

Early experiences using eID in self replacing Merinos



Enterprise snapshot

Owners	Brett and Yung Nietschke
Location	Koonunga, Barossa Valley, South Australia
Size	300 ha
Brief enterprise description	Self-replacing Merino flock running 350 ewes and 180 ewe hoggets. Approximately 75 ha of pastures, including cereal crops for grazing.
Number of employees	1 full time
Average annual rainfall	460 mm
eID data being used	Pregnancy scanning of ewes for multiples, live weights to monitor performance in feedlot.

Background

Brett Nietschke has been managing the family property at Koonunga since 2010. The property comprises undulating hills with red-brown earth soils, of which approximately 95% is arable. A self-replacing Merino flock of 350 ewes and 180 ewe hoggets are run for lamb and wool production, with wool averaging 19.5 micron. Wether lambs are finished in a feedlot prior to sale.

The ewes are run in a single mob for most of the year, with electric fencing used to implement rotational grazing at high stocking rates for improved pasture utilisation and management. Pregnancy scanning is used to inform management decisions, including the separation of animals into mobs carrying singles or multiples. Prior to lambing, mobs are moved to a 4 hectare 'sacrifice' paddock, for a period of 2-3 months. Twins are maintained at the target condition score of 3.3 and singles are slightly lower.

This containment period allows for building of a feed wedge prior to lambing. Ewes are moved out of containment for lambing in June and July onto either

regenerated pasture, comprising clover and grass, or sown pasture paddocks. The best feed is allocated to twin-bearing ewes.

During lambing, mob size is reduced to 50-80 for multiple bearing ewes. Ewes with singles are kept as one mob.

Over the past five years Brett has achieved a scanning percentage of 143 and marking percentage of 108. Pregnancy scanning results over the same period average 50% twins, 44% singles and 6% empty. Empty ewes are sold, and any ewe that fails to produce a twin within a three year period is also sold.

Brett began using electronic identification (eID) tags with the 2022 drop lambs and continued tagging lambs through 2023 and 2024. In 2025, eID tags were applied to all remaining sheep on the property. This case study explores how eID scanning equipment and related data are used to support decision making.



Figure 1: Brett with the Tru-Test stick reader that records all tag numbers for use with associated data.

What eID supported improvements are being sought?

- High reproductive efficiency.
- Fast growth rates in lambs.
- Tracking ewe lambs born as twins.
- Efficient use of available feed for ewes.

Through his involvement with one of PIRSA's eID Advantage Producer Groups, run by the Barossa Improved Grazing Group, Brett has expanded his knowledge of eID technology and how to leverage data for productivity and profitability gains. He has developed a breeding plan supported by eID data and conducted a flock profiling DNA test. This test provides commercial Merino producers with a genetic benchmark against industry which Brett has used to inform ram purchasing for priority traits.

Data collection and use

The types of eID related data collected by Brett are:

- pregnancy scanning results - twins, singles, empties
- live weight data for wethers and ewe lambs
- birth status of ewe lambs – singles, multiples.

Brett first became interested in adopting eID in 2021 when he participated in the Red Meat and Wool Growth Program - a PIRSA initiative supported by Meat & Livestock Australia (MLA). He completed the Livestock Enterprise Planning process and purchased equipment with assistance of a rebate offered through the program.

When selecting the type and brand of equipment, Brett considered his needs and spoke with other producers. He prioritised ease of use, cost effectiveness, and strong after-sales support. He trialled multiple brands of eID tags to find the one that performed best for his needs.

Data is collected using a Tru-Test XRS2 stick reader and an ID5000 weigh-scale indicator, paired with a Combi Clamp handler (figures 1 and 2). Tag numbers are transferred by Bluetooth from the stick reader to the ID5000 and are recorded against weight readings from the load bars under the handler. Brett has found this setup simple and cost effective, relative to purchasing and installing panel antennas.

In 2025, wether lambs were weighed when they were put into the feedlot for finishing, and again four weeks later. Average gain was 240g per head, per day and the bottom 10% were sold early to maximise feed use efficiency. Ewe lamb weights are also recorded to inform classing decisions when they are hoggets.

How has eID technology helped Brett achieve his livestock goals?

