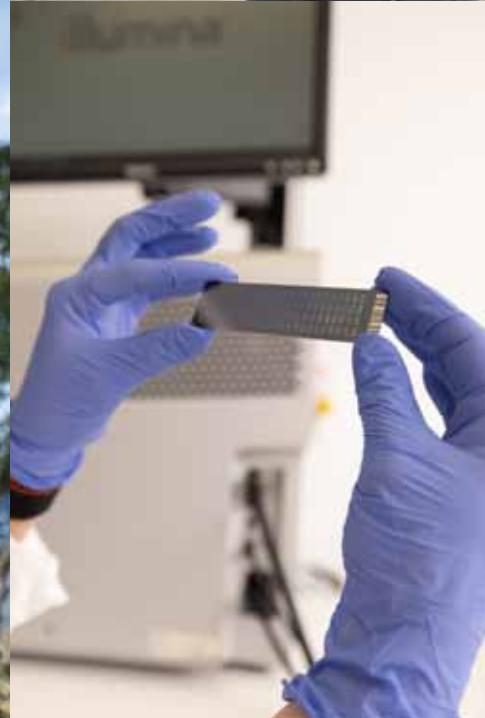


Annual Update 2025



DataGene is an independent, industry-owned organisation that delivers world-class herd improvement products and services to Australian dairy farmers and their service providers. Our members include leading herd improvement service providers, genetics suppliers, breed associations and peak dairy industry organisations.



Contents

Chair's Report	4	Highlights 2024/25	17
Solutions for herd development	6	Strategic Pillar 1: Efficient data-driven decisions	17
About DataGene	6	<i>Feature Project: DataConnect</i>	19
Our Vision	6	<i>Case Study: DataConnect</i>	20
Our Mission	6	Strategic Pillar 2: Sustainability and animal	
How we work	6	performance through R&D and herd improvement	21
Products and services	8	<i>Feature Project: Ginfo</i>	23
Genetic and genomic evaluations	8	Strategic Pillar 3: Promoting the value of herd	
NASIS registrations	9	improvement	24
Export heifer certification	9	DataGene CEO receives breeding Fellowship	26
Reports, tools and resources	9	<i>Case study: Breeding strategy</i>	27
Software services	9	Strategic Pillar 4: Diversified and improved service	
Strategic IT consulting	9	offerings	28
Forage Value Index	9	<i>Feature Project: HerdData app</i>	29
Our data engine room	10	Strategic Pillar 5: Service delivery	30
Data Vat	10		
Central Data Repository	10	Software development and IT strategic consulting	31
Genetic Evaluation System	10	DairyBio: Developments in the pipeline	32
Performance metrics	11	DataGene consultative committees	33
Genetic trends	11	Data Access and Standards Standing Committee	34
Number of cows		Herd Test Centre Committee	34
with phenotypes in the CDR	12	DataGene Board	35
Female genomic testing	12	<i>Case study: DataConnect</i>	39
Genomically tested bulls	13		
NASIS-registered bulls	13		
Workability	14		
<i>Feature Project: NBO review</i>	15		
<i>Case Study: Breeding tools</i>	16		

Abbreviations

AAABG	Australasian Association for the Advancement of Animal Breeding and Genetics	HWI	Health Weighted Index
ABV	Australian Breeding Value	ICAR	International Committee for Animal Recording
AI	Artificial Insemination	iDDEN	International Dairy Data Exchange Network
BPI	Balanced Performance Index	LTE	Linear Type Evaluation
BRD	Business Requirements Document	ME	Metabolizable Energy
CCM	Cloud Controls Matrix	MIR	Mid Infrared
CDR	Central Data Repository	NASIS	National AI Sire Identification Scheme
CEO	Chief Executive Officer	NBO	National Breeding Objective
DDF	DataGene Delivery Framework	NHIA	National Herd Improvement Association
FVI	Forage Value Index	R&D	Research and Development
GAICD	Graduate of the Australian Institute of Company Directors	VDIA	Victorian Dairy Innovation Agreement
Ginfo	Genomic Information Reference Herd		

Chair's Report

Tim Jelbart
Chair
DataGene



In the hustle and bustle of daily life – whether in the dairy, paddock, or office – it's easy to lose sight of progress. Annual reporting season gives us the opportunity to pause: to look up, look back, and look ahead.

In this 2025 Annual Update, we are proud to share the progress our industry has achieved. We also provide updates on current projects and their intended outcomes, as these initiatives will continue to make a difference to our customers and stakeholders across the agricultural sector.

The **National Breeding Objective Review 2025** sets the course for breeding priorities and shapes the characteristics of Australian dairy herds for generations to come. Through an intensive process of fact-finding, genetic and economic modelling, testing, consultation, and implementation, we are now in the process of updating selection indices for delivery with the December 2025 public ABV release. We are deeply grateful to the many organisations and individuals who contributed to this significant review.

DataConnect is a multi-year project designed to enable data exchange with herd management software, extending

DataGene's services to more herds. Over the past year, DataGene has continued to integrate with information systems across a diverse range of dairy farms, increasing the flow of data into our central database. Together with Dairy Australia, we completed a data supply chain audit for the dairy industry – an important step in identifying the most promising areas to improve data connectivity.

We also continue to support the vital work of the **International Dairy Data Exchange Network (iDDEN)**, as herd improvement centres worldwide collaborate with equipment manufacturers to overcome integration challenges.

On the global stage, DataGene has worked closely with international partners to advance research aimed at reducing greenhouse gas emissions. Specifically, we co-ordinated the design of the **Global Methane Hub database** for the International Committee for Animal Recording (ICAR) and Wageningen University, The Netherlands. DataGene has recently been commissioned to build and maintain the Global Methane Hub database. This critical piece of infrastructure will accelerate research



that targets reductions in methane emissions from dairy production.

While DataGene is best known for genetic evaluation and data management, our strategic advisory and consultancy services have also supported customers to achieve efficiencies, deliver key projects, and plan technology investments. For example, our team is leading the co-design process for the next transformational research program in animal genetics under the Victorian Dairy Innovation Agreement.

The environmental and market challenges faced by many farmers this year have left no room for uncertainty in decision-making. DataGene continues to provide farmers with accessible genetic and herd management information to support confident decisions in uncertain times. On reflection, it is often easy to forget the improvement in genetics across the national herd over the past 10 years due to high-quality genetic information – if we look at BPI alone we have seen an improvement in Holsteins of \$285 during this time. For an average herd of 342 cows, this is an improvement of about \$97,000 net income minus feed and herd costs per year compared to a decade ago. We encourage you to reach out to our team if you need help accessing the information that's right for your business. While these conditions have affected DataGene's revenue streams, our members, and our farmers, our commitment to delivering on priority projects remains strong.

The 2024/25 financial year saw DataGene posting a net deficit of \$122,842 for the year, a significant improvement from the previous year's \$575,444 deficit. Our continued investment in data connectivity in the industry saw us implementing Capitalisation of new Software Builds, giving the company an Earnings Before Income Tax, Depreciation and Amortisation of \$432,169, reflecting improved operational efficiency. Although DataGene was affected by the collapse of heifer exports to China and some external

projects not going ahead, expenditure was held well below budget to account for this, putting DataGene in a more favourable cash position at the end of year. The Board and Management remains focused on investing in our data future while diversifying income streams and enhancing service delivery to support sustainable and profitable outcomes for the industry. More details are available in [DataGene's Financial Report](#) for the year ended 30 June 2025.

We continue to make significant investments to improve data connectivity across the industry, supported by the expertise and commitment of our staff. The board strongly believes in the value of investing in our data future.

We acknowledge the invaluable financial support of **Dairy Australia** on behalf of all dairy farmers. Together, we have secured a funding agreement that is central to our new five-year business plan. We extend sincere thanks to the DataGene directors for their vision and insight, to committee members for their industry knowledge and passion, and to our dedicated, diverse team for their continued commitment.

Finally, we recognise the contribution of our inaugural Chief Executive Officer, **Dr Matthew Shaffer**, who recently accepted the role of Managing Director at Dairy Australia. Matt's influence on the genetic and herd improvement industries extends well beyond Australian shores. He is a former Chair of the Interbull Steering Committee of the International Centre for Animal Recording, where he played a leading role in founding the International Dairy Data Exchange Network and reshaping Interbull governance. His depth of experience, global networks, and commitment to delivering value for farmers have driven groundbreaking initiatives that benefit both research and industry. Matt is widely respected in Australia and internationally for his ability to listen, foster diversity, and find common ground on complex issues. We thank him for his outstanding service and leadership at DataGene.

Financial summary 2024/25

Profit and Loss at 30 June 2025

Sales Revenue	4,902,882
Other Revenue	56,838
Other Income	54,444
Total Income	5,014,164

Employee expenses	2,651,473
Other expenses	2,485,533
Total Expenses	5,137,006

Deficit	-122,842
---------	----------

EBITDA	432,169
---------------	----------------

Balance Sheet at 30 June 2025

Current Assets	1,704,970
Non-Current Assets	4,219,318
Total Assets	5,924,288

Current Liabilities	1,013,592
Non-Current Liabilities	1,197,755
Total Liabilities	2,211,347

Net Assets/Total Equity	3,712,941
--------------------------------	------------------

Solutions for herd development

About DataGene

DataGene is an independent and Australian dairy industry-owned organisation responsible for driving herd improvement and enabling data-driven decisions in the agriculture sector. It is an initiative of Dairy Australia and the broader dairy industry. DataGene brings together non-competitive functions under the one umbrella, including genetic evaluation, herd recording and data systems. It also provides software development services and strategic consulting services in technology.

