms of lambs weaned and lifetime average ewe joining weight (Data type: raw data).

These early data insights show there is considerable variation in performance across ewes, which means producers can find ewes with low mature weights who can still wean a high number of lamb kgs. How growers can best find these ewes at young ages is a key question for the MLP analysis work.

Further details of these Balmoral results will be available in the upcoming September 2022 edition of *Beyond the Bale*.

Balmoral's MLP Site July 2022 Report of the lifetime results (reported in sire groups) for the 2015 and 2016 drop can be downloaded via [merinosuperiorsires.com.au/mlp-project](http://merinosuperiorsires.com.au/mlp-project).

The AGBU analysis team has started looking at the lifetime relationships between production traits in the Balmoral F1 ewes. The project team looks forward to reporting this work in future newsletters.



Balmoral's 2015 drop lining up for their end of site photos.

# A Host to Thank!

A project like the MLP needs passionate people and the Balmoral site hosts provided this in spades! The Tuloona Pastoral team provided the everyday management of the MLP ewes and were consistently keen to keep the project on track and maintained their excitement right through to viewing the ewes in their field day sire groups. Working alongside them on all the big jobs were the Balmoral Breeders - a mob of highly engaged, enthusiastic Merino people. A special thanks to Jane and Michael Craig plus Sean Harvey of Tuloona Pastoral, as well as Tom Silcock and Mark Bunge of Balmoral Breeders.



AMSEA's Emma Grabham collating the end of site photo library for the Balmoral site. 2015 drop: Left race = least wool cut, right race = most wool cut.



Balmoral 2015 drop end of life individual wool staples - 6.5 years.

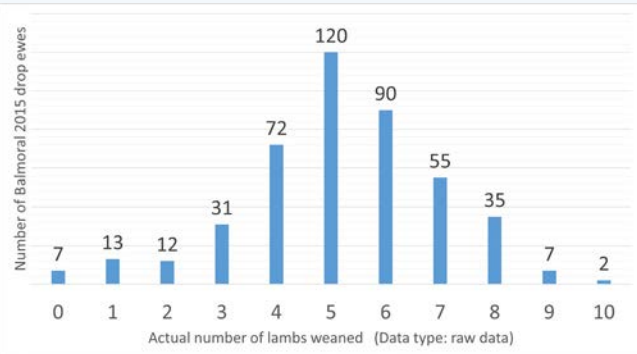


Collecting an end of life DNA sample.

## Fun Facts

Of the 444 ewes that remained in the Balmoral 2015 drop, over their 5 joinings 43% had more than 1 lamb per year, just 7 ewes failed to rear a lamb and only 1 failed to conceive.

A similar observation applies to the 2016 drop - just 20 ewes of the 657 to finish in the project failed to rear a lamb and just 7 failed to conceive. It will be interesting to see if this type of observation is repeated across any or all of the other four MLP sites as they reach completion.



# Around the sites

## Balmoral - SITE COMPLETE

### Pingelly

The site has received 210mm of rain for 2022 with typical growing conditions for the Autumn period and a May break of 35mm leading to excellent growing conditions since.

April's preg scanning saw the 2016 drop achieving 95% conception and averaging 73kg and CS 3.0. The 2017 drop achieved 91% conception and averaged 68.9kg and CS 2.9. Ewes are now split into mobs of singles and twins and in their lambing paddocks since June 22.

Pingelly's final field day is scheduled for October 21, 2022.



Pingelly's MLP F1 ewes and F2 lambs, July 2022.

### MerinoLink

Excessive rainfall has been received with 495mm falling for the year as of mid-June. Lambing started at the end of May in good conditions, however cold and wet conditions have followed.

The ewes were preg scanned in April with the ewes scanned at 91% in lamb. The 2016 drop averaged 73kg and CS 3.3, the 2017 drop averaged 72.1kg and CS 3.4

MerinoLink's final field day is scheduled for October 14, 2022.



MerinoLink's MLP F1 ewes and F2 lambs coming in for tagging, August 2022.

### Macquarie

The site has received a total of 351mm of rainfall (as at mid-June) - well above the long-term median for most of the year. April 2022 saw seven times more rain than historic records. This resulted in degradation of feed quality in April.

Preg scanning in March 8 saw the 2017 drop achieve 91% conception at an average weight of 79.2kg and CS 3.5. The 2018 scanned at 91% conception and average weight 76.0kg and CS 3.5. The ewes finished lambing at the end of June.



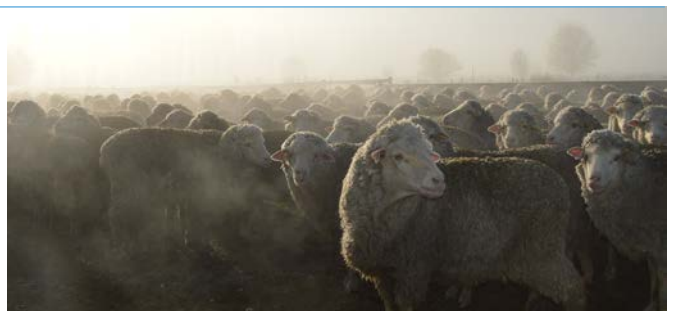
Macquarie's MLP F1 ewes and F2 lambs, June 2022.  
*Image credit: Tracie Bird-Gardiner, NSW DPI*

### New England

Very wet conditions in the New England continue with a total of 482mm received as at mid-June.

A successful June 2nd field day was held; 70+ attendees noted the day as enormously valuable and informative, with a mix of sheep inspections and talks. The ewes were then classed and mid side sampled before June shearing.

Ewes were preg scanned and achieved 96% conception in the 2017 drop, averaging 59.2kg and CS 2.9. The 2018 drop achieved 96% conception, averaging 59.4kg and CS 2.9. Lambs will start to arrive in late August.



MLP F1 ewes lining up for classing on a chilly New England morning, July 2022.

## 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.



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