Accessing precision livestock data in the home, office or yard.

Focus Farm Case Study

As a result of adopting eID technology coupled with a well-designed yard, the Harlocks are now spending less time in the yards and reducing animal stress, all while improving their cattle and sheep productivity and profitability.

Business Snapshot

Owners: Scott and Fleur Harlock
Property name: Shepherds Way
Location: Bool Lagoon
Size: 1,400 hectares
Enterprise description: 1550 composite ewes mated to Border Leister and White Suffolk rams, 260 Herford cows approximately 85% mated to Hereford and 15% to Angus targeting the feeder market and contract hay and seeding
Number of Employees: 3, 2 full-time
Average annual rainfall: 640 mm
On-farm technology adopted: Electronic identification, Yard-design

Background

Scott and Fleur Harlock have been farming on ‘Shepherds Way’ at Bool Lagoon for over 7 years. Pastures at ‘Shepherds Way’ are rotationally grazed, and include a mix of phalaris, fescue and sub clovers. The enterprise has a focus on animal health, low stress stock handling, adoption of technology and managing staff. Breeding objectives for the beef herd are focused around reducing gestation length, high 400 day weight, good milk and low mature cow weight.

Originally the Harlocks were involved in a family run partnership in Victoria which included two dairy farms milking 750 cows and a property with 300 beef cows. The family still has one dairy farm milking 360 cows, managed by Scott’s mother.

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With their background in dairying where individual animal management is essential, it was natural to maintain the focus on measuring each animal's performance in both their sheep and cattle enterprises.

How are they using technology to manage their business?

The Harlocks with their Panasonic Toughbook and Tru-Test™ Datamars Stick reader (wand)

Cattle: All cattle have an eID tag that is matched with a visual management tag giving each animal two forms of identity. This is particularly important in case one tag is lost. Scott believes identifying individual animals using eID makes life easier when it comes to drafting, record keeping and maintaining accreditation for the European Union (EU) Market as well as Teys Pasture Fed Assurance System grassfed market.

Currently the Harlocks start recording individual animal performance at marking, recording the year and month of birth, birth mob, breed and sex against eID. During the lifetime of the animal, pregnancy status, movements and treatments including chemical batch number and dosage are recorded. Temperament and mothering ability are also recorded, and poor performing cows are placed in the cull mob.

Sheep: Recently the Harlocks shifted their sheep enterprise from pure Merinos to composites. The Harlocks want to further expand eID tag use in their composite ewes to record pregnancy scanning data manage multiples, singles and dry ewes accordingly.

Future goals for individual animal recording include pairing progeny with sire and dam using DNA and then linking to feedback on performance of animals once sold into a feedlot or abattoir or carcase feedback if sold direct to processors.

"Technology has created precision in the business for both the livestock enterprise and contracting business and made data collection easier but doesn't come without its own issues," Scott says. *"It sometimes creates stress when something isn't working which on occasion needs a technician to fix it, but once it's back up and running it's great," he adds.*

Tag retention is an issue, albeit minor, according to Scott, with 10% of cattle and 2% of sheep losing their tags. Scott has found differences between tag manufacturers including the longevity of tags.

Adoption of the technology has been relatively easy for the Harlocks and their staff to learn and use. Scott uses a Tru-Test Datamars wand/stick reader, indicator and load cells, finding the load bars which have a split aluminium platform light and easy to set up. Sapien KoolCollect software is used to manage the data and feeds into Scott's financial software Phoenix by AgData. Phoenix is used to record the paddock treatments, livestock treatments and movements and all associated income and costs. The data is stored via the Cloud making it easy to access and collect data in the yards. Scott uses a refurbished Panasonic Toughbook which is dust, water and shatter proof. The tough book also has a screen that is designed to be used outside making viewing easier from any angle.

The value of well-designed cattle yards

Harlocks have found a well-designed yard system saves them time, labour and reduces their frustrations as well as making livestock easier to handle. As Scott has built a few sets of yards over the various

properties he has managed, he's put together a list of key features a well-designed yard should have. These include:

- A long bugle type forcing yard that funnels cattle into the race
- The force yard (pen leading into the race) should operate from the outside
- Race should be curved with enclosed panels
- A weigh box
- Good crush
- A front three-way draft
- A large pound yard which allows for transfer of cattle and drafting through the yards
- Good drainage with suitable slope
- A well-maintained solid rubble base
- Access to power and water makes it easier to keep yards clean.

The verdict on adopting on-farm technology - quality investments for the long term

Scott outlines that the total investment to use eID tags in cattle was less than $10,000. A good wand and indicator can be purchased for around $7000, a platform for weighing around $2000 and software for $1000 with a $400 per year subscription. Some hardware may need to be replaced after 10 years but often still holds some value beyond this time.

Scott's advice for producers wanting to invest in on-farm technology is to always look for quality, as cheap products generally have a poor performance.

As a result of adopting eID technology coupled with a well-designed cattle yard, the Harlocks are now spending less time in the yards and seeing a reduction in animal stress, all the while using data to inform them on how to improve their enterprise productivity and profitability.

Further Information

This case study is an initiative of the Red Meat and Wool Growth Program of Primary Industries and Regions SA, supported by Meat and Livestock Australia, SA Sheep and Cattle Industry Funds and AWI/SheepConnect SA.

For more information visit pir.sa.gov.au/redmeatandwool or contact the Red Meat and Wool Growth Program via phone (08) 8429 0360 or email redmeatandwool@sa.gov.au.