Our Vision

Leading sustainable and profitable agriculture by facilitating data-driven decisions.

Our Mission

An independent DataGene supports Australian dairy farmers to improve the sustainability and profitability of their farms by delivering world-class genetic evaluation, data-driven decision-making tools, and software and professional services to the agricultural industry.

Our activities are managed within five strategic pillars:

1. Efficient data-driven decisions
2. Sustainability and animal performance through R&D and herd improvement
3. Promoting the value of herd improvement
4. Diversified and improved service provision
5. Service delivery

How we work

DataGene plays a fundamental role in the pathway between research outcomes and on-farm application. With many others also having a role in this process, collaboration is vital. DataGene has a long-standing collaborative relationship with DairyBio that provides the research pipeline for genetic evaluation, new traits, improved reliability and novel applications (see page 32).

DataGene performs the development and delivery roles to implement new traits and applications created by DairyBio. The development phase may involve implementing models into DataGene's genetic evaluation system and developing new software, tools or apps. Ginfo – the industry's genomic information reference population – has an important role for both research and development. DataGene's expertise in development is increasingly recognised and valued by other organisations within the dairy industry and more widely across agriculture who are commissioning the services of DataGene's IT advisory and strategy team.

DataGene's routine delivery services include genetic evaluation (ABV releases, including genomics, that are published via DataVat.com.au), software services such as DataGene Centre for herd test centres and a range of extension resources.

Dairy farmers are the reason for DataGene's existence. They are the end-users of most of our products and services and the focus of our vision and mission. We recognise that many players have an influence on the application of herd improvement on farm. To ensure farmers have access to the information and tools they need, DataGene works with a broad range of service providers including herd

Solutions for herd development

test centres, software companies, bull companies, breed societies, resellers and genomic service providers. We can also reach farmers through a diverse range of advisers, including Dairy Australia's regional programs.

DataGene works closely with international organisations such as the International Committee for Animal Recording, Interbull, iDDEN, the Council on Dairy Cattle Breeding and Lactanet.

DataGene is owned by industry. Its foundation members are Dairy Australia, Australian Dairy Farmers and the National Herd Improvement Association of Australia (NHIA). Our members include herd test centres, genetics companies, genomic service providers, breed associations, and animal health companies (see inside front cover).

Dairy Australia is a major funder of DataGene and is also a client in the development of software solutions such as the Clinical Mastitis App.

Dairy farmers are the reason for DataGene's existence



Products and services

Genetic and genomic evaluations

DataGene owns and manages Australia's national independent dairy genetic evaluation database and analysis service with the aim of increasing the rate of genetic improvement in Australian dairy herds. DataGene is the sole entity calculating and supplying Australian-specific breeding values. Virtually all AI bulls with semen sold in Australia have been evaluated using DataGene's independent genetic and genomics data.

DataGene maintains the industry's national genomic reference herd, [Ginfo](#), which underpins the development of breeding values for new traits, especially those that are difficult to measure, such as health traits. Ginfo also enables the industry to use new technologies such as MIR (mid infrared) spectrometry (see page 23).

Evaluations are publicly released three times a year in April, August and December, in line with internationally agreed Interbull release dates. Bull ABVs are updated weekly for fee-paying customers such as genetics companies and herd owners. Female ABVs are updated weekly based on the latest genomic and herd test results for herd owners and genomic service providers. Australian Breeding Values are calculated for Holstein, Jersey, Guernsey, Brown Swiss, Australian Red, Ayrshire, Illawarra, and Dairy Shorthorn breeds as well as their crosses.

Genomic evaluations are delivered for Holstein, Jersey, Red breeds as well as their crosses.

Products and services delivered directly	Fee for service
Good Bulls Guide and App	×
Website (information and data)	×
ABV(g) reports to genomic service providers	✓
Bull proofs to bull companies	✓
HerdData app	✓
Project management services to industry organisations	✓
Centre and inventory software to service providers	✓
Software development services to industry	✓
NASIS	✓
Export heifer	✓

Products and services delivered through third parties	Fee for service
HerdPlatform (via DataVat / herd test centres)	✓
Selective Dry Cow Tool	✓
Genetic Progress Report	×
Extension resources	×
MIR Conception report (via herd test centres)	✓

Products and Services

NASIS registrations

DataGene manages the National AI Sire Identification Scheme (NASIS) that registers critical information on dairy and beef bulls for the purpose of pedigree recording and genetic evaluation. NASIS is part of the Central Data Repository and holds a wealth of detailed identity information for more than 30,000 bulls from around the world.

Export heifer certification

DataGene collaborates with Holstein Australia in the certification for Holstein heifer exports, including administration of records of animal pedigrees and identification details.

Reports, tools and resources

DataGene supports and enhances a suite of [decision support tools](#) such as the Good Bulls Guide, Good Bulls App, Genetic Progress Report, HerdPlatform dashboard, HerdData app, Fertility Focus report, Mastitis Focus Report and national statistics.

Software services

DataGene delivers software development and maintenance services including provision of Centre and inventory software to herd testing and AI service providers. [DataGene Centre](#) is the software that supports more than 90% of herd testing in Australia. DataGene Centre is a highly specialised software solution tailored to Australian conditions. DataGene has a proven track record for developing and maintaining software for the agriculture sector, both domestically and internationally.

Strategic IT consulting

DataGene provides [software and strategy services](#) and has a portfolio of services to deliver solutions for Australian and international customers across dairy and the broader agricultural sector. These services help diversify income streams and maintain capacity at DataGene on behalf of the dairy industry (see page 31).

Forage Value Index

DataGene evaluates Dairy Australia's [Forage Value Index](#) each year. Developed by Dairy Feedbase, the Forage Value Index (FVI) is a tool that helps Australian dairy farmers and their advisers to make more informed decisions when selecting ryegrass cultivars.

Our data engine room

DataGene's data engine room is underpinned by three IT systems: DataVat, the Central Data Repository and the genetic evaluation system. Combined, DataVat, the CDR and the genetic evaluation system hold the key to enabling dairy farmers to make data-driven decisions with ease. Although challenging, DataGene continues to progress towards the vision of a system that enables "single entry; multiple access". The aim is for seamless transfer of data between on-farm systems and industry databases enabling data to be entered once and then used in multiple ways across different platforms, tools and reports.

DataVat

DataVat is a web portal that allows customised, secure access to various reports, tools and resources such as Australian Breeding Values, the Genetic Progress Report, HerdPlatform, the Selective Dry Cow Tool and MIR Conception. These tools draw on each herd's own data that is stored in the Central Data Repository. Some of the tools and reports are publicly accessible, while others are available only to herd owners, or fee-paying customers of DataGene services (such as bull companies and genomic service providers).



Central Data Repository

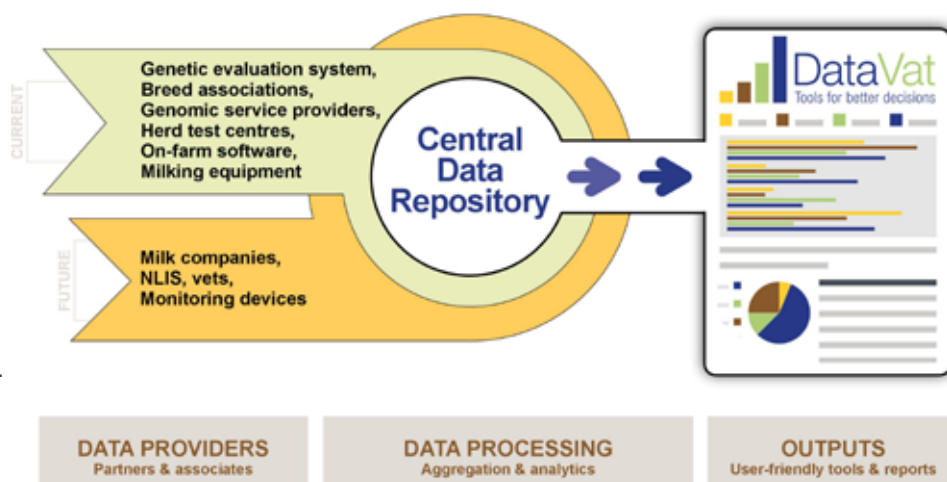
The Central Data Repository is Australia's largest database of dairy animal performance records, some dating back more than 100 years. With new information arriving every day, the CDR feeds data into the tools and resources delivered via DataVat. While DataGene is its caretaker, the CDR's value extends beyond genetic evaluation and herd data measurement that it is best known for. The CDR supports dairy cattle trade and marketing, quality assurance programs required by milk processors, industry reporting, benchmarking farm business performance, and other services.

Increasingly, the CDR is evolving to incorporate data from non-traditional sources. DataGene is focused on its growth through the DataConnect project.

The vision for the CDR is to enable data sharing across multiple platforms, such as those already connected and new connections to vets, milk companies, and livestock monitoring systems such as the National Livestock Identification System (NLIS) for the benefit of the farmers who contribute the data. A key principle underpinning the CDR is that each farmer should control access to their data.

