Case Study



A breeding insight that computes

Dairy farmer: Eugene Rea Region: South-West Victoria Topic: DataVat: Genetic Futures Report

Eugene Rea's approach to breeding dairy cows changed with the click of a button. Well, more specifically, the downloading of a report – but that all began with tapping the computer mouse.

Eugene and his wife Chantelle milk 300 registered Holsteins, under the Childers Cove prefix, across 150 ha in South-West Victoria.

The Mepunga dairy farmer started using the new dairy industry herd improvement and breeding website, DataVat, earlier this year. DataVat is a web portal the allows farmers access to customised reports and tools based on their own herd and business records.

A Holstein enthusiast, Eugene was looking forward to viewing all the information of his 300 head herd. He called it a 'herd snapshot'.

What he didn't expect was to rethink his breeding philosophy.

"It was quite obvious on the Genetic Futures Report that DataVat generates, the cows in our top 25% for BPI [Balanced Performance Index] were producing 66 kg more milk solids and their calving intervals were 33 days less than those in the bottom 25%," he said.

"It's pretty obvious those cows are the profitable ones. You suspect that, but to see the actual figure – comparing the



Eugene was looking forward to seeing the 'snapshot' of his 300-head herd on DataVat.

top 25% to the bottom 25% – I guess the proof was just there."

Eugene's breeding philosophy had concentrated on type, but more recently he started looking for bulls that enabled him to breed for this and health traits.

"We don't show, but we've imported some embryos into the herd from high-type pedigrees, that's where my interest lies, and trying to breed a cow with good confirmation certainly helps her longevity," he said.

"The longer we can keep them in the herd the more they make, but the other side of that is if they are not going to get in calf, they are not going to stay in the herd. It is trying to find that balance."

Building on the strong foundation from the imported embryos, Eugene will use Australian Breeding Values (ABVs) and BPI ranking as another tool when selecting his bull team.

"I can see now that, by looking at these figures on the DataVat report, that the proof is there," he said. "The BPI is a profitable index."

An early DataVat adopter, Eugene mostly analysed reports about his herd, concentrating on the individual cow breeding information.

When it comes to selecting bulls, he anticipates spending a few hours using DataVat to filter bulls best suited to his breeding goals. Daughter fertility, feed saved and reducing the herd's average stature will be his main priorities. The need for these improvements was confirmed by the information generated by his herd's Genetic Futures Report.

"Type, longevity and mastitis resistance were well above average," Eugene said. "Fertility was below average, and our fat and protein were about average but heading-up at a fairly sharp level. I think the last couple of years we have probably turned things around a bit for type and production but fertility hasn't improved so much."

With an average weight of about 600 kg, the milking herd's diet includes pasture and grain, while during winter it is supplemented with corn silage grown at the Reas' outpaddock.



"It was quite obvious on the Genetic Futures Report that DataVat generates, the cows in our top 25% BPI were producing 66 kg more milk solids and their calving intervals were 33 days less than those in the bottom 25%."

Eugene Rea, South-West Victoria, 300 Holsteins.

Average production is about 9,100 litres/cow/lactation or 640 kgMS/cow/lactation.

Eugene expects DataVat will help improve his knowledge about individual cows in his herd, how his herd ranks compared to others and the bulls suited to his operation.

"You can see what bulls have worked in the herd because it ranks your top cows and those which are continually throwing animals up the top of the list," he said.

"Conversely, it goes the other way too, which ones aren't working."

Eugene's been investigating individual cows and discovering what makes up their BPI but has enjoyed comparing his herd to the rest of the database.

"The Genetic Futures Report gives you a herd level base of many different traits from production through all management traits and every type trait as well," he said. "Because we classify every animal as well, we have a lot of information at our fingertips now to make breeding decisions."

Looking ahead, Eugene would like to explore genomic testing as a way to generate more data about his herd and increase the reliability of the information.

"DataVat has changed our thinking about breeding and what the profitable cows are," he said.

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

T (03) 9032 7191

Ń



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.

April 2020