

High BPI bulls the way to go

IMPROVING
HERDS

Tim Miseen
Denison, Gippsland



Genetics Case Study

High BPI bulls have proved their worth to Denison dairy farmer, Tim Miseen, who has seen their benefits first hand as a participant herd in the ImProving Herds Project.

Tim runs up to 240 milkers on his dairy in the Macalister Irrigation District in Gippsland and has been milking cows for 38 years.

The current farm has a split-calving herd of which every cow in the herd has been bred by an AI sire.

“We’ve been involved in a number of projects. We became a Dairy Farm Monitor project farm 10 years ago and the experience and information we got out of it was great,” Tim said.

“There was a lot of benchmarking and information on what we were doing – it really highlighted that being the best at one thing didn’t necessarily equate into having a better bottom line. Sometimes high performance came with high costs.

“We didn’t go into the ImProving Herds project for our own benefit – we were more focused on what it could do for the industry which would use our records and data to correlate to genetics.

“But at the end I came away with a very clear message – high BPI bulls are the way to go and now I have more confidence in using high BPI bulls.”

“The daughters of the high BPI bull are all retained in the herd a lot longer.”

Tim’s herd was one of 27 dairy farms across Australia that recently underwent detailed analysis by the ImProving Herds project to investigate the contribution of genetics to dairy businesses.

Farm stats (August 2018)

HERD SIZE

Up to 240

BREED

Holstein and crossbred

FARM SIZE

85 ha home farm (67 ha milking area)
plus 30 ha irrigation block and 40 ha dry block

CALVING PATTERN

Split 60:40 spring:autumn

DAIRY

22-unit swing over

STAFF

0.7 + owners

FEEDING SYSTEM

1.7-1.9 t/cow/year

HERD TESTING

Bimonthly with evening milking



“I came away with a very clear message – high BPI bulls are the way to go and now I have more confidence in using high BPI bulls.”

Tim Miseen, Gippsland

The study identified the top and bottom 25% of each herd, ranked on Balanced Performance Index (BPI), the genetic index for profit used by the Australian dairy industry.

Ten years of historical performance data, plus recent farm financial data from the herd records were analysed to look at the difference in contribution production, longevity and financial contribution to the farm business between the top and bottom BPI groups.

The study found that cows in the top 25% of the Missen herd produced 562 more litres, 41 more kilograms of fat, and 32 more kilograms of protein/cow/year than the bottom 25% of the herd.

The extra milk production from the top cows resulted in an extra \$287/cow/year in milk income after feed and herd costs compared with the bottom group.



Sire selection

Tim has always selected the sires he uses in his herd by using the printed and App versions of DataGene's *Good Bulls Guide* as well as suggestions from the local Hico representatives.

The herd is 100% bred by AI, and Tim selects high ranking bulls for BPI, daughter fertility and mastitis resistance.

After a disappointing experience with sexed semen in the past, he recently used sexed semen for two rounds of AI over last year's maiden heifers and the results look promising.

The program for the heifers involved using fixed time AI with CIDRs, and resynchronising for the second cycle. A Jersey mop-up bull was used for the third cycle; progeny by this bull are sold and do not join the herd.

Mature cows are joined to conventional semen and are not synchronised but are fitted with heat detection collars which monitor cow movement. The collars and auto drafter in the dairy allow for twice a day inseminations.

"The collars mean we have one less job to do on the farm and we don't have to have staff with heat detection expertise," Tim said.





ImProving Herds pays dividends

IMPROVING
HERDS

ImProving Herds was a three-year project that studied the contribution of herd improvement to Australian dairy businesses.

At the heart of the project were 34 inspiring Focus Farmers who agreed to put their farm, herd and financial records under the spotlight. Seven were Herd Test Focus Farmers and 27 were Genetics Focus Farmers. This is one of a series of case studies about their experiences as ImProving Herds Focus Farmers.

ImProving Herds has shown that:

- *The daughters of High Balanced Performance Index (BPI) bulls perform better under Australian conditions, across dairying regions and feeding systems.*
- *Cows in the top 25% for BPI in a herd outperform cows in the bottom 25% for production, fertility, longevity and contributed on average an extra \$300 income over feed and herd costs.*
- *The benefits of using genomic breeding values to guide heifer selection decisions were demonstrated on the Focus Farms, where the performance of genotyped heifers aligned with their genomic breeding values.*
- *Information from herd testing gave Focus Farmers confidence to make data-driven decisions for routine management and to respond to high pressure events.*

Funded by the Gardiner Dairy Foundation, the project was a collaboration of Dairy Australia, Agriculture Victoria, DataGene, Holstein Australia and the National Herd Improvement Association of Australia (NHIA).

“Mop-up bulls go in the herd after eight weeks of AI but we don’t keep any of the calves sired by the mop-up bulls.

“Any cow that fails to get in calf is sold with the exception being cows with high levels of production, which may get carried over the following joining period, but we monitor them closely.”

Heifers

Every AI sired heifer calf – of which there are about 70 – is reared each year.

“We haven’t been genomically testing because we keep them all,” Tim said.

“Genomic testing will be a great tool for culling replacement heifers when we have too many.

“For the first time last year, I hired some scales to monitor heifer growth rates. It showed we were exceeding the targets, so the exercise confirmed we were doing the right thing.

“We’ve had some pretty challenging seasons and this year has been very dry, so we will sell Holsteins for export as an option to reduce stocking pressure.”


CONTACT US

ABN: 78 613 579 614

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

 email: enquiries@datagene.com.au

 www.datagene.com.au

 (03) 9032 7191



Disclaimer: DataGene is an independent and industry-owned organisation responsible for driving genetic gain and herd improvement in the Australian dairy industry and is an initiative of Dairy Australia and industry. This report is published for your information only. It is published with due care and attention to accuracy, but DataGene accepts no liability, if for any reason, the information is inaccurate, incomplete or out of date whether negligent or otherwise. Copyright © DataGene Ltd. All Rights Reserved.

October 2018