Genetic Evaluation System

DataGene's genetic evaluation system is the IT system which processes the billions of records of animals' genetic and performance data to calculate Australian Breeding Values and indices. The genetic evaluation system includes the models used to calculate ABVs for more than 40 traits and four indices. The genetic evaluation system is run 43 times a year to update ABVs and indices.



Performance metrics

DataGene uses clearly defined measures to monitor its progress for the most important aspects of its work. This report includes just six of these key metrics: Genetic trends, number of cows in the Central Data Repository (CDR), number of bulls and females that have been genomically tested, National AI Sire Identification Scheme (NASIS) bull registrations and workability records. These metrics represent our progress towards the National Breeding Objective and forecast future success that is founded on high-quality data.

Genetic trends

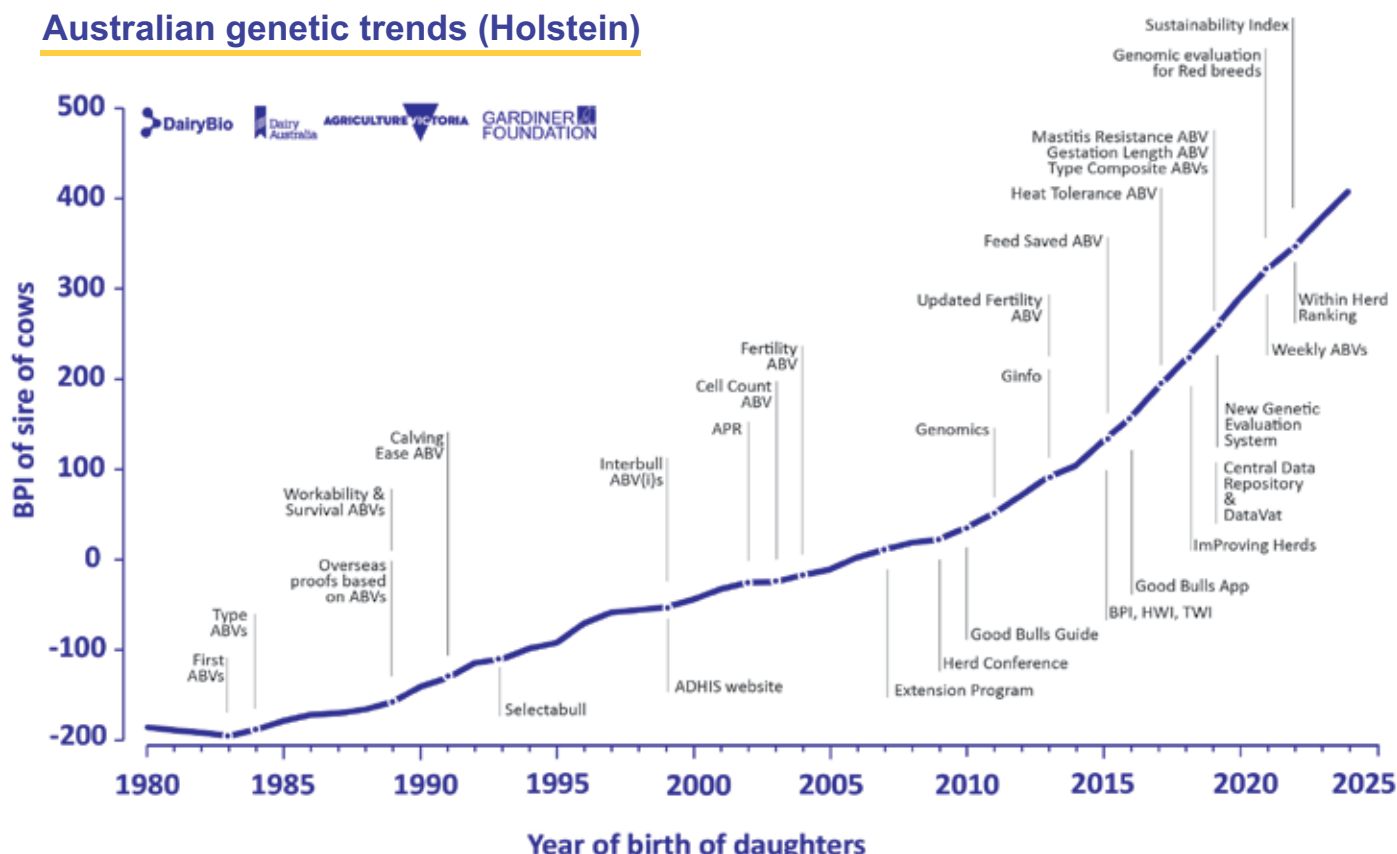
A substantial portion of the value that DataGene delivers to the dairy industry is through genetic evaluation that drives profitable herds and cows. DataGene tracks the rate of genetic gain for dozens of characteristics but its main genetic metric is the trend for [Balanced Performance Index](#) (BPI).

Target: long-term (10 year) average \$30/year

Current: For Holsteins, the average rate of genetic gain for BPI in sires of cows over the past 10 years (2014–2024) is very close to the target of \$29.09.

For Jerseys, the 10-year trend is \$16.45/cow/year, with the most recent 5-year trend at \$16.95/cow/year.

Australian genetic trends (Holstein)



Performance metrics

Number of cows with data in the CDR

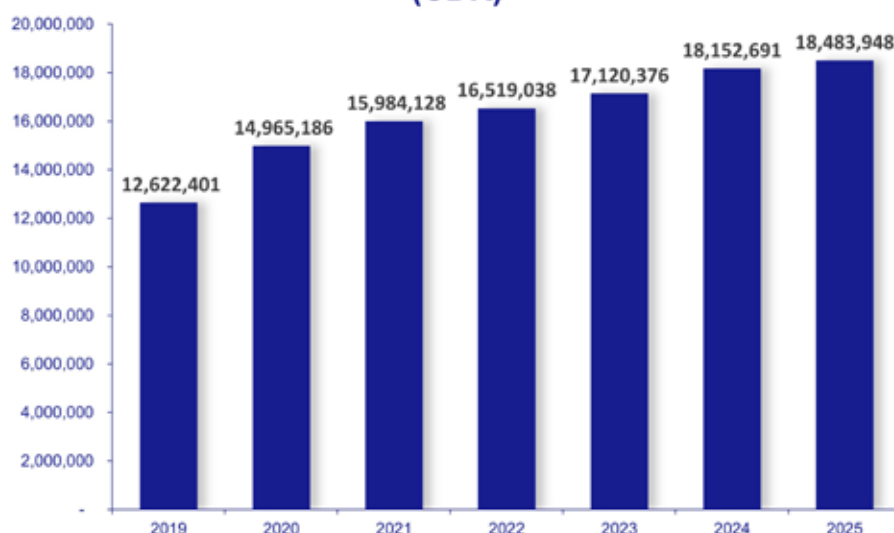
Expanding the number and type of records in the CDR is vital to ensure the industry has access to data for accurate genetic evaluation and innovations to enable data-driven decisions.

Tracking the number of cows in the Central Data Repository gives an indication of the information arriving from herd-recording services, breed organisations and on-farm data sources that are now connecting.

Target: increasing annually by 5%

Current: 18.5 million (1.8% increase)

Number of cows in Central Data Repository (CDR)



Female genomic testing

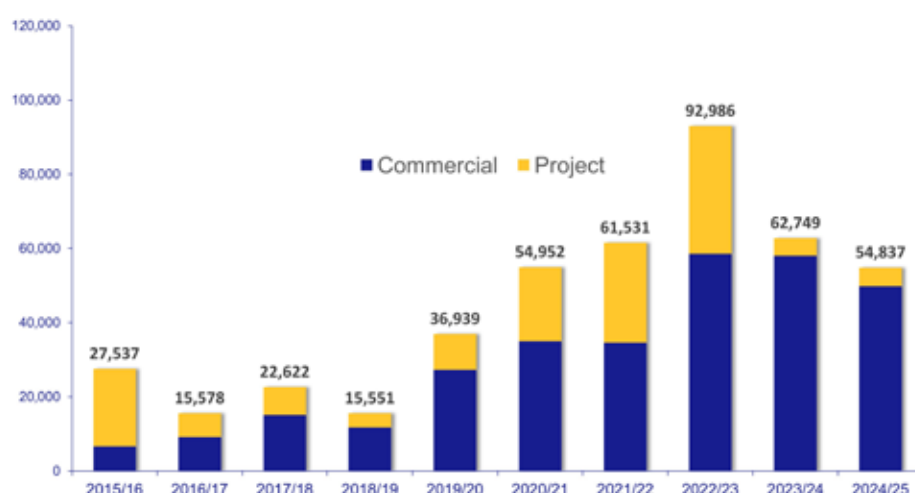
Heifer genomic testing is a cost-effective way for farmers to select the best replacements for their herd. Genomic results contribute to higher rates of genetic gain through selection decisions and pedigree correction, confident culling choices and diversifying income streams that enhance business agility.

Target: minimum of 15% increase in the number of females tested

Current: 54,837 (13% overall decrease, 6% decrease in commercial tests)

While the number of commercially tested cows is within 6% of last year's figure, the testing of animals associated with research projects has declined. The growth of genomic

Number of genomically tested females



testing of females has slowed as changes in market conditions have occurred, such as lower demand for export heifers and seasonal conditions in some regions.

