

Adding on to the MLP

Opportunities of a ewe's lifetime

It's a novel opportunity to be able to research Merino ewes right across their lifetime. As the MLP project tracks ewes across the years, it is enabling additional research opportunities for site hosts and their affiliated organisations. Every MLP site now has Add-On projects in progress. Here is a directory of Add-On projects.

MLP fast facts

The AWI-funded MLP project is a \$8 million (plus \$5 million from partners), 10-year partnership between AWI, the Australian Merino Sire Evaluation Association (AMSEA), nominating stud Merino breeders and site partners.

- **Balmoral, Vic**
Partner: Tuloona Pastoral Committee; Balmoral Breeders Association
- **Pingelly, WA**
Partner: Murdoch University / UWA
Committee: Federation of Performance Sheep Breeders (WA Branch)
- **MerinoLink, Temora, NSW**
Partner: Moses & Son
Committee: MerinoLink Inc.
- **Macquarie, Trangie, NSW**
Partner: NSW DPI
Committee: Macquarie Sire Evaluation Association
- **New England, NSW**
Partner: CSIRO
Committee: New England Merino Sire Evaluation Association

The MLP project is tracking the lifetime performance of 5,700 ewes as they proceed through four to five joinings and annual shearings.

A full suite of assessments will be undertaken including visual trait scoring, classer gradings, 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.

To stay up to date with the latest MLP findings, visit www.wool.com/mlp. Subscribe to MLP updates via www.merinosuperiorsires.com.au/contact-us



Pingelly, WA

FOUNDATION EWES (DAMS OF MLP EWES)

- **Use of sensors** to allocate dam pedigree
- **Evaluation of mob size for optimal lamb survival**
Funding: Murdoch University / AWI

More information:

andrew.thompson@murdoch.edu.au / a.lockwood@murdoch.edu.au

WETHERS (MLP EWE SIBLINGS)

- **Growth & wool production project** recording teeth eruption, worm egg counts, breech, wool and carcass assessments up to the adult age stage (2016 and 2017 drops). Funding: Murdoch University / AWI

More information:

bronwyn.clarke@murdoch.edu.au

- **The Genetic Evaluation: Productivity Efficiency and Profitability (GEPEP) project** is looking to improve current estimates of profitability per hectare, by assessing feed intake and total body reserves rather than metabolic body weight (DSEs). GEPEP includes an additional fleece measurement at age 2.5 years and comprehensive economic analysis. Funding: Murdoch University / AWI

More information:

s.blumer@murdoch.edu.au. *Beyond the Bale*, March 2021, pages 42-44.

- **Footrot Genetic Evaluation of Resistance.** Evaluation for susceptibility and extent of footrot across Pingelly MLP sires to further develop Australian footrot breeding values (2016 and 2017 drops). Funding: Murdoch University / Animal Health Australia

More information:

andrew.thompson@murdoch.edu.au

Macquarie, Trangie NSW

FOUNDATION EWES (DAMS OF MLP EWES)

- **Rectal temperature** and the implications for AI conception. Funding: DPI

More information:

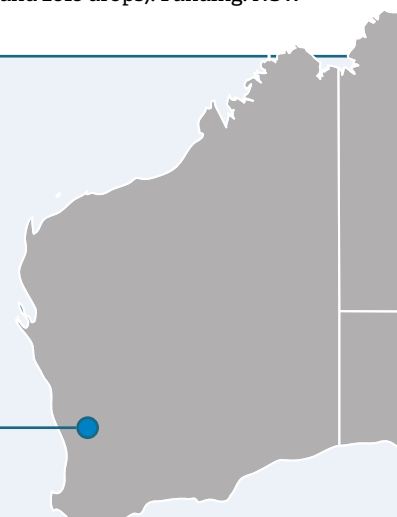
Gordon.refshauge@dpi.nsw.gov.au

MLP EWES

- **Wells Classer Trial** involving both the 2017 and 2018 drops (see Balmoral)
- **Ram Mating Success** (see MerinoLink)
- **Yield Project** (see MerinoLink)

WETHERS (MLP EWE SIBLINGS)

- **Measurements** including wool assessments, visual scores and carcass measurements up to their yearling age stage (2017 and 2018 drops). Funding: NSW DPI / AWI



Balmoral, Harrow Vic

MLP EWES

- **Data collection** including lamb teeth eruption and teat counts, then at later stages, feet/leg component scores (2015 and 2016 drops). Funding: Balmoral Breeders

More information:

balmoralsireevaluation@gmail.com

- **Wells Classer Trial.** The 2015 drop has undergone this trial exploring the repeatability of a classers grade within a sire group to that sire's own breeding objective. Funding: AWI

More information:

anneramsay1@bigpond.com

- **Ram Mating Success** project working on the results of syndicate sires joined to MLP ewes with evaluation of physical and semen

- **Carcase measurements, slaughter traits and meat quality project** combined with production data (2017 and 2018 drops). Additionally, meat eating quality and consumer taste panels were incorporated into the 2018 drop work. Funding: NSW DPI / MLA

