Case Study



Genetic selection for successful breeding

Dairy farmer: Anthony Eccles Region: South-West Victoria Topic: Genetic selection

Breeding good cows using the latest technology runs in the genes for Purnim dairy farmer Anthony Eccles.

Anthony's father Ray was one of the first to use artificial insemination in South-West Victoria some 60 years ago, and the herd continues to enjoy the benefits of that early adoption of technology.

Anthony continues the tradition and has been an early user of genomics and sexed semen, as well as regularly referencing DataGene's Good Bulls Guide to make sure he has a full picture of his breeding choices.

Purnim Holsteins has been registered since 1988, and Anthony's calves are in demand locally and internationally. With a well-established and successful breeding program, Anthony regularly has plenty of replacements but enjoys

selling, not only as another revenue source but also to help other farmers improve their herds.



Anthony Eccles' family farm has benefitted from adopting new breeding technologies as they become available.

Calving starts around 10 February and continues until the end of May, before resuming in early August until the end of October. This avoids the worst of the mud and wind in winter and the heat of summer and keeps a flat milk curve for the farm's fresh milk contract.

Anthony synchronises autumn-calving cows and has introduced sexed semen in the past three years, following its success with heifers.

"We find that with synchronising the cows we are getting a better conception rate - probably 55% with sexed straws and then we go to conventional for the others," he says.

"Sexed semen has improved out of sight compared to what it used to be."

Anthony rears about 300 calves and 60 bulls each year. This is more than he needs for replacements but with a well-bred herd, he has no trouble selling surplus stock.

"We have got a good market because they're registered and genomic tested," he says.

"We always get good feedback. The latest buyers have an older herd and want a bit of youth and have already said they'll be back for more next year.

"I'm in the Ginfo project - Australia's national reference herd for genetic information - and all heifers and two-yearolds are classified every year, so we know the better ones and we herd test every month."

Ginfo is a large-scale genotyping project that provides genetic and performance information to increase the reliability of Australian Breeding Values (ABVs) and indices. It is a collaboration of DataGene, Dairy Australia, Holstein Australia, Jersey Australia and the Victorian Government.

Selecting good bulls

Anthony doesn't just use the bull with the highest Balanced Performance Index (BPI).

"I look at those with good legs and feet and udders," he says.

"They have to survive in the herd. There's no good having something that doesn't suit my herd.

"The cows have to walk a long way - 2.5 kilometres from the dairy to the back paddocks, so they need good legs



Anthony Eccles uses the Good Bulls Guide as an invaluable breeding management tool.

and feet. And when you have high producing cows, you've got to have a good udder to support that."

The cows produce an average 8,500-9,000 litres with high fat and protein solids, meaning production becomes another breeding goal for Anthony and his team.

Anthony also looks for bulls with strength and chest width to avoid having frail cows in the herd.

He has a good base to work from, but still likes to check the facts and says The Good Bulls Guide is an invaluable breeding management tool.

"You might have a rep come in with a nice glossy book who says they're elite bulls. But if you don't look at all of the options, you might not be selecting what's right for your herd."

At the moment, Anthony is using bulls from five different herd improvement companies.

"I can be selective. You need the right information. Because we're all genomic tested, we can run through a computer program and connect the best bull to the best cow because that's what the computer is telling us."

For Anthony, the cheapest bull isn't necessarily the best bull.

"That cheap bull could cost you a lot of money down the track," he says.

He also uses the guide to track popular cow families.

"Breeders have good cow families, so you can recognise a family name in the guide and know a bull out of that family is going to be good."

It's no surprise that Anthony has excelled at breeding over the years as he freely admits that it's his big passion when it comes to farming.

"It's important because it's the foundation of a farm's success," he explains. "I'd rather milk one high-producing cow instead of two average cows. This is what the farm is about - it's not just about milking numbers."

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The Good Bulls Guide includes listings of the top Australian and overseas proven bulls, based on **Australian Indices and Australian Breeding Values** (ABVs) and is a part of Dairy Australia's efforts to drive herd and feed innovation by delivering outcomes from research to support farm decision-making for improved productivity and profitability.

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