Performance metrics

Bull genomic testing

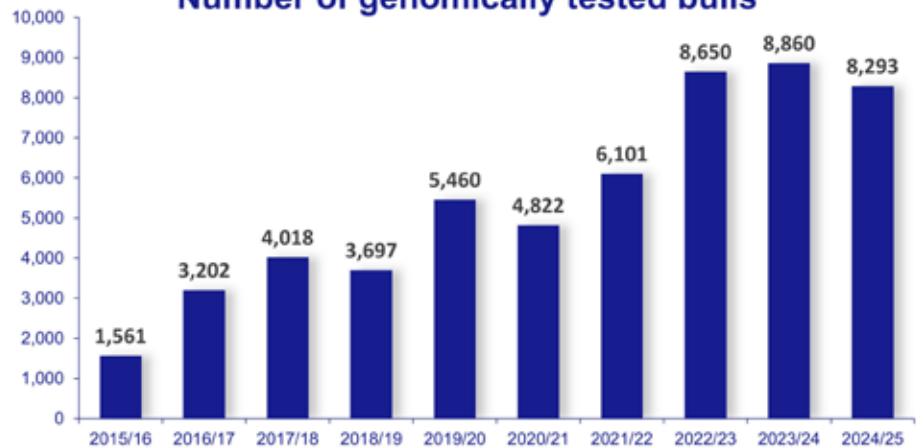
Strong demand for Australian genomic evaluations for bulls has delivered another strong year of bull genomic testing. Increasing the number of bulls that are tested ensures that farmers have access to the best genetics available, validated in Australia's unique dairying environments.

Target: >3,000/year

Current: 8,293 (6% decrease since last year, 158% more than when DataGene began)

Following on from two previous record years, this year's performance remains strong. The active interest in bull genomic testing is mainly driven

Number of genomically tested bulls



by bull companies but also includes active registered breeders who now routinely test their young bulls.

NASIS registered bulls

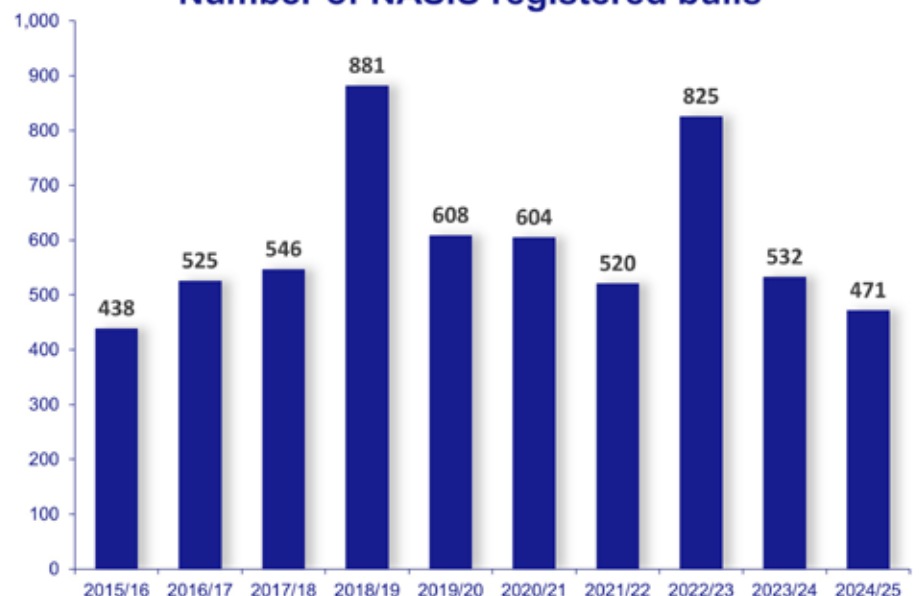
The NASIS (National AI Sire Identification System) bull registry is a collaborative industry effort that underpins high quality animal recording and evaluations in Australia.

Target: Maintain a minimum of 500 new bulls registered on NASIS each year.

Current: 471 (decrease of 11% since last year)

NASIS registrations this year were slightly lower than last year, and this is expected. The decline is in line with the 8.1% decline in dairy semen sales that occurred in a similar time period as well. Coinciding with the immediate market drivers is a longer-term shift towards the use of accurate genomic tests to support precision selection of bulls that are moved to the marketplace.

Number of NASIS registered bulls



Performance metrics

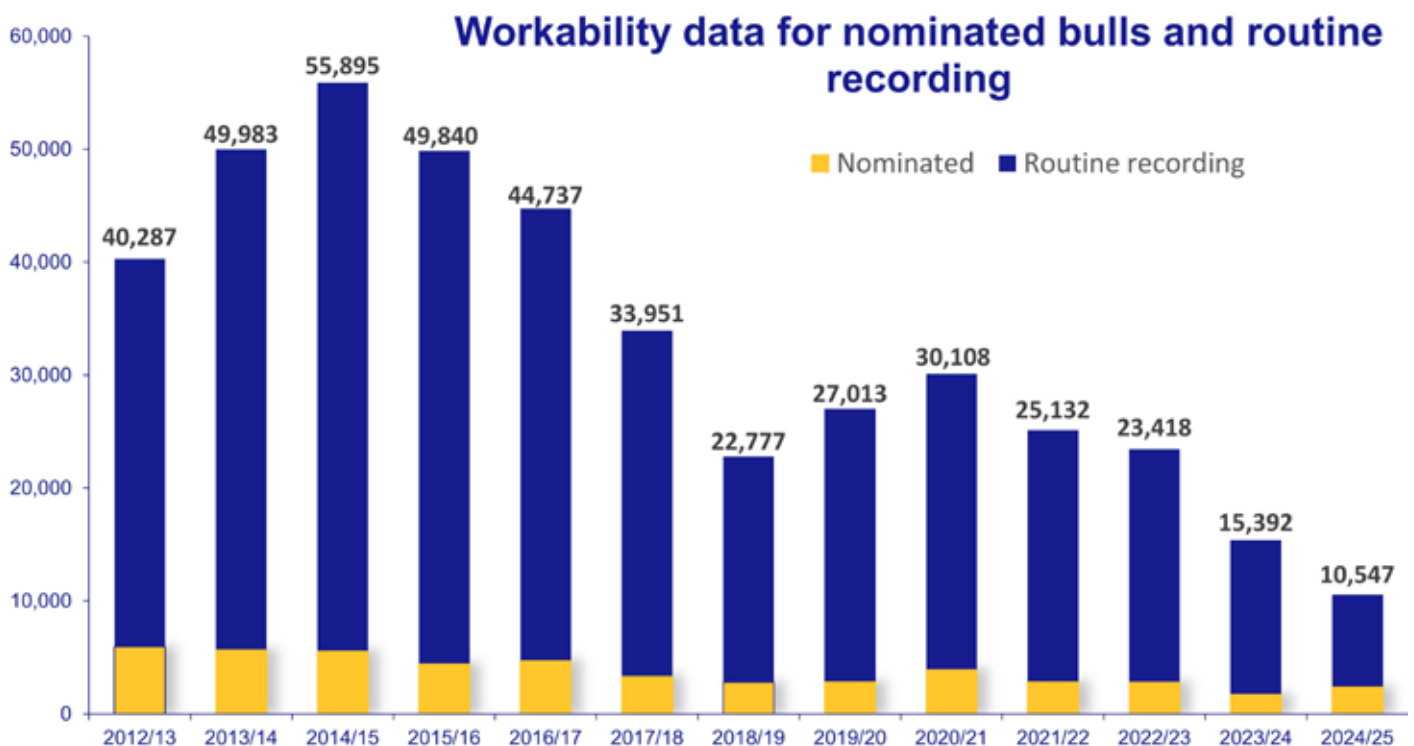
Workability

Workability reports are a vital piece of data for genetic evaluation – no one likes a kicking cow or a slow milker. Workability traits have an economic value and are included in breeding indices (BPI, HWI, SI). Farmers are asked to report workability scores on all 2-year-old heifers through their herd management software (Easy Dairy, Mistro Farm), their herd test centre or the HerdData app.

Target: 3,000/year from the progeny of nominated sires

Current: 2,427 from the progeny of nominated sires (36% increase since last year) and 10,547 records from routine and nominated collections.

For the first time in five years, the number of workability records increased. However, there has been a gradual decline in the number of workability record collections over time through both routine recording and bull company nominations. DataGene has recently invested in the HerdData app which is now freely available for workability collection (subscription fees apply for farmers wanting to use all app features).



Feature Project: NBO review

Breeding our future herds

The [National Breeding Objective](#) (NBO) describes the collective breeding priorities for Australian dairy herds. Its purpose is to enable farmers to breed herds that meet the future needs of the Australian dairy industry. The NBO must evolve over time in response to the changing needs of dairy businesses, new knowledge and breeding technologies. As the NBO evolves, so do the indices. DataGene undertakes a formal review of the NBO every five years. A review process has been under way during 2024 and 2025 with implementation scheduled for the December 2025 public ABV release.

The NBO review is overseen by DataGene's Genetic Evaluation Standing Committee who determine the key themes for the review. The process for the 2025 NBO review involved three main stages:

- Consultation – identify industry needs and discuss proposed options (May–October 24 and Mar–June 25)
- Analysis and development of options (May 24 – Jan 25)
- Implementation (build and test) – changes to the genetic evaluation system (July – Dec 25) for rollout with the December 2025 ABV release.

