

## Selecting the best heifers with certainty in Tasmania

**Issac and Angelique Korpershoek**

**Region: Tasmania**

**Topic: Genomic testing heifers**

When Isaac Korpershoek selects heifers to keep for his dairy herd, his decisions are backed by science.

Subjective assessments of replacements, based on their size or appearance, have been traded for objective and data-driven judgments about the long-term profitability of these animals in his herd.

Genomics, the study of an animal's DNA, has made this possible.

The Tasmanian dairy farmer would be the first to admit that selecting heifers from data required a different way of thinking.

"You'd normally look at a heifer and say, 'that's a big strong heifer, we will keep that one' but with genomics, I've

found those heifers aren't necessarily the best ones," he said. "Genomics has changed my mindset, no longer do I say, 'that's a good one' when the data is telling me it isn't." Isaac farms with his wife Angelique – a veterinarian – at Forest in Tasmania's north west. They milk 350 cows and calve in autumn.

Crediting Angelique for the farm's adoption of science-based, proven and supported practices, Isaac said using evidence to make business decisions was reassuring.

For Isaac and Angelique, the benefits of genomic testing far outweigh the cost.

"You know that the heifers you keep are going to be superior," he said. "What's \$50 (a test) to know that you are keeping the best 110 heifers that you have got."

Australian dairy farmers can now access their herd's genomic data faster and make more timely decisions about what animals to retain and sell, thanks to DataGene's weekly genetic analysis.



*The Korpershoek family (from left): Angelique, Ari, Sienna, Isabella and Isaac holding Celeste.*



Introduced in 2021, the updated analysis halved the time it takes for a genotype to be evaluated and results to return to the farm. Shipping and lab analysis take a few weeks. Once the genotype has been received by the DataGene system, farmers receive their results within nine days – in line with the some of the world's largest dairying nations.

### Making the data-driven decisions

Isaac and Angelique use the genomic data to rank heifers by their Balanced Performance Index (BPI), Mastitis Resistance and Fertility Australian Breeding Values (ABV). After selecting their replacements, excess heifers are sold to the export market.

In recent years, sexed semen has helped bolster the Korpershoek's heifer numbers. As more genomically tested females enter the milking herd, Isaac said sexed semen would be used to join the heifers as well as the three- and four-year-old cows.

This would ensure all their dairy replacement would be bred from their genetically superior animals. The rest of the herd would be joined to beef.

Incorporating Angus bulls into their Holstein breeding program has opened new markets for the dairy operation.

"We've had 20 to 30 people ringing up wanting beef

calves," Isaac said. "There are not many autumn calvers up our way and because we are a Friesian herd – not crossbred – there's a stronger demand for the beef-cross calves."

The Korpershoek's calves are genomically tested at about 3½ months of age. All calves are done in one batch and testing is combined with vaccination and drenching.

Isaac and Angelique take an ear notch sample to determine their calves' genomics. Isaac said this was easier to get a clean sample compared to extracting tail hairs.

Adding genomics to their farm, Isaac and Angelique hope to have better control over their breeding program which would deliver benefits to their overall business.

"Basically, the gains you get in dairy farming now are a lot smaller than say 15 years ago when Dad was dairy farming," Isaac said. "Then you could develop more land by feeding grain you could take cows from 5,000 litres (per lactation) to 9,000 litres. The gains we get now from dairy farming are a lot smaller. Those gains come from just trying to improve the herd with more trouble-free cows, ones that can get in calf, are functional and that stay in the herd.

"Obviously, you want to keep the best ones and try and sell the others to the export market. The data doesn't lie."



## CONTACT US ABN: 78 613 579 614

DataGene Limited, AgriBio, 5 Ring Road,  
La Trobe University, Bundoora Victoria 3083



email: [enquiries@datagene.com.au](mailto:enquiries@datagene.com.au)



[www.datagene.com.au](http://www.datagene.com.au)



T (03) 9032 7191



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