

#### **Sheep CRC ASBV Case Studies**

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# GLEN AND JAYNE TILLEY **HILLCOTT GROVE,** TARLEE, SA

- \* Study the ASBVs for rams in the sale catalogue well before sale day
- \* Use an on farm progeny test to check the performance of your rams

At first glance Glen and Jayne Tilley's property 'Hillcott Grove', near Tarlee in the Lower North of South Australia, is typical of the many mixed-farming enterprises in the area.

But what separates the Tilleys' operation from the pack is that the lamb enterprise is based largely on Merinos and that the selection of rams relies heavily on the use of Australian Sheep Breeding Values (ASBVs).

The Tilleys' 1,850 Merino ewes are joined on 'Hillcott Grove' and nearby leased country, of which 1,350 are joined to Merino rams and 500 of the older ewes joined to Border Leicester rams.



"Regardless of whether we are buying Merino or Border Leicester rams, ASBVs are a critical part of our selection," Glen said. "Using ASBVs gives me greater confidence in selecting rams to meet our breeding objective than if I were using visual selection alone."

All the wether lambs on 'Hillcott Grove' are sold over the hooks with a target carcase weight of 20-22kg for the Merinos and 22-24kg for the first-cross lambs, while the first-cross ewe lambs are sold to another specialist prime lamb producer.

"Growth rate is the key trait we look for in all of our rams," Glen said. "We aim to turn lambs off at 7-9 months so we look at the ASBV for post weaning weight (PWT) as the key indicator of growth."

Carcase traits, including fat (FAT) and eye muscle depth (EMD) are also important on 'Hillcott Grove'.



One of the reasons Glen selects rams with positive fat ASBVs is to maintain condition on the ewes, which in turn assists reproductive performance.

As the business is based on producing the maximum amount of lamb per hectare, Glen has been prepared to compromise on the wool cut of the Merinos and is now quite happy to select Merino rams with average ASBVs for yearling fleece weight (YCFW) and yearling fibre diameter (YFD).



## GLEN AND JAYNE TILLEY **HILLCOTT GROVE,**TARLEE, SA

That said, the Merino ewes have still cut 6.5kg of 19-20 micron wool, whilst lambing in excess of 100% over the last five years of fluctuating seasons, making them a true dual-purpose animal.

"It's not always easy to find rams with both positive eye muscle depth and fat, as well as good growth characteristics," Glen admits. "But finding the right source of rams that has the same breeding objective as ours is a really good start."

To help identify suitable sources of rams, Glen uses the Sheep Genetics website to rank rams according to the traits he is interested in. From those rankings, Glen obtains an excellent picture of what studs he should be looking at.

"I always make sure I get the stud's catalogue well before the sale and spend a couple of nights going through the ASBVs," Glen said.



"We aim for rams in the top 10% for post weaning weight (PWT) and top 30% for yearling eye muscle depth (YEMD) and yearling fat (YFAT), but will adjust this in order to get a balance between the traits."

Glen tends to focus more on the individual traits than on indexes in order to obtain a balance that meets his specific breeding objectives.

"We're conscious of keeping our sheep at a moderate frame size. We need to balance adult size with early growth and carcase characteristics," Glen said.

On sale day, Glen inspects each of the rams he has pre-selected to ensure that they meet his visual requirements as well.



"Structure and conformation are important in both Merinos and Border Leicesters and we pay extra attention to the Merinos having plain bodies," Glen said.

"For rams to come home they need both the figures and the visual characteristics we are looking for. However, we do put more weighting on the figures as they are directly related to our key profit driver of producing more lamb per hectare.



## GLEN AND JAYNE TILLEY **HILLCOTT GROVE,** TARLEE, SA

"A stud breeder once told me that rams are made up of building blocks and you need to use them like tools to improve certain aspects of your genetics. If you think of each trait as a block, should you wish to change a trait, you look for a source of that building block."

And whilst the Border Leicester rams used by the Tilley's have been purchased from one source for many years, the Merinos have come from quite a few different studs.

"We've swapped Merino bloodlines three times in the last I I years as we have fine-tuned our breeding objective and aimed for plainer and more productive sheep," Glen said. "Our breeding objective is based on growth and fertility, regardless of whether we are breeding Merinos or first-cross."

To validate that the rams he is buying are doing the job at home, Glen runs small on-farm progeny tests to compare the progeny of sires for carcase weight, fertility and wool traits.



"It's a really simple thing to do and helps ensure that we are on the right track with the rams we are buying," Glen said. "It is really important to check that the rams are actually improving our flock in the traits for which they were selected."

Glen knows that his sheep business is well in front of where it would have been if he was just selecting on visual characteristics alone. His lambs are more uniform and feedback from processors is positive.

Although genetics is a major focus of the Tilley's successful lamb business, Glen is mindful of the role nutrition plays.

"Along with good genetics, you need to manage the sheep for production through keeping a close eye on nutrition," Glen said. "We've certainly focused on that over the last few years as well and that has contributed to our business moving forward."





#### GLEN AND JAYNE TILLEY HILLCOTT GROVE, TARLEE, SA

#### "Using the figures"

Glen and Jayne use ASBVs to help them select Merino rams that will pass on the right genetics in the flock.

A ram's appearance is affected by the level of feeding, its age, whether it is single or twin, if it was born in a good or bad season and if it's dam was a maiden or adult. ASBVs remove these effects so that sheep producers can directly compare the genetic value of rams with greater confidence.

ASBVs are reported as variations from the average of the animals in MERINOSELECT in 1990. This means that the average in 1990 is set to zero and all ASBV figures are deviations from zero.



For some traits the average ASBV for animals in MERINOSELECT will have increased since 1990 (Clean Fleece Weight), while others will have declined (Fibre Diameter) or stayed about the same (Fat).

The MERINOSELECT Percentile Band Report is an important tool for selection of Glen and Jayne's Merino rams. It provides a basis for comparing the performance of all rams born in a particular year and identifies the ones that meet their selection criteria.

TRAIT	PWT	YEMD	YFAT	YCFW	YFD
What Glen & Jayne are looking for	Rams in the top 10%	Rams in the top 30%	Rams in the top 30%	Rams that are average or better	Rams that are average or better
ASBV value required	Rams with an ASBV greater than 4.6 kg	Rams with an ASBV greater than 1.2 mm	Rams with an ASBV greater than 0.5 mm	Rams with an ASBV greater than 7.3%	Rams with an ASBV less than - 1.2 micron