The initial consultation phase involved an online survey (255 respondents), in-depth interviews with 20 farmers and 28 discussion sessions with 138 industry stakeholders.

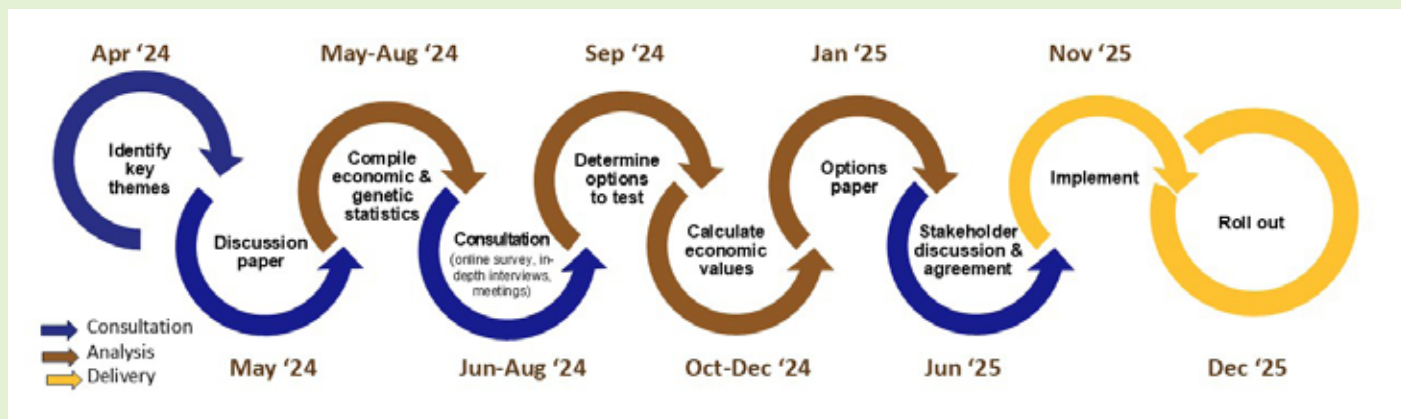
Findings from the consultation phase informed a series of analytical studies including forecasting future input costs and milk price, compiling economic and genetic statistics and testing more than 30 index options. An options paper was prepared based on the combined results of analytical work and consultation findings.

Three key recommendations were the focus of discussions held during the second stakeholder consultation phase. More than 100 people participated in 16 face-to-face meetings held between March and June 2025. A recorded video was circulated to resellers and large herd groups. Discussions during these sessions showed consistent support for the key recommendations.

Key recommendations:

- Update pricing for milk components and inputs (for all indices, all breeds):
 - changing the protein:fat ratio from 2:1 to close to 1:1.
 - shifting to using forecast milk prices.
- Enhance the Health Weighted Index (HWI) by adding in calving ease and gestation length to make HWI more relevant for seasonal herds.
- Update the base in 2025 and then 5-yearly.

The project is on schedule for delivery with the December public ABV release, with the focus in mid-2025 on building and testing the recommended changes in DataGene's genetic evaluation system.



Case Study: Breeding tools

Focus on milk boosts sustainability

The Hamilton family manages costs on their dairy farm by optimising production. It is also how they make the most of a limited milking platform, their homegrown supplementary fodder, and decades of selective breeding to produce healthy, long-lasting and highly productive Australian Reds.

Bolstering the kilograms of milk solids – and litres – leaving their farmgate near Mount Gambier in South Australia is also paying dividends on Australia's newest breeding index.

The Hamiltons' 600-head Australian Red operation, 'Hamilton's Run' was the third highest herd on DataGene's Sustainability Index (SI) in the April 2025 release of Australian Breeding Values (ABV).

Graeme Hamilton said DataGene's [Sustainability Index](#) aligns well with his breeding philosophy – for a herd that efficiently turns feed (protein and energy) into milk which also means less greenhouse gas emissions per litre of milk produced.

"We chase higher production than many, to dilute the unit costs per litre of milk rather than per cow," he said.

"The title Sustainability Index suggests that it is all about carbon minimisation per unit out the gate. And while it is trying to minimise the carbon and our effect on the planet, it also relates, very much, to the amount of protein and energy I need to put into the cows. The goal is the most production from a given quantity of energy and protein."



Cluain 4909 Matilda (ET), who has a 942 SI. With a herd average of 292 SI, Hamilton's Run has 82 cows with a SI of more than 500 including one cow – Cluain 4909 Matilda (ET) – at 942 SI.



Graeme Hamilton said the Sustainability Index suited his family's breeding philosophy.

Graeme and Michele Hamilton, their son Craig and Graeme's mum Pat calve 600 cows year-round. The herd consumes up to 60% of its diet from direct grazing, while the remainder of their forage requirements – lucerne and maize – are grown locally by the Hamiltons and fed on a feedpad at their home farm.

Graeme said the Sustainability Index (and where necessary other DataGene indices) are used as a 'first cut' to select a range of bulls.

"After that, I start looking at the detailed traits, but I don't make my final decisions based on SI or BPI ([Balanced Performance Index](#)) or HWI ([Health Weighted Index](#)), they're just how we do a first cut to come up with a short list of bulls to work with."

The next step is to look at production and conformation traits. The milk, fat, and protein output must be balanced; the cow must be robust enough to sustain high production; and her udder must be easy to manage in the dairy.

He said selecting an index to use as a guide for a breeding program should be based on the entire farm system.

"The selection has to be matched by the feeding regime and the healthcare – cow care – and all those things go together to make a whole," he said. "It is no good taking one part (of a farming system - such as breeding) in isolation and saying, 'well, this is going to fix all the problems'. It is not a silver bullet."

Hamilton's Run is also ranked in the top 10 for BPI and HWI.

Highlights 2024/25

Strategic Pillar 1: Efficient data-driven decisions

Strategic priorities (2025–2029):

- DataVat provides seamless transmission of data between on-farm systems, DataGene and industry data users.
- DataVat becomes the industry reporting platform for sustainability metrics.
- Work with Dairy Australia, milk processors, animal health sector, and others on improved data collection and analytics.
- Develop new reports, tools, and resources to help make the best whole-farm decisions.

Key focus areas 2024/25:

- First stage of DataVat redevelopment completed.
- Connecting herds to the Central Data Repository (CDR) via DataConnect.
- iDDEN integration with equipment manufacturers.

System enhancements

During the year DataGene implemented a number of IT system enhancements to automate repetitive tasks and improve the user experience.

Since February 2025, cow ABVs and indices have been updated on [Herd Platform](#) with every routine run (>40 times a year). In the past they were only updated three times a year, with public ABV releases. Having more up-to-date information available enables farmers and their trusted advisers to make more informed decisions, based on their herd's actual data.

System enhancements implemented in mid-2025 have enabled automated uploading of information for genomic testing. This enables genomic service providers and labs to load genotypes and related information to a secure managed file transfer (MFT) with direct links to DataGene's database. The information is processed hourly everyday between 8am - 5pm (EAST). Users have direct access to a log file to view the results of the upload. This pipeline also enables direct submissions of genetic conditions and haplotypes data to DataGene's system.

Key deliverables

- ✓ System enhancements
- ✓ DataVat redevelopment
- ✓ DataConnect
- ✓ iDDEN

Highlights 2024/25

DataVat redevelopment

In the time since [DataVat](#) was developed (in 2016), IT technologies and DataGene's services delivered through it have evolved. [DataConnect](#) (see page 19) is expected to deliver a quantum increase in the volume and types of data received from farmers. The redevelopment of DataVat will accommodate this growth and also connect farm data that is currently siloed. The DataVat redevelopment is a multi-year project.

This year's activities included user-consultation, preparing business requirements documentation (BRD) and a paper outlining different options for implementation over a series of phased modules. The options address different budget and timing scenarios.

iDDEN

DataGene is a member of the [International Dairy Data Exchange Network](#) (iDDEN), which is negotiating data exchange between on farm equipment and software systems and national databases, including Australia's CDR. This multi-year project will provide the pipeline to dramatically expand the number of data suppliers connected to the CDR. It will also create access to new types of data, offering opportunities to develop new breeding values and decision support tools.

iDDEN continues to work with equipment manufacturers on speeding up the roll out to all members. A consent management trial is currently underway and will be evaluated after June 2025. A similar trial is proposed to simplify authentication between systems and countries.

Seven international companies are in various stages of development to enable data exchange. The most progressed is DeLaval which has data exchanging in Europe. DataGene has completed the IT development work for data exchange with DeLaval and now is waiting for its place in DeLaval's queue for roll out.



iDDEN's owners

- Australia: DataGene
- Austria, Germany: RDV
- Canada: Lactanet
- Germany, Luxembourg: vit
- The Netherlands, Belgium: CRV
- USA: National DHIA
- Denmark, Finland, Iceland, Norway, Sweden Nordic Cattle Data Exchange (NCDX)

iDDEN's partners include:

- DeLaval and its affiliates UNIFORM-Agri and Dairy Data Warehouse
- GEA
- Lely
- Afimilk (produces cow behaviour sensors, farm management software and milk meters)
- Cowmanager
- SmaXtec (a rumen bolus sensor company)
- Qualitas AG (provides IT and quantitative genetics services for Swiss livestock)
- Synergy

“Farmers today are generating more and more data on the farm and need solutions that solve the challenges of data integration. For GEA, iDDEN is therefore an important partner, because they precisely offer this IT service of connecting different systems and data sources in a suitably secure and globally standardized framework.”