More information:

sue.mortimer@dpi.nsw.gov.au

F2 PROGENY [MLP EWE'S OWN LAMBS]

- The Macquarie site and NSW DPI are also utilising the MLP F2 lambs for research around selecting for nutrient efficient livestock and improved grazing technologies.



performance to help explain foetus getting ability (2015 and 2016 drops). Funding: Livestock Logic

More information:

[Lexie Leonard, l.leonard@livestock.com.au](mailto:Lexie.Leonard@livestock.com.au)

WETHERS [MLP EWE SIBLINGS]

- **Later stage measurements** including yearling wool assessments, AWEX-ID, visual traits and carcase measurements up to their first adult year. Funding: AWI

More information:

ben.swain@bcsagribusiness.com.au

- **Hogget slaughter data** collected on a sample of each 2015 drop sire group. Funding: MLA

More information:

balmoralsireevaluation@gmail.com

New England, Armidale NSW

FOUNDATION EWES [DAMS OF MLP EWES]

- **Reproduction, fitness and survival work** collecting birth and death records, plus fitness compromise of MLP ewes and their wether siblings to evaluate performance in neonatal survival, and fitness survival to yearling age. Funding: CSIRO / AWI

More information:

jen.smith@csiro.au

- **Use of foetal age for prediction of birth date.** This used foetal age at pregnancy scanning to better predict birth date for improved management and improved genetic evaluation accuracy (Kim Bunter, Australian Genetics Breeding or AGBU). Funding: AWI

More information:

kbunter2@une.edu.au

MLP EWES (2017 AND 2018 DROPS)

- CSIRO site research:
 - **Young sheep dentition.** Age of permanent teeth eruption of MLP ewes and wethers was assessed to target management options, evaluate sire effects plus associations with fertility at first mating.

MerinoLink, Temora NSW

MLP EWES

- **Wells Classer Trial** involving the 2017 drop (see Balmoral)
- **Ram Mating Success**, similar to the work at Balmoral, this work is being undertaken by Jillian Kelly, Local Land Services (LLS), and Tim Gole, For Flocks Sake. Funding: LLS / For Flocks Sake

More information:

jillian.kelly@lls.nsw.gov.au / tim@flockssake.com.au. *Beyond the Bale*, March 2021, pages 40-41.

- **Yield project** which compared yield and fleece measurements between the mid side, pin bone and whole fleece core samples of one shearing during drought (2016 and 2017 drops). Funding: AWI / NSW SMBA

More information:

ben.swain@bcsagribusiness.com.au

WETHERS [MLP EWE SIBLINGS]

- **Data collection** including wool assessments and carcase measurements up to their hogget age stage, plus slaughter carcase data (2016 drop). Plus, additional assessments and measurements up to the adult age stage (2017 drop). Funding: MerinoLink / AWI

More information:

admin@merinolink.com.au

- **Lamb survival and birth weight.** Birth and death records at lambing for evaluation of lamb survival (F2s), lambing ease and maternal behaviour.
- **Neonatal mortality.** Autopsy of neonatal F2 lamb deaths to determine cause of death and accuracy (or not) of death assignment in the field (UNE student project).
- **Udder and teat traits.** Udder trait recording for evaluation of associations with ewe performance, lamb survival and growth to weaning (UNE student project).
- **Estimation of fleece value.** Incorporating style grade information from crimp frequency measures and AWEX-ID assigned to fleeces at shearing to improve estimation of fleece value within and across years (MLP ewes and wether siblings). Funding: CSIRO

More information:

jen.smith@csiro.au / amy.bell@csiro.au

- **Investigation of anti-mullarian hormone (AMH).** Examining the relationship between AMH levels in young ewes and future reproduction performance to assess AMH as a marker of ewe lifetime fertility. This work was undertaken by Will van Wettere, University of Adelaide, (2018 drop). Funding: University of Adelaide / AWI / CentrePlus Merino

More information:

william.vanwettere@adelaide.edu.au

- **Mini FLOTAC validation.** This looked at Mini FLOTAC as a potential method of providing a more sensitive WEC test and allowing WEC sampling at lower levels (2018 drop). Funding: Dawbutts / AWI

More information:

matt@dawbutts.com. *Beyond the Bale*, March 2020, page 45.

WETHERS [MLP EWE SIBLINGS]

- **Resilience project.** Half the wethers were tested for immune competence as weaners. Lifetime fitness compromise and disease incidence was recorded to validate the potential for tests to identify resilient animals and investigate resilience with production traits in different production pathways. Funding: CSIRO / AWI

- **Meat quality and slaughter traits (see Macquarie).** Half the wethers were backgrounded on site, feedlot finished and slaughtered as lambs. The other half were retained as wool-growers with full production and disease trait recording, then slaughtered. Carcase and offal disease data was collected at slaughter (2017 and 2018 drops). Funding: CSIRO / MLA / AWI

More information:

brad.hine@csiro.au. *Beyond the Bale*, December 2018, page 61.