Case Study



Running on data at Bookaar

Dickson family Region: Western Victoria Topic: Genomic testing

If Ally Dickson is going to collect herd data she wants to be able to use it for as many purposes as possible.

The herd manager at her family's 600-cow seasonal calving dairy farm at Bookaar near Camperdown loves information.

There's nothing she likes better than sitting at the dairy

office computer crunching numbers and "painting a picture" of her and her father Neil's Holstein herd.

She says she "runs on data" with accurate records assisting everything from herd culling and mating decisions to benchmarking to improve the businesses' performance.

It's no surprise that the father and daughter jumped at the chance to add genomic testing to their data tool kit.

Ally and Neil recently genomic tested their first batch of 155 calves after attending a WestVic Dairy and DataGene information session.



Ally Dickson and her dad Neil use whatever data they can to underpin decisions on their dairy farm. They've recently added genomics to their data tool kit.

The DNA testing showed that eight of these 155 calves were sired by the Jersey mop-up bull.

These eight won't be used to breed replacements but will remain on-farm as Neil and Ally are expanding their business.

In years to come – and once herd numbers have stabilised – these lower genetic merit animals will be sold at a young age.

The recent genomic results also revealed the calves had an average Balanced Performance Index (BPI) of 300 – something Neil and Ally didn't know before.

They will now use this figure as a benchmark for future breeding decisions.

Surprising, the genomic data also shed light on something the father and daughter had noticed within their herd but weren't able to explain.

"It showed that our gestation length was all negative," Neil said. "For the last few years, we'd say 'all the cows are calving early'. Then we'd say, 'it's the season or it's the feed' but really it was because short gestation had been bred into our herd and the genomics really highlighted this."

When these heifers reach joining age, their genomic data and subsequent BPI will determine their mating.

The genomic information will be integrated into their existing breeding programs to be accessed by their advisor.

"We have to build a picture and to build an accurate picture we need information over time," Neil said.

"We were thinking, as we go forward, that we need to identify cows when they enter the herd so we won't breed a low BPI animal to fresh sexed semen. Instead, we will breed them to an Angus or a beef bull, so we are only breeding from our best cows and improving the genetic gain of the herd to get feed and milk production efficiency to maintain profitability." "After that genomic information day at Camperdown, as soon as it finished, I walked up to Dad and said, 'we need to do that'. Accurate data is everything these days."

- Ally Dickson

Neil and Ally will continue to genomic test their heifer calves to build a bank of information.

This year, they will take ear notches from calves at the same time they disbud.

The Dicksons have recently built a new dairy so they can build cow numbers to match the farm's capacity.

This infrastructure upgrade has also included the introduction of activity collars for heat detection and the ability to bail feed according to production.

Add in genomics on top of decades of herd testing and they've got more data than they've ever had before.

Data has become central to their business operation, and that's the way Ally and Neil like it.

"If you don't measure it, you don't have the information and you can't make accurate decisions," Neil said.

"In this day and age, there are no gut feelings anymore," Ally added.

"I don't reckon we'd be in the position we are in now if we didn't have data. The dairy runs on data, the collars run on data – we basically run-on data."

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