– Martin Schnare, Product Manager Digital Solutions at GEA

Feature Project: DataConnect

Towards single entry, multiple use

DataConnect is a multi-year project that explores ways the industry can work collaboratively to tackle the challenges farmers experience when exchanging and integrating data. Better connections between data sources and the industry data base (Central Data Repository – CDR) are critical for achieving DataGene's vision for a pipeline that allows for single data entry; multiple uses.

A high priority is expanding the number of farms connected to the CDR. We are pursuing opportunities through a variety of organisations involved with dairy records (such as on-farm software providers and milking equipment companies that supply dairy automation solutions). This is a challenging phase as the issues tend to be unique to each company and need to be addressed individually. Addressing these issues should enable connections with a significant number of farms using these systems.

In parallel, DataGene continues to progress its work with the International Dairy Data Exchange Network that is building better pipelines with overseas equipment manufacturers.

Progress 2024/25

In early 2025, Dairy Australia provided additional funding to accelerate the DataConnect project with three key deliverables: a supply chain data audit, redeveloping the HerdData app and connecting herds to the CDR.

The supply chain audit examined how data is generated, shared and governed across the dairy farm-to processor supply chain. It involved a series of 30 in-depth interviews with farmers, software vendors, processors and industry advisers. The project mapped current data flows and identified inefficiencies, capability gaps and opportunities to improve data sharing infrastructure in the Australian dairy industry. The report gave 11 recommendations across the themes of strategy, structure, people, processes and data/technology.

The [HerdData app](#) was redeveloped and deployed through the App Store and Google Play on 30 June. The redevelopment provided enhanced performance, security, and future compatibility. It also included a new, free feature



to provide a convenient way to report workability. Bull companies have welcomed this feature. (More details page 29)

The most challenging task of this project is connecting herds, which is an ongoing project. The initial priority was herds with GEA and DeLaval systems and the IT infrastructure for these was completed during the year. Connections for other systems will roll out progressively over time as the IT systems are developed.

As part of the communication plan, a case study highlighting the value to advisers has been prepared featuring Craig Wood (see page 20).

Case Study: DataConnect

New data automations a game changer

Recent automations in data transfer from on farm software is a game changer for farmers, dairy vets and advisers. Dr Craig Wood from Terang and Mortlake Vet Clinic has been analysing the data from dairy herd records for years, to help his clients make informed decisions about mastitis management, selective dry cow treatments and culling.

Until now, accessing herd data has been challenging and varied with different on-farm software systems. Craig said he would either have to visit the farm on site to manually download the data himself or get the farmer to create and email him a dif file or get a back up file from the on-farm software. This process had to be repeated regularly to ensure his analysis was based on current herd data.

"It was a time-consuming but worthwhile exercise because making decisions based on actual herd data directly affects the farm's financial performance, as well as animal health and welfare," he said.

Craig is excited about the [DataConnect](#) project which enables dairy farmers to set up a daily, automatic transfer of herd data from the farm to the industry's Central Data Repository.



Vet, Craig Wood says automated data transfer between on farm software and DataGene's central data repository is a game changer.

This means farmers and their trusted advisers can log into [DataVat.com.au](#) to access reports based on actual herd records to gain insights into mastitis management, selective dry cow therapy, improving herd fertility and genetic progress.

"The recent automations enable my clients to give me permission to access their herd data and reports anytime, anywhere. I can give better advice, faster, especially in the herd health space," he said.

"This really is a game-changer. Instead of spending half of my time on farm downloading data, I can do the analysis before I get there and the visit becomes a discussion about how the herd is doing, intervention options and a plan of action."

DataGene is rolling out connections with a variety of systems progressively over time, with DeLaval and GEA systems already up and running and others in progress.

"I've got a lot of clients with DeLaval systems so I'm keen to get them connected in the coming months."

At this stage, each herd needs to set up the connection. The process is quick, easy and secure. It's a once-off task that involves a 10-minute online session with DataGene's IT staff, who set up the connection process. Once connected, data is updated to the industry's Central Data Repository every night. Herd owners control who they give access to their records via the DataVat website portal.

The DataConnect project is a step towards DataGene's vision of a system that enables data to be entered once and then accessed in many different ways to eliminate double entry of the same information and to enable data-driven decisions through reports and tools that analyse the data.

Additional benefits of connecting include less double entry of data when it comes to genotyping and improved accuracy of breeding values – both for animals in the herd and the genetic evaluation of bulls.

Highlights 2024/25

Strategic Pillar 2: Sustainability and animal performance through R&D and herd improvement

Strategic priorities (2025-2029):

- Deliver world best practice genetic evaluations.
- Collect herd performance data to grow Australia's largest dairy dataset.
- Assist with development of high value ABVs.
- Promote the use of genomic testing.

Key focus areas 2024/25:

- National Breeding Objective review
- Revised Survival ABV and new Calf Vitality ABV
- Ginfo – adding genotypes and LTEs to reference population.

National Breeding Objective

One of this year's major priorities was the 5-yearly review of the [National Breeding Objective](#). Refer page 15 for more details.

ABV releases

Releasing updated Australian Breeding Values and indices is DataGene's core business. ABVs and indices are key tools used by farmers and the herd improvement industry to improve the genetic merit of the Australian dairy herd.

During the year, DataGene delivered 43 routine releases of Australian Breeding Values including three public ABV releases (in April, August and December). DataGene's communication and extension campaigns are focused around the three public releases, when interest in genetics and breeding tends to peak. DataGene collaborates with Dairy Australia's communication team to expand the reach of campaign messages.

Bull evaluations

As seen in the graph on page 13, the number of bulls that are genomically tested in the Australian genetic evaluation system is steadily increasing. Almost all the world's commercially available bulls are evaluated under the Australian system. Not only are all bulls that are sold on the Australian AI market evaluated by DataGene, many young overseas bulls are evaluated on the Australian system before bull companies decide whether to buy them. This is an outstanding record for a country of Australia's size, and reflects the growing credibility of Australia's genetic evaluation system and the value placed on some of our world-leading breeding values such as the Heat Tolerance ABV.

Australian dairy farmers benefit in two ways. First, by testing more bulls, the industry can find the best combination of traits to suit our farming conditions. Second, it means farmers can make breeding choices based on Australian Breeding Values that are the most accurate reflection of an animal's future performance under Australian conditions.

Key deliverables

- ✓ NBO review
- ✓ ABV releases
- ✓ Bull evaluations
- ✓ Genetic codes
- ✓ Revised Survival ABV
- ✓ Calf vitality
- ✓ Ginfo



ABS Jeronimo is an example of an overseas bull that found a niche in the Australian market.

Highlights 2024/25

Genetic conditions

From April 2025, DataGene began publishing [genetic conditions](#) (genetic defects and characteristics) for cows, and expanded the number of genetic conditions and [haplotypes](#) reported through DataVat, the Good Bulls app and [related spreadsheets](#).

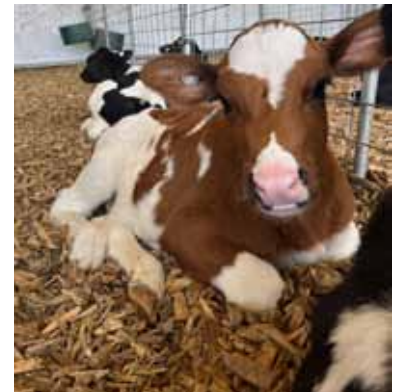
New model for Survival ABV

The Survival ABV, first released in 2001, was an estimate of the likelihood of an animal making it to the next lactation. The new model for the Survival ABV developed by DairyBio combines an estimate of survival in the first lactation (early survival) with survival in subsequent lactations to provide an estimate of a cow's productive life. The revised model improves accuracy and stability. It is expected to increase the rate of genetic gain for cow survival. Improved cow survival has the potential to contribute to reduced methane emissions, improved production and dairy business profitability.

The revised model was tested and refined during the year and is scheduled for implementation with the December 2025 public ABV release. The industry requested implementation in December rather than earlier because survival has a significant weighting in all three indices, so changes to the breeding value have the potential to result in movements in bull rankings. It made sense to implement in December when bull rankings would also be affected by the implementation of the NBO review recommendations.

Calf ABVs

Calves represent about a third of the stock on a dairy farm and rearing them involves significant time and money. About 7% of Australian dairy calves are born dead. Research overseas and in Australia has demonstrated genetic variation in calf traits, indicating the potential to develop a breeding tool to select for fewer stillbirths. DairyBio research has developed models for calf traits. Work is underway for implementation in the genetic evaluation system, which is scheduled to occur in 2026.



Work is underway for the implementation of a calf trait, scheduled for release in 2026.

Feature Project: Ginfo

Australia's genomic reference population

Ginfo is a precious resource for the Australian dairy industry. Managed by DataGene, Ginfo is a participatory program for farmers that accumulates high quality data for the national reference population. The data from Ginfo farmers underpins weekly genomic evaluations and enables research that drives productivity improvements that, directly or indirectly, touch virtually every dairy farm.

