

Merino Lifetime Productivity Project Newsletter No.12

Events - Past + Future

Field days are back on the MLP agenda with the Pingelly site holding an October 2021 field day and plans in place for the Balmoral and Macquarie sites.

The Pingelly site held its second last field day in October 2021. The day was well-attended with 70+ people viewing the MLP F1 ewes and listening to talks on the latest results, GEPEP Add-on project and MLP classing. Further information is available in December's edition of [Beyond the Bale](#). Pingelly's last field day is scheduled for October 2022.

The last field day for the Balmoral MLP site in Victoria is also scheduled for 2022 on February 17*. Hosted by Tuloona Pastoral, it's one of three sites being showcased within the Balmoral Breeder's Field Day Bonanza (full information on following page). Balmoral's MLP F1 ewes will be displayed for the final time as sire progeny groups in full wool with their corresponding wool, carcase and reproduction results. Current event details and tickets available via balmoralfielddays2022.eventbrite.com

**Field day registration is essential.*

Following on will be the Macquarie site's 2022 March 30 field day, hosted by NSW DPI and the Macquarie Sire Evaluation Association at the Trangie Agricultural Research Centre. The site will have both the 2017 and 2018 drop on display alongside their most recent results. Further details will be released closer to time via wool.com/mlp.



Pingelly's October 2021 field day - (left) attendees penside with displayed progeny groups and (right) beside the race hearing from one of Pingelly's site classers, Nathan King.

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.



COVID SAFE
Outdoor displays,
well-spaced
sit-down dinner



Balmoral
Breeders

BALMORAL BREEDERS FIELD DAY BONANZA

February 17 - 18 2022*
RSVP ESSENTIAL

FINAL MLP FIELD DAY



February 17 1-4pm
Tuloona Pastoral, Harrow VIC
2015 + 2016 drops (1:30pm penside talk)
Inspect 50 sire progeny groups

Last chance...
Inspect the 5-6yo
MLP ewes.

INDUSTRY DINNER



February 17 6pm
\$45 pp. Hamilton Showgrounds VIC
Refunds available
Hosted by AWI & BestWool/BestLamb

Showcasing
the world's biggest
Merino project.

SIRE EVALUATION FIELD DAY



February 18
10am - 12pm Austral Park, Tarrenlea VIC - 2021 drop
1pm - 4pm Jigsaw Farms, Hensley Park VIC
2019 + 2020 drops (2pm penside talk)
Inspect 63 sire progeny groups

2 days + 3 sites
113 sire progeny groups
5,000 Merinos on display

Event updates, info and RSVP visit: balmoralfielddays2022.eventbrite.com

Alternatively, call Mark Bunge 0409 962 248 or Emma O'Bryan 0437 249 465

*Attendees will be asked to provide evidence of COVID-19 double vaccination or exemption. The event will be subject to current government health guidelines.



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For current
event info visit:
[balmoralfielddays2022.
eventbrite.com](https://balmoralfielddays2022.eventbrite.com)

Around the sites

Balmoral

The Balmoral ewes weaned their last drop of MLP F2 lambs in November 2021 achieving 112% lambs weaned to ewes joined. A total of 1274 F2 lambs were weaned, and the ewes were classed for functionality. At weaning both ewe drops averaged CS of 3.3, with the 2015 drop weighing in at 58.2kg and the 2016 drop 56.8kg.

The final field day is scheduled for February 17, 2022 following the final classing and midside sampling early in the month and the classer trial the day prior. RSVPs essential: balmoralfielddays2022.eventbrite.com



The Balmoral team completing the final individual WEC sampling, December 2021. **Image credit: Tom Silcock, Balmoral Site Manager**

Pingelly

The Pingelly ewes took part in the GEPEP Add-On project just prior to the successful October field day. The GEPEP work involved assessment of proxies for feed intake via measurement of CO₂ emission and two types of sensors fitted for 7 - 10days. In addition, whole body fat/energy assessments were also taken with the ewes having ultrasounds, non-invasive microwave technology assessments, and whole-body water estimated via blood sampling and injecting with deuterium (which equilibrates with whole body water).



Sarah Blumer, Andrew Thompson and Jarryd Krog of Murdoch University, enjoying Pingelly's MLP Field Day, October 2021

MerinoLink

At weaning in September which followed a wet, cold winter with a high worm burden, 103% lambs were weaned to ewes joined. The 2016 drop ewes averaged 60.8kg and CS 2.3, while the 2017 drop averaged 62.1kg and CS 2.5. The change of season saw a massive pasture growth with a corresponding production improvement. Classing and midside were undertaken in mid-October. December pre-joining assessments saw the 2016 drop ewes sitting at 67.4kg and CS 3.3, the 2017 drop ewes averaging 68kg and CS 3.4.



MerinoLink's MLP F1 ewes pre-shearing, October 2021.

Macquarie

Classing and mid-side sampling took place in mid-October, followed by shearing in the first week of November and off-shear traits classed in early November. Following two weeks of teasers, rams went out on December 21 with the 2017 drop ewes sitting at 65.8kg and CS 3.4, and the 2018 drop sitting at 61kg and CS 3.3. Worms were active in January 2022 and an individual WEC sample is planned for early February.

Save-the-date - 2022 field day - March 30.



