

Proof of breeding improvements inspire SA farmers

Dairy farmer: Gary Zweck

Region: South Australia

Topic: Genomics

When Gary Zweck was told he could increase production, fertility and decrease vet costs by changing the way he chose bulls, he wasn't entirely convinced.

The South Australian dairy farmer previously outsourced breeding, using a consultant to correctively mate his family's Holstein herd.

He was pleased with the way his herd was milking but wanted to take the hassle out of pouring through glossy breeding magazines and catalogues.

As part of the Improving Herds project four years ago, Gary and his wife Ros were introduced to selecting bulls using the Balanced Performance Index (BPI).

The BPI reflects the economic drivers for a range of Australian dairy farming systems: production, health and fertility, type, workability and feed efficiency.

It didn't take long for Gary and Ros to see breeding changes flow through to their farm at Blyth in South Australia's Mid North region where they milk up to 240 Holsteins under the Donava prefix.

"Seeing it on my farm straight-up, in the early stage, made it easier to recognise the value of selecting on BPI and which traits to follow," Gary said.

The Donava herd data tells the story of a rapid rise in almost all key breeding traits, such as fertility, production, longevity, overall type and mastitis resistance.

Their calves born in 2019 have a BPI four times higher than calves born just three years earlier.

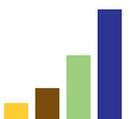
The herd's most recent Genetic Futures Report revealed Donava calves born in 2020 had an average BPI about 40 per cent more than the national Holstein average.

This rapid increase in genetic gain is proof of how quickly a breeding direction can be altered, according to DataGene extension officer Peter Williams.

"Gary and Ros have been using the industry tools – tools that embrace modern technology – and applying them to their business," he said.



The genetic merit of Gary Zweck's dairy replacements has skyrocketed since he began making breeding decisions based on the Balanced Performance Index (BPI).



“They are proof of what is possible for a dairy farm business and it has all come from selecting high BPI bulls and those from DataGene’s Good Bulls Guide.”

Gary and Ros haven’t seen the full effect of their changes in the milking herd yet, as heifers have only been coming in during the past few years.

But what they had witnessed changed their perspective on what they deem a ‘good’ cow.

“When we had the first lot of genomic results come back and our number one heifer was 160 BPI, not that fantastic but that was our highest,” Gary explained.

“The first thing I did was rush down to the yard, she hadn’t calved yet, but she was in calf. I looked at her and she was a plain looking heifer. There was no brilliant stature or interesting markings, nothing to say, ‘there’s my top heifer’. I did think ‘what’s going on here’. But she’s now back in calf with her fourth calf. Over those years I used four or five straws of semen (in total) to get her in calf. That particular animal, she has shown to me, the better the BPI the better she performs.”

This heifer is also now classified VG86.

“Genomics has made me realise that DNAs tell more of a story than the visual eye,” Gary said.

When the Zweeks first joined the Improving Herds project in 2016, they were intrigued by the industry data showing the huge difference between the top and bottom 25 per cent of some herds in terms of contribution to the business bottom line.

To fully embrace these gains, they knew they needed to pick the “right bulls” and move away from using natural bulls for mopping-up.

Now their breeding program includes sexed semen across a large portion of the milking herd as well as heifers. Sexed semen is used to join high production animals and those which calved smoothly – didn’t have retained membranes or other health complications.

Milkers which aren’t joined with sexed semen receive dairy-beef semen, while a Speckle Park mop-up bull runs with the heifers.

This practice has delivered ample replacement dairy heifers for the Zweeks.

It’s also enabled them to diversify their business by selling surplus dairy heifers to the export market and rearing dairy-beef for local restockers or the processing market.

“Export heifers have been selling quite well, but with the beef, we are having a bet both ways,” Gary said.

“If the export market doesn’t continue, we have options with the beef market and that has been going well recently so we are happy to ride that wave.”

“The strategy I think has been getting us better heifers overall. I’m finding it harder and harder to pick-out heifers that I want to send to China, it is all heading in the right direction for the moment.”

Gary and Ros run a total mix ration dairy system, milking up to 240 Holsteins and crop 771 ha rotating wheat, barley, vetch and oats. Their average annual rainfall is 350 mm a year and there aren’t any other dairies further north in South Australia.

They are joined on the farm by their son Justin and full-time employees Olivia and Janar.

All the crops grown on-farm are used in the dairy business.

The average milk production per cow is “close to” 10,500 litres a lactation – milking twice a day – or more than 2.4 kg of milk solids/day.

Gary said the herd’s milk fat and protein was “struggling” a few years ago, but now the protein sits at 3.2-3.4% with milk fat at 4% or more.

The herd averages 650 kg liveweight.

Looking ahead, the Zweeks are looking forward to embracing polled traits while placing increased emphasis on their herd’s strength.

Breeding for “functional” udders will remain a priority as well as improving fertility, production, and mastitis resistance.

Gary said most bulls that tick all his boxes are ranked into the top portion of the BPI and have been identified by the industry as a Good Bull.

“For me, the BPI makes life easier,” he said. “The herd average production is going up all the time and fertility is going up and the vet bills are going down. Everything is going in the right direction.”

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