Like genetics itself, Ginfo's contribution takes time to realise but its impact is powerful. In the past five years the reliability of the Daughter Fertility ABV has lifted four percentage points for young bulls with a genotype (from 56% to 60% in Holsteins and 47% to 51% in Jerseys).

With higher reliability comes greater accuracy and confidence when making semen purchase and heifer selection decisions.

The drive for improvement doesn't stop. Research projects are underway that will use Ginfo data to make step changes to genetic evaluations in Australia. Here, three scientists from Agriculture Victoria Research talk about Ginfo and the role it plays in their work.

Professor Jennie Pryce, Research Director, Agriculture Victoria Research: "Ginfo is the backbone of Australian genomic breeding values. The farmers and data recorders behind the data, do this task without expectation, but for the betterment of ABVs. Their passion, dedication and generous feedback helps us at Agriculture Victoria and DataGene to make a better ABV system."



Dr Majid Khansefid, Research Scientist, Agriculture Victoria: "The data quality from Ginfo herds is so high it can be considered a gold standard, particularly for traits like disease prevalence and fertility. The data from Ginfo herds has been incredibly valuable in improving the reliability of breeding values for non-milk production traits."



One specific strength of the data from Ginfo herds was that the cows were not pre-selected for genotyping, as all cows within participating herds were genotyped. This approach is particularly valuable because it provides an unbiased representation of the population, which is essential for accurate genetic evaluations and research.

Dr Boris Sepulveda, Research Scientist, Agriculture Victoria: "Think of Ginfo as a country-wide, real-world lab that keeps breeding values as accurate as possible and lets us build new traits. It contributes to a reference population living in commercial conditions: multi-breed, multi-region, longitudinal, and tightly linked to milk recording, mid infra-red spectral data and ABVs. That mix gives statistical power for low-heritability traits. It lets the researchers model the interaction between genotypes and the environment and provides constant "refresh" for genomic evaluations. Its long-term continuity makes it unusually valuable for both routine genomic evaluations and the development of new and improve methods. In the future, I can see Ginfo powering new traits such as resilience, cow health, welfare, and emissions. I can also see Ginfo integrating sensor data from activity, rumination and temperature monitoring. It will be an anchor for multi-omic work where we link the host genomics with rumen microbiome features for methane-related indices."



Highlights 2024/25

Strategic Pillar 3: Promoting the value of herd improvement

Strategic priorities (2025-2029):

- Promote the use of independent, validated and science-backed indices and ABVs.
- Effectively communicate the value proposition of data-informed decisions.

Key focus areas 2024/25:

- Increase the number of heifers genomically tested
- Develop and implement strategies of working with large herds on herd improvement
- Broaden reach of stakeholder engagement (finance, processor, veterinarians and farm consultants).

Key deliverables

- ✓ Large herds
- ✓ Broadening stakeholder engagement
- ✓ Good Bulls strategy

Large herds

Improving the genetic merit of cows in large dairy herds has the potential for a significant impact on the national herd as they represent a growing share of cows in Australia. DataGene is developing strategies to encourage all replacements in large herds to be bred from Good Bulls. The first step has been to work with Dairy Australia to initiate dialogue with large herds so that we can better understand how DataGene products and services can be refined to add value to their businesses. Consultation sessions as a part of the NBO review created additional opportunities to connect with large herds (see page 15)

Broadening stakeholder engagement

DataGene has a long history of close engagement with stakeholders in the herd improvement industry. There is potential for further impact by engaging with a broader field of stakeholders (who influence farmers' herd improvement decisions) such as vets, farm consultants and processors. During the year, DataGene had initial discussions with a milk processing company about opportunities for their suppliers to access customised reports such as the Mastitis Focus Report by participating in the DataConnect project. The DataConnect Supply Chain Audit identified further opportunities to engage with a broader group of stakeholders.

DataGene is developing strategies to encourage all replacements in large herds to be bred from Good Bulls.



Highlights 2024/25

Improving the genetic merit of Australian dairy herds

One of DataGene's key roles is to support farmers to breed higher performing, more profitable and sustainable dairy herds. DataGene has a variety of initiatives that contribute towards this:

- Publishing Australian Breeding Values
- Communication campaigns associated with each public release of Australian Breeding Values
- Working with the herd improvement industry and others who influence farmers' breeding decisions
- Resources on the website
- Reports and tools such as HerdData and the Good Bulls App
- Extension activities.

Every joining season is an opportunity for dairy farmers to improve the genetic merit of their herds. The results are permanent and cumulative. DataGene's key extension message is to breed replacements from the females in the herd with the highest genetic merit by joining them to Good Bulls.

Australian Breeding Values and Indices are the key tool that enable farmers to identify high genetic merit animals. These tools are widely used by Australian dairy farmers, with the recent survey results* indicating that 80% of respondents were using ABVs and 70% using the Balanced Performance Index.

* Watson et al (2024) 2024 National Breeding Objective Market Research – topline results. Down to Earth Research.

Genomics

Genomic testing analyses an animal's DNA from a sample such as ear tissue, to predict future performance. Animals can be tested as young calves, so that early decisions can be made about their future value to the business.

Available in Australia since 2011, the initial uptake was by bull companies to identify bulls of superior genetic merit to include in their product offering. In recent years, genomic testing of females has also become a valuable tool for dairy farmers. Genomic testing of females gives farmers the opportunity to fast-track genetic gain in their herds.

Good Bulls Strategy

The Good Bulls Strategy aims to encourage farmers to breed all dairy herd replacements from sires which carry the Good Bulls icon. To qualify for Good Bulls status, a bull must meet DataGene's minimum requirements for Balanced Performance Index (BPI) and reliability and be available for purchase.

DataGene offers a range of tools to help farmers identify bulls that meet their breeding priorities, including the [Good Bulls Guide](#) and the [Good Bulls app](#) which are both updated with the public release of Australian Breeding Values in April, August and December each year.

DataGene's key extension message is to breed replacements from the females in the herd with the highest genetic merit by joining them to Good Bulls.



Highlights 2024/25

During the year enhancements were made to the [Good Bulls app](#), allowing users to view and filter haplotypes, and therefore avoid joinings between carrier animals.

Breeding replacements from the best females

Advances in genomic testing, heat detection and sexed semen have enabled Australian dairy farmers to be strategic about breeding replacements from the highest genetic merit females in their herds. They have a variety of options for the lower genetic merit females which may vary with market conditions, for example joining for export heifers or dairy beef or culling.

Currently some genomic service providers report only foreign breeding values to their Australian customers. DataGene has been pursuing opportunities to encourage them to also report Australian Breeding Values on animals tested through their services. In mid-2025, one of the major suppliers of overseas breeding values agreed to enable access to their Australian genotypes and provide ABVs for every one of them on a trial basis. This is a significant step.



DataGene CEO receives breeding Fellowship

Outgoing DataGene Chief Executive Officer Dr Matthew Shaffer was awarded a Fellowship of the Australasian Association for the Advancement of Animal Breeding and Genetics (AAABG) for his outstanding contributions to the genetic and herd improvement industries in Australia.



The Fellowship was announced during AAABG's 26th annual conference in New Zealand. AAABG is a professional organisation focused on the science of animal breeding and genetics, particularly in livestock and aquaculture, in Australia and New Zealand.

AAABG Fellowships are presented to people who have rendered eminent service to animal breeding in Australia and/or New Zealand or elsewhere in the world.

Matt's Fellowship recognised his role in leading the transformational change from the former Australian Dairy Herd Improvement Scheme to a contemporary organisation with broad industry support. The successful delivery of DataGene, and its programs, was cited as one of his greatest professional achievements.



Matt's leadership heavily influenced the Australian dairy industry over the past two decades. His breadth of experience, networks and focus on delivering for farmers has benefited research and industry organisations and led to ground-breaking initiatives.

He played an instrumental role in establishing the Herd Improvement Industry Strategic Steering Committee, developing Ginfo – the national reference herd of genomic information, modernising the Central Data Repository and genetic evaluation system, ImProving Herds, and the rapid acceleration of genetic gain towards an agreed national breeding objective.

His significant influence has stretched beyond Australia as a past chair of the Interbull steering committee (a standing committee of the International Centre for Animal Recording) where he was a founding innovator of the International Dairy Data Exchange Network, and as a past president of the World Holstein-Friesian Federation.

Case study: Breeding strategy

Genetic selection for successful breeding

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 breeding technologies.

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/app](#) to make sure he has a full picture of his breeding choices. The family farm has benefitted from adopting new breeding technologies as they become available.

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 said.

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 said. "I'm in the [Ginfo](#) project – Australia's national reference herd for genetic information – and all heifers and two-year-olds 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, and DairyBio.

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. 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 Eccles uses genomic results to breed replacements from his best females and join them to Good Bulls that suit his breeding priorities.

Anthony has a good base to work from but still likes to check the facts and says The Good Bulls Guide/app 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."

Anthony uses the Good Bulls Guide/App 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."

Highlights 2024/25

Strategic Pillar 4: Diversified and improved service offerings

Strategic priorities (2025-29) include:

- Develop and maintain software and data services.
- Collaborate with stakeholders in livestock and other agricultural sectors to deliver services.
- Work with herd recording centres to rapidly adopt technology and services.
- Build and maintain DataGene and industry infrastructure.
- Develop and maintain industry solutions.
- Establish new revenue streams.

