

# Ginfo herd insights: Bonnie View

**Ginfo herds were chosen because they had very good records. The project classified and genotyped the herd's first lactation heifers. The results provided herd managers with information to see the impact of their breeding decisions and inform future breeding decisions. Paul Douglas, Ginfo project manager, reports on the results for Ray and Sue Howe's Bonnie View herd, which is managed by Stuart Seabrook.**

In a typical year, there were about 550 milkers in the Bonnie View herd, with calving split between autumn and spring. Based at Drouin in West Gippsland, Ray and Stuart make breeding decisions together. Over the past 20 years, they've bred high genetic merit animals, with their Holstein herd ranking 112 in Australia based on Balance Performance Index (BPI). Ray and Stuart make the sire selection decisions to breed animals that have functional traits suited to a pasture-based system.

"We are looking for animals that are athletic, capable of walking distances and foraging pasture. In the past we've focused on Australian-bred bulls but more recently we've paid more attention to workability and longevity traits," Ray said.

When selecting sires, profitable production is a given, as Ray and Stuart tend to focus on proven bulls that rank in the top 10%.

"Within that group we look at all the indices for each bull – BPI, TWI and HWI."

The first thing to note about the Howes' results is they've made steady progress in improving the herd's genetic merit for Balanced Performance Index (BPI) over the past 20 years (see graph). This is very impressive as it's easy to get distracted on different breeding priorities over time.

Using the herd's current ABV results, which include a large proportion of genomic data, we broke the herd into five groups based on BPI. Working with the current



milk price, an average cow in the bottom 20% of the herd returns \$347 less income than the top 20%. There's about 100 cows in that bottom 20%, so between them, the bottom 20% generate \$36,000 less income than the top 20%.

Knowing who's in the bottom 20% will be handy for Ray and Stuart when making breeding and culling decisions. For example, they could select replacements from the higher performing ABV cows, and apply greater scrutiny and culling nomination to the lower performing ABV cows. Genomics results for younger heifers allow herd managers to review how replacement heifers align with potential future profitability performance. Ray also sees the opportunity to keep the occasional bull calf from top cows to use after the AI period.

We compared the actual (historical) performance of individual cows (from herd test results), with their ABV(g)s for specific traits. Their actual performance was closely aligned with their genetic merit, particularly for mastitis resistance, fertility and survival. For example, the cows in the Bonnie View herd dataset with higher Cell Count ABVs have an average cell count that is 180,000 lower than the lower genetic merit cows.

Cows with higher Fertility ABVs have an average calving interval that is 64 days shorter than their lower genetic merit herd mates.

The cows in the herd dataset with higher Survival ABVs last on average 596 days longer in the herd than the lower genetic merit cows. That's almost two extra lactations.

BPI is also a good indicator of longevity. Cows in the Bonnie View herd dataset with higher BPI on average last 462 days longer than the lower BPI cows.

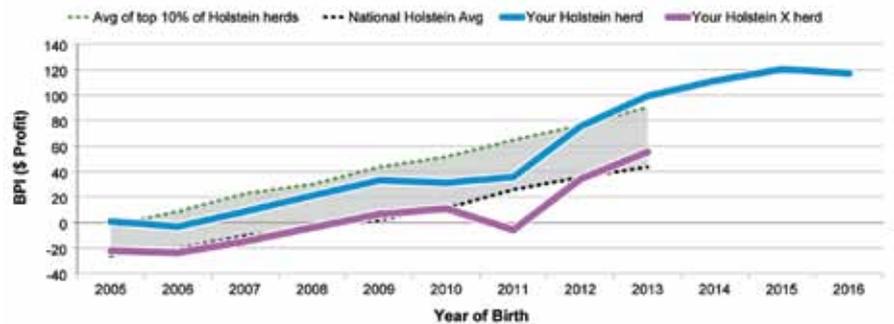
The Ginfo team also used genomic results to analyse each herd's breed purity. The Bonnie View herd showed very high breed purity, based on successive generations of highly recognised Holstein AI sires. Although breed purity is a relatively new measure for Australian herds, having a high purity herd is potentially useful to owners, for example for potential export heifer opportunities and the asset value of animals. Future registration opportunities for this high calibre herd become apparent with the support of this data.

## National reference herd for genetic information

Ginfo is Australia's national reference herd for genetic information. It includes detailed information on more than 20,000 cows including their genotypes, classification scores and performance data from herd testing.

Bonnie View was an ideal candidate for Ginfo, having pedigree data records back to 1980 and herd test data records back to 1987.

As a Ginfo herd, Bonnie View data has contributed to improving the reliability of genomic ABVs – ABV(g)s for all traits, especially daughter fertility and overall type. In particular, the addition of classification results has helped improve the reliability of individual cow breeding values for type and mammary system.



Bonnie View's Genetic Progress report shows the herd has made steady progress in improving genetic merit for Balanced Performance Index (BPI) over the past 20 years.

The Bonnie View herd clearly demonstrates that ABVs are a well aligned to actual cow performance, giving herd managers confidence in genomic testing and using the results for breeding decisions. **HJ**

*If you are interested in analysing the performance of your herd or having females genotyped, contact Holstein Australia ph 03 9835 7600 or email: [enquiry@holstein.com.au](mailto:enquiry@holstein.com.au)*



Ray Howe and Stuart Seabrook have bred a high genetic merit herd, making the breeding decisions together, aiming to breed cows that have functional traits suited to a pasture-based system.