Case Study



Genetic focus adds diversity and value to Larpent business

Sam Simpson and Mark Billing Region: South-West Victoria Topic: Breeding for business diversity

Sam Simpson can pinpoint the exact time she knew her family dairy business needed more income diversity. It was the infamous farmgate milk price 'clawbacks' of 2016. May 2016 to be exact.

"Then, something in the realm of 95% of our income came from milk alone and I was adamant that we would never again be put in that position, losing so much of our income overnight," Sam said.

"That milk price clawback, it was terrible for the dairy industry, but it was the start of our genetic journey.

"We saw genetic improvement and diversifying with beef as a way to take a bit more control in progressing the direction of our business." Seven years later, 22% of the income comes from beef and the rest from milk. Sam and her husband Mark Billing are moving towards "a true 70:30 split".

The genetic improvement – or genetic gain – in Sam and Mark's dairy herd came from using DataGene's Balanced Performance Index (BPI) to increase their number of profitable cows and retain them longer.

The way they used sexed semen in their mating program was also altered. They used sexed semen on females they deemed suitable, regardless of their age.

"The co-benefit of gathering this genetic information and using tools such as sexed semen and genomics was the ability to develop a fair dinkum beef sideline that produced quality calves fit for the meat chain," Sam said. Historically, they had sold calves that simply went to the 'bobby calf' market."

Sam is confident that this concentration on genetic gain will put them in good stead when it comes to increasing



the value of their herd when it's time to consider succession planning.

The 430-cow herd at 'Craiglands', Larpent in south-west Victoria, now has an average BPI of 215. In August the herd was ranked 27 nationally. Only five months earlier, their average BPI was 188 and their herd was ranked 43.

DataGene Extension Officer Peter Williams said jumping 16 places from April to August was "not an easy feat" for a herd ranked within the top 50.

"Most herds at the pointy end of the rankings are very good herds as well and it's hard to jump them," he said.

"This rise is testimony to Sam and Mark's increased use of female genomic testing and their work to ensure they breed replacement females from their higher genetic merit females using increasing amounts of sexed semen."

Peter said Sam's earlier bull choices – such as selecting Powerhouse and Sondalo when they were young genomic high BPI sires – has contributed to the herd's BPI rise.

These bulls now have daughters milking in the Craiglands herd, along with the progeny of several other high-ranking bulls from the *Good Bulls Guide*.

Collecting and analysing her herd's genomic data has helped Sam have more informed discussions with breeding consultants about bull selections.

"Having a better understanding of genetics, knowing more about our cows (thanks to genomic information) and using the *Good Bulls Guide*, I'm a much more active player in the conversation about bull selection," Sam said.

"I'm not just sitting at the table with a bull catalogue as a taker of information. I'm asking for what we need and what we want and I'm no longer beholden to someone telling me what is or isn't a good bull for my business."

This focus on genetics, collecting and using their herd data to make decisions – both genomic and herd test information – has made a noticeable difference.

Cows remain in the herd longer, a win according to Sam because of the cost associated with rearing and then carrying these animals.

There's also been an improvement in the rate and severity of mastitis cases, a direct correlation with the emphasis Sam has placed on breeding for mastitis resistance.

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"The younger cows – those bred specifically for mastitis resistance – if they do get mastitis, it is not as severe as in the past. That and the reduction in recurrent cases, that's a cost saving straight away."

One of the biggest changes has been in the number of cows they "need" to milk to meet farm business production targets. Sam said this came to light after Mark saw the breeding schedule.

"When Mark saw all the cows going to beef, he nearly had a fit," she laughed. "He said 'if we join all those to beef, we are not going to have enough cows to milk'."

But, thanks to the genetic improvements within the herd, Sam said they no longer have to milk a set number of cows to meet production targets.

"Milking fewer cows, there's saving on animal health. We might not save on feed but our per labour unit costs go down, staffing requirements are reduced, repairs and maintenance goes down – all the result of physically milking fewer cows in the herd," she said.

"It's not about how many cows you milk, isn't it more about what's in the vat?"

Efficient production is the name of the game for Sam and Mark and that will play an even bigger role in their business going forward.

Sam said they have often implemented on-farm practices before they were required by either law or industry – such as anaesthetising calves for disbudding and stopping inductions. Reducing their carbon footprint will be no different. For this, they have started paying attention to DataGene's Sustainability Index (SI) to reduce the emissions intensity of their production.

These informed breeding decisions will only grow as the amount and efficiency of the data collection and analysis increases, according to Sam.

For now, Sam and Mark will continue to work towards expanding their vision – created seven years ago in the wake of a tough time for the dairy industry.

Improving their genetics to diversify their income, boost their own herd and create a higher value asset – for whatever might come.



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