Key focus areas 2024/25

- Grow revenue from business development.
- Deliver the Forage Value Index.
- Redevelop HerdData app.

Forage Value Index

DataGene routinely evaluates Dairy Australia's [Forage Value Index](#). Developed by Dairy Feedbase, the FVI is a tool that helps Australian dairy farmers and their advisers to make more informed decisions when selecting ryegrass cultivars. It provides an accurate, reliable and independent assessment of the potential economic value of ryegrass cultivars in different dairy regions of south-east Australia and Western Australia. Until 2025, the seasonal dry matter production was the only FVI published. The 2025 evaluation included a new trait for forage quality based on metabolizable energy (ME) and yield.



Contracted projects

While the core of DataGene's funding comes from Dairy Australia, DataGene derives additional income from IT, software and strategy services to external clients. As well as providing additional income, it enables DataGene to retain skilled personnel with a deep knowledge of DataGene's core business. DataGene aims to diversify its income through new services both within the Australian dairy industry and further afield where its expertise can add value, particularly in IT.

DairyBio 3

During the year DataGene was commissioned by Dairy Australia to assist in the development of the business case for DairyBio 3 which is overseen by the Victorian Dairy Innovation Agreement. VDIA is an agreement between Agriculture Victoria, Dairy Australia and the Gardiner Dairy Foundation to invest in transformational research to benefit the dairy industry. The current VDIA research program known as DairyBio 21-26 is due to finish in June 2026 (see page 32). The VDIA is now co-designing a new research program focused on animals within the genetic, data and technology fields with projects that will make a difference on farm.



Key deliverables

- ✓ Forage Value Index
- ✓ HerdData app
- ✓ Contracted projects

Highlights 2024/25

DataGene's consultancy service involved working with farmers, researchers, industry representatives and commercial organisations to identify promising research project ideas that would make a difference on-farm. The project will continue during the second half of 2025.

Global Methane Hub

The Global Methane Hub is an initiative of the International Committee for Animal Recording (ICAR) and Wageningen University, The Netherlands. The database will offer a storage and exchange platform for phenotypes and genotypes for the global ruminant industries. DataGene was initially contracted to gather and document the requirements for the database. With this work complete by the end of 2024, the development phase of the project went out to tender. DataGene has recently been advised that its proposal has been accepted, with the development work to start in mid-2025. The project is expected to be complete within a year, with a 5-year agreement for hardware maintenance and user support.

Feature Project: HerdData app

During the year, the [HerdData app](#) was redeveloped onto a modern IT platform to enable easy access via the App Store and Google Play. The redevelopment was necessary because IT technologies and user needs had evolved since the app was developed in 2016.

The HerdData app provides a quick and easy way to enter or access herd records using a phone or mobile other device. Its data is synchronised with the farm's herd management software, allowing information to be shared across the whole farm team.

This helps them to make more informed decisions and keep better records. It also enables information that was previously difficult to capture to reach DataGene's Central Data Repository. The information contributes to more accurate breeding values and opportunities for new breeding values such as for health traits.

- ✓ Synchronises data between the app and farm computer
- ✓ Shareable information across the whole farm team
- ✓ Instant access to information at the time and place it's useful
- ✓ No need to make notes on the go and then re-enter the same info onto the computer
- ✓ Great for calf and cow record keeping



Highlights 2024/25

Strategic Pillar 5: Service delivery

Strategic priorities (2025-29) include:

- Apply best-practice corporate governance and financial management.
- Have the right capability and processes to innovate and deliver value.
- Sustain effective stakeholder and employee engagement.
- Develop and maintain appropriate IT infrastructure and policies.

Key focus areas 2024/25

- Maintain engagement through Standing Committees.
- Deliver Herd '25 conference.
- External security audit.
- Standing committees.

Standing committees

DataGene has a variety of formal and informal mechanisms that provide stakeholders with input to DataGene's priorities and activities. Formal consultative committees include the Genetic Evaluation Standing Committee, Data Access and Standards Standing Committee and Herd Test Committee. They are not simply an advisory body but exercise authority as delegated by the board. (see pages 33-34).

Herd '25

Herd conferences provide members of the herd improvement industry with a rare opportunity to get together, share ideas and hear updates on the latest advances in their fields. Held every two years, DataGene partners with Dairy Australia, Holstein Australia and NHIA to organise these events. More than 150 herd improvement enthusiasts attended Herd '25 at Bendigo in March. The program had a strong future-ready theme with a particular focus on the application of data technologies in herd improvement. Recordings of presentations are now available to anyone online. Watch the recordings [here](#).

Security audit

DataGene is responsible for maintaining and protecting large volumes of sensitive industry data, including the genetic evaluation system, Centre (herd recording) and the Central Data Repository (CDR). Regular external audits are conducted to ensure that DataGene's systems operate in line with industry best practices, with any risks or gaps addressed in a timely manner. As part of its commitment to strengthening cybersecurity, DataGene has implemented leading security tools and practices, including the deployment of CrowdStrike, Microsoft Defender and Intruder.io.

This year's work also included a strategic readiness assessment for adopting the industry-aligned CCM Lite framework. This approach allows DataGene to evaluate the framework's relevance and alignment with existing controls—without prematurely committing to full implementation. Due for completion by the end of July 2025, the findings from the audit will inform a targeted remediation plan and guide the implementation of selected controls to support continued improvements in cybersecurity maturity.

Key deliverables

- ✓ Herd '25
- ✓ Standing committees
- ✓ Security audit



Software development and IT strategic consulting

DataGene provides advanced [software](#), [data](#), and [advisory services](#) across the dairy and broader agricultural sector in Australia and internationally. Our portfolio spans genetic evaluation, herd improvement, milk recording, and digital enablement. Through targeted delivery of strategic and technical solutions, we support on-farm productivity, industry innovation, and regulatory alignment.

Our business development efforts are underpinned by a clear focus: delivering value through data. We grow revenue beyond industry funding by applying our platforms, delivery expertise and technical skills in new markets. Strategic partnerships and offshore capability allow us to scale effectively and respond to complex, cross-sector challenges.

We have a dedicated team of professionals across IT, data science, and change management who bring expertise in managing large-scale, multi-stakeholder programs. Our team combines domain knowledge with proven capacity in:

- Scoping and delivering end-to-end digital projects
- Managing complex and diverse datasets
- Scaling agile delivery with offshore partners
- Assessing organisational readiness and enabling change.

Project execution is governed by the DataGene Delivery Framework (DDF), which blends structured planning from Prince2 and waterfall models with agile development principles. This hybrid approach enables reliable project control while allowing flexibility for iterative delivery and stakeholder input.

Project portfolio

- Artificial intelligence innovation projects
- Strategic reviews of industry data and digital infrastructure
- Change readiness and capability assessments
- Design and implementation of integration platforms
- Delivery of industry-scale digital tools and software systems
- Enabling data sharing across private and public partners.

Our technical capabilities

- Data integration and interoperability platforms
- AI, Computer Vision and machine learning
- Cloud-native software architecture
- Mobile applications and digital workflows
- Decision support and analytics dashboards
- Big data and predictive modelling
- Blockchain for traceability and assurance
- Internet of Things (IoT)-enabled solutions
- Change enablement and adoption strategy
- Genetic evaluation and herd improvement software.

Examples of organisations we have worked with across several agricultural and food industries include:

- Cotton Research and Development Corporation (CRDC)
- Council on Dairy Cattle Breeding (CDCB)
- Food Agility
- Dairy UP
- Holstein Australia.

DairyBio: Developments in the pipeline

DairyBio's Animal Program provides a research pipeline for Australia's genetic evaluation system, including breeding values for new traits, improved reliability of existing ABVs and other innovations.

DataGene works closely with stakeholders and industry to understand farmer priorities which can be translated to research opportunities for innovative solutions.

Highlights from recent DairyBio research that will be implemented by DataGene in the near future include:

- Improved genetic evaluation for survival using multi-trait models.
- Australian Breeding value for transition cow health and fertility.
- More accurate identification of recessive lethals and haplotypes.
- An inventory of large-scale changes in the genetic structure found in Holstein, Jersey and Red cattle.
- Working towards improved Sustainability Index by incorporating methane data.

DairyBio's research program for 2021-26 includes:

- Genetic improvement of cow and calf/heifer survival and resilience.
- Using genomics to predict animal performance in real time.
- Genomic selection for transition health and fertility.
- Advanced Heat Tolerance ABVs.
- Breeding for reduced pollution and improved efficiency.
- Genomic diversity for more resilient and profitable cows.



DairyBio team members on-farm collecting samples for the 10K blood project, which is providing data for the future development of a transition cow health ABV.



DairyBio is a bioscience research program, focused on delivering outcomes of direct value to Australian dairy farmers. Conducting both animal and plant improvement research, DairyBio is a joint initiative between Agriculture Victoria, Dairy Australia and the Gardiner Dairy Foundation.

The DairyBio team works in purpose-built facilities at the AgriBio Centre for AgriBioscience near Melbourne, as well as at Agriculture Victoria's research facilities in regional Victoria. The AgriBio research facility is home to Agriculture Victoria's molecular scientists and quantitative geneticists, as well as industry organisations such as DataGene, Holstein Australia, Jersey Australia and NHIA. Being co-located creates a unique mix of great scientific minds, cutting edge technology and real-world perspective.

More information:
www.dairybio.com.au

DataGene consultative committees

