Data tests the decisions

Producer Case Study

For Steven Hobbs at Kaniva, his merino sheep enterprise needed to pay its way. After years of variable wool returns, a conscious decision was made to increase the focus on growth and the finishing ability of his sheep – which in turn became a major driver for setting a new business direction.

The change in focus to increase the kilograms of liveweight sold in wether lambs resulted in a new breeding objective for his sheep enterprise. Gone was the narrow focus on micron and fleece weight, instead rams would be selected for a more balanced combination of traits including growth, muscle, fat and reproduction. Steve explained it best when he said 'I don't expect my sheep to be the best for any one trait, but I do want them to perform well across the board'.

After altering his breeding objective, Steve made a significant change and upgraded his ram team. A big decision, and one not taken lightly. Making the changes provided Steve with a great opportunity to get involved with an MLA funded producer demonstration site project being undertaken by Jason Trompf's LambsAlive group. The focus of the demonstration was to investigate the role of a stated breeding objective in setting the genetic direction of the flock – and importantly testing if the genetic potential of the flock aligned to the breeding objective. Does the potential of the sheep match the required traits?

As part of the demonstration Steve was the first of six host farmers to undertake a 'flock profile'. The flock profile is based on a DNA sample taken from 20 random ewe lambs at marking (prior to any selection pressure from culling) and assesses the genetic potential for the flock against the key production traits. The performance of the flock is then compared with all of the animals in the merino select database – with an easy to understand report that outlines how the flock ranks in relation to percentile bands.

With the testing completed on this year's drop of ewe lambs that were sired by the new ram team, Steve is content that they are on the right track. 'At this stage we are really happy. We were looking to increase growth, and it looks like we have been able to do that, our animals are comparing favourably for growth to the top 10% of animals in the merino select database. As a commercial operation I'm really happy with that.' So far the paddock observations are lining up with the flock profile report as well. While there is always a risk in comparing progeny from different age ewes or a mix of twins versus singles, from the raw data lambs by the higher growth sires were a couple of kilograms heavier at marking and a further 5kg heavier at weaning. 'We will go back through all the scanning results and make a full assessment of how the singles and twins compared for each group, but on the raw averages I'm really happy with how things are tracking' said Steve.

When making any change, monitoring performance becomes a critical part of measuring both the success and impact of the change. Changing the ram battery over could only be deemed a success if the data showed improvement for the key traits, with improved financial performance being the ultimate success. In collecting the data to test any of Steve's management interventions (such as changing ram genetics) his ability to simplify data collection has been critical. Steve's ability to value add to the electronic identification of his sheep has been a game changer for his business.

'To us it was pretty straight forward, the ability to pin key data points to individual animals has been one of the biggest changes to our business in recent years. It's not guessing any more, I know who the best performing animals are – and just as importantly, I also know who the passengers are. Whilst a visual

assessment of the ewes tells part of the story, when you know what individual animals have actually returned, that's when you can get really excited about where the flock is headed. Understanding the genetic potential of our sheep ensures that we can pick the right sires going forward. Following that up by working through the data for liveweights and key times and pregnancy scanning, we can really start to test that our decisions have been the right ones – I think I'm as excited as ever to be in the sheep industry.'

After establishing the baseline genetic potential of his flock, Steve is now looking to monitor changes over time and see how far he can drive the genetic improvement of his flock to better meet his breeding objective. 'Thanks to the flock profile, we've got a good picture of where we sit now. I'm really happy that our sheep are performing well for growth and have a good amount of fat – there is no doubt that this lines up with our ram selection choices. Heading forward we can probably increase our focus on reproduction, so it will be interesting to see what sort of change we can get in that area.'

Any Lambs Alive members interested in discussing the development of a breeding objective for their flocks are welcome to talk with Nick Linden from Agriculture Victoria who is working with the host farmers as the demonstration progresses.

As more data comes to hand from host farmers, updates will continue to be fed back through the Lambs Alive network.

For more information

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