

## Genomics guide decisions for Gippsland family farm

**Dairy farmer: Evans Family**

**Region: Gippsland**

**Topic: Heifer genomics**

Retaining a group of heifers, originally earmarked for the export market, unwittingly helped one Gippsland dairy farmer conduct his own experiment on the value of genomics.

Four years ago, Huw Evans and his family took samples from 80 heifers for their first try at genomic testing.

It was also the first year the family operation at Wuk Wuk near Lindenow had generated surplus heifers and they wanted to be sure they were keeping their best animals as replacements.

The genomic results listed the heifers from lowest to highest according to their Balanced Performance Index (BPI), the Australian measure of a cow's genetic merit for the traits that contribute to a dairy farm business.

The family 'tagged' the 15 lowest BPI animals and those that ranked poorly for fertility and cell count for sale to the export market. But the heifers never actually left the farm.

"The agents couldn't tell me when they were actually going on the boat," Huw said. "It got to joining time and I said, 'can you actually tell me when they are going on the boat?'. They couldn't so I said, 'fine, I will join them and keep them'.

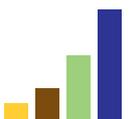
"That group are now only on their second lactation and we only have one or two of them left in the herd. There were a number that didn't get in calf originally or they have just dropped off really quickly compared to the others."

Huw, his sister Bron Evans and father Philip Evans milk 350 cows along the Mitchell River in East Gippsland.

The herd produces about 600 kg of milk solids/cow/lactation from about 2 tonne/cow a year bail feed, directly grazed feed and supplementary hay and silage – depending on seasonal conditions.



*Retaining a group of heifers, originally earmarked for the export market, helped Huw Evans conduct his own experiment on the value of genomics.*



Admitting this accidental genomic experiment probably wasn't a big enough sample size to draw widespread conclusions, Huw said the noticeable results during the past few years reinforced the value of herd data and helped clarify a future breeding plan for the herd.

Genomics also provided a focus for Huw and his family during the recent years of drought in East Gippsland and periods of low farmgate milk prices.

"It gave us something that we felt like we had control over and that we could make steady improvements," he said. "It has certainly given us a sense of achievement during tough years."

Thanks to genomic data, the Evans family also now have more confidence using sexed semen to make the most of their genetically superior animals and beef semen to diversify their income and reduce their workload.

"At first we used sexed semen to breed extra heifers but now having a bit more data on those in our herd, we are utilising that genomic information to get better calves, by focusing on the better cows in the herd," Huw said.

Currently, all heifers are included in a heat synchronisation program before they are joined to sexed semen for their first round of artificial insemination.

Other mating decisions are determined by an industry mating program and the type of semen they receive depends on a cows' BPI ranking.

"Our current plan is that if a cow is above a certain BPI she gets sexed semen," Huw said. "Those in the middle get conventional (semen) and below a certain BPI line a cow will get beef in the first round of AI.

"For the second round of AI, the top ones that got sexed semen initially get conventional semen, and anything below halfway (down the BPI list) gets a high fertility beef. In the last round, short gestation beef semen is used to tighten everything up."

This system is constantly being fine-tuned and Huw said they would consider moving away from conventional semen.

About 65% of the mostly Holstein herd calves across 10 weeks in the autumn. The remainder calve in spring across 10 weeks.

The workload in the last weeks of calving has been

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Huw Evans, Gippsland, 350 cows



significantly reduced thanks to the introduction of beef into the breeding program.

Beef calves are sold at about a week old to local restockers, resulting in less calves to rear and freeing-up valuable space in the calf shed for dairy replacements.

While breeding dairy-beef animals is "more of a management thing," according to Huw, it has provided his family business with increased flexibility and income diversification.

"Local demand for beef calves for the last couple of years has been pretty good," Huw said. "I'd rather get a little bit less money at a week old for beef and be able to sell a bull and a heifer, rather than having to raise a dairy heifer to 180 kg."

Genomic testing has also had benefits within their calf rearing program. "Since we have been testing and having a bit more of a focus on the calves and their quality, it has meant we have put more effort into growing them well and feeding them well," Huw said.

"The focus on managing them better came as soon as we started seeing their data, it really gave us that boost to follow through with them."

Asked if genomic testing has made life easier, Huw said it hadn't changed the farm workload, but it had helped decision making.

"It makes us feel like we have more control or input," he said. "It makes us feel like we know what we are doing a bit more. Half the traits people look at when they look at cows and calves and say, 'that's a good looking cow or calf', lot of that stuff goes over my head. But the numbers on the paper I can decipher that and because of that, hopefully we are making better decisions."

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