MLP F1 ewes, December 2021. **Image credit: Tracie Bird-Gardiner, NSW DPI**

New England

Preliminary lambing results over a wet and cold season saw a 114% of lambs tagged to ewes joined. Site hosts, CSIRO, undertook lambing rounds recording pedigree, birth type and date, ewe behaviour and lamb mortality data. Weaning took place early in December with only 6 lambs lost from tagging resulting in 113% lambs weaned to ewes joined. Ewes were back in condition owing to the wet conditions with the 2017 drop averaging 48.2kg and CS 2.4, with the 2018 drop averaging 49.8kg and CS 2.8.



MLP F1 ewes and F2 lambs, November 2021.

Profile series: Meet the AWI-AGBU analysis team

As the analysis phase commences for the MLP project, an exciting team has been developed at the Animal Genetics and Breeding Unit (AGBU) to work in conjunction with AWI and the MLP project team on the expansive Merino dataset being collected from the project.

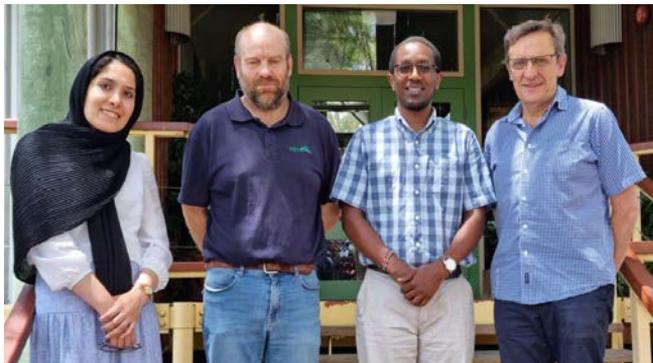
AGBU, AWI and the MLP

The AGBU team now has two dedicated research positions newly funded by AWI who will be working on the analysis phase of the MLP project as well as additional AWI genomics projects, reporting to two familiar experts.

Let's meet the genetic experts in the team.

Elena Dehnavi joined AGBU in early 2021 and pre-MLP her work focused on breeding objectives and breeding program design, including updating terminal sheep selection indexes and estimating genetic parameters. Elena's university studies were completed at the Gorgan Agricultural Science and Natural Resources in Iran and at the Isfahan University of Technology also in Iran with time spent in Canada at the University of Guelph, CGIL group participating in their "ten thousand cows genome project". Awards, internships and scholarships are the norm for Elena and include a scholarship to attend the World Congress of Genetics Applied to Livestock Production in 2018. Elena has previously worked with buffalo, cattle, poultry and Japanese quail genetics- so the MLP is lucky to have her skillset now applied to Merinos!

Next up is Peter Wahinya who finished his PhD at AGBU in 2020 on quantitative genetics after earlier university studies in Kenya. His studies were in the application of genetics and economics to improve livestock productivity by developing breeding strategies for genetic improvement of dairy cattle under different production systems. Since 2020 Peter has been involved in a variety of AGBU projects including the estimation of genetic parameters of methane emission in Australian sheep in grazing and controlled environments plus the analysis of pure and crossbred genotypes for breed composition estimation and genetic evaluation in beef cattle.

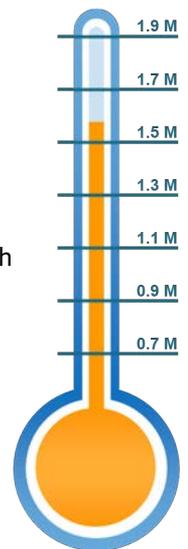


The team from the Animal Genetics and Breeding Unit (AGBU) - Elena Dehnavi, Daniel Brown, Peter Wahinya and Andrew Swan (L-R).

Daniel Brown is a Principal Scientist at the Animal Genetics and Breeding Unit at Armidale. He is part of the team responsible for the routine estimation of Australian Sheep Breeding Values (ASBVs) for Sheep Genetics as well as the ongoing research and development of the genetic evaluation system. Daniel has been working in this role for nearly 23 years with the primary focus on the genetic improvement of sheep. Daniel is also a program leader for the Advanced Livestock Measurement Technologies project aiming to develop objective measurement technologies to collect lean meat yield and eating quality data from commercial supply chains. And keeping in touch with the practical elements of his professional work, Daniel also operates a small sheep and beef operation with his family.

Andrew Swan has been working in animal genetics research for 30 years, joining AGBU in 2006. Whilst at AGBU he has contributed to the development of genetic evaluation services for the Australian sheep industry, delivered to ram breeders and their clients through Sheep Genetics and AMSEA. This has involved close collaboration with AMSEA, Sheep Genetics staff, ram breeders, and genetics service providers over a long period of time. Recently Andrew's research focus has been on the application of genomic information working in collaboration with other researchers and leading to the full implementation of "single step genomic BLUP". This is the first and largest analysis of its kind in international sheep breeding. Andrew's passion is to see genetic gains made by ram breeders translated into improved productivity and sustainability for industry.

With over 85% of the MLP's 1.9M data points now collected, some early analysis of the dataset is commencing. The first of the five sites (Balmoral, Victoria) will complete its project assessments in March 2022, Pingelly (Western Australia) and MerinoLink (New South Wales) will wrap up late in 2022. The Macquarie and New England sites will continue into 2023/24. Analysis outcomes will be reported via the usual AWI and MLP channels plus additional avenues which will be advertised in future editions of this newsletter. Watch this space!



Further information

Download MLP Reports from 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