Using eID data for decision-making has been a relatively recent introduction to livestock management on the property, and it is too early to quantify results.

For over 30 years, pregnancy status data has been collected manually - a slow process with a high risk for error. Historical pregnancy-scanning data from older ewes still on the property has been loaded into the new eID system. This data is averaged over each ewe's lifetime to create a 'lambs per year' metric, which is used to inform classing decisions (figure 3). Early signs indicate that collecting pregnancy scanning data with eID has proven to be more efficient and less prone to errors compared to manual methods used previously.

Ewe lamb weight gain is now tracked and used to support classing decisions when they are hoggets. Animals with lower average gains are sold, while those with higher gains are retained as breeders. Brett expects to see his selection for higher daily weight gain in his breeders to yield a continuous improvement over time.

He says that tracking daily weight gain of wethers in the feedlot has improved productivity by enabling him to identify and remove poor performers early.

Knowing the birth status of ewes has been highly valuable in supporting sound classing decisions. It helps remove the inherent bias toward selecting single-born lambs that appear superior but typically have lower lifetime productivity. Over time, Brett expects to see an increase in the number of twin bearing ewes as more twin bearers are retained for breeding.



Figure 2: Combi Clamp handler and wand being used to record weight data.

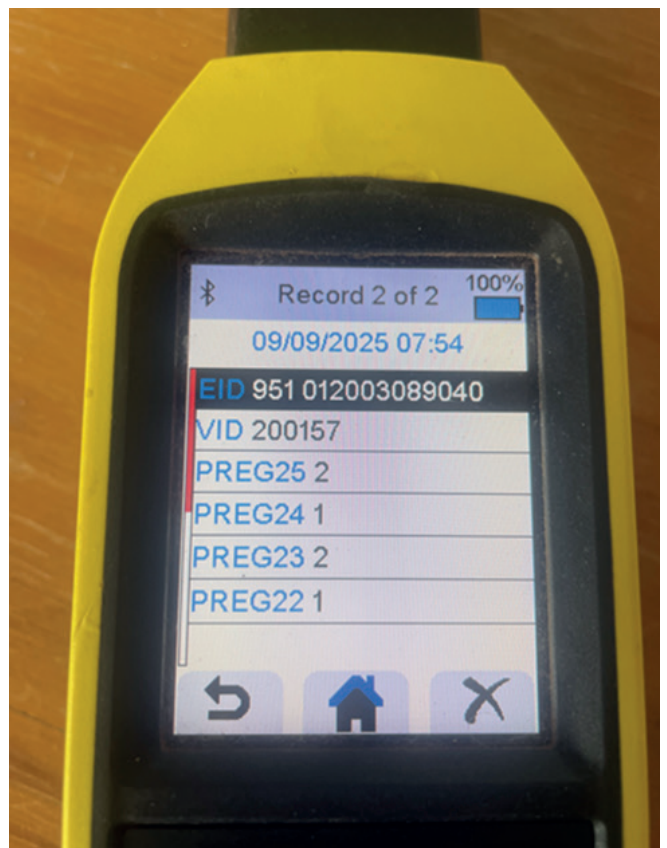


Figure 3: Lifetime data display for pregnancy scanning that helps with classing ewes.



Advice for producers commencing with eID

Brett shares his advice for sheep producers getting started with eID data for decision making.

- When it comes to data management, create a master file to store lifetime data.
- Establish and maintain an ordered sequence for the last 4 digits of tag numbers to avoid duplicates across years - this is important because repeated numbers can cause problems for data recording.
- Prepare a cheat-sheet for equipment set up and operations. This speeds up the process of setting up and running equipment, if its only used infrequently, and avoids relearning each session.
- Join a producer group to gain insights from experts and peers.



Future plans

Brett intends to continue leveraging eID data to inform decision making on farm, including recording condition scores when animals are weighed.

Plans to introduce an audible alert on the reader are in place to more easily identify animals with poor production history during classing.

Brett also hopes to improve lamb marking percentages by increasing lamb survival rates.



More information

This case study is an initiative of eID Advantage Program from the Government of South Australia, supported by Meat and Livestock Australia and AWI Extension SA.

For more information visit pir.sa.gov.au/eid

