JB and Alison Tancred are excited about the potential of new genetic tools in the G.R.A.S.S. Merino flock they manage. Image: Kirsty Fisher Photography.

A grassroots approach to genetic gain

With spring ram sales underway, NSW Merino breeder JB Tancred opens the gate to his breeding strategy.

JB and his wife Alison manage G.R.A.S.S. Merinos, a Poll Merino stud at Gulargambone, central west NSW. The stud, which celebrates 50 years of operation this year, began as a breeding cooperative. It is owned by 11 breeders, who started the stud to develop a more scientifically objective way of selecting their rams.

JB and Alison also have their own commercial farm, located 20km from the stud property.

Clear goals

"The stud production goal is the dual-purpose ram," JB said.

"We have a strong emphasis on clean fleece weight, but also reproduction and growth rates.

"We're also very focused on welfare traits, particularly the transition to non-mulesing. Early breech wrinkle is a very important trait for us, but also visual traits such as wool quality."

Because of its historical philosophy around objective measurements, G.R.A.S.S. has always measured sheep, initially through fleece weighing and basic body weighing.

These measurements have become more sophisticated as the science has advanced, including the introduction of Australian Sheep Breeding Values (ASBVs), genomic testing and the inclusion of frame structures and early breech wrinkle into their index.

Welfare traits

"Putting the welfare traits into a production index has been really important for us," JB said.

"Breeding values are essentially based on an economic value, and that economic value relative to other traits.

"Obviously, to cease mulesing, you need the breech area to be as plain as possible.

"We score their breeches from one through to five, and this visual score is turned into an ASBV.

"However, putting this into an index was challenging because there's no real relative economic value.

"We'd like to think we get paid for non-mulesed wool, but you don't specifically get paid for the fact that your sheep are non-mulesed – so it's very hard to put a relative economic value on a trait like early breech wrinkle."

Apart from the early breech wrinkle target, the Tancreds are also endeavouring to increase clean fleece weight, fertility and growth rates, and reduce micron.

"We're trying to produce a ram that's profitable, but also sustainable into the future, and which carries all those traits," Alison said. "We're also trying to ensure that we rear as many lambs as possible and ensure the sheep are happy and healthy."

Getting the balance right

Alison said the indexes allow them to manage potentially antagonistic traits, when clean fleece weight is such an important profit driver.

"When you're selecting for clean fleece weight, your fibre diameter and early breech wrinkle can increase," she said. "You really need to be using an index to try to bypass all of that from happening."

JB and Alison are excited about the new industry indexes that were recently released – turn the page to learn more about these and other genetic tools.

"I think what the geneticists and MLA broadly have done over the past 12 months for the Merino indexes is going to be really important for the industry," JB said.

"These new indexes are excellent, and they align with most of the breeding objectives of the industry moving forward – continuing to increase production, while taking animal welfare and sustainability traits into account." ■

JB and Alison Tancred. Image: Kirsty Fisher Photography.

SNAPSHOT

JB AND ALISON TANCRED,
Gulargambone, NSW

AREA
900ha (stud) and 3,200ha (commercial)

ENTERPRISE
Poll Merino seedstock producer

PASTURES
Improved pastures are lucerne, chicory and medic-based, along with some native and subtropical grasses

SOIL
Range from sandy loam to grey self-mulching soils

RAINFALL
525mm

LESSONS LEARNT

- Set your breeding objectives and goals, then work out exactly the type of animal you would like to be producing for your business.
- Once you have your objectives, align yourselves with a stud which has similar breeding objectives.
- Even if an animal is high on your index, look at the individual ASBVs to ensure you don't choose a sheep which doesn't align with your breeding objective.
- Do a visual assessment to make sure the sheep passes the grade.

MLA genetics hub **genetics.mla.com.au** BREEDPLAN **breedplan.une.edu.au**
JB Tancred **themaze@activ8.net.au** Sarita Guy **sguy@mla.com.au** Peta Bradley **pbradley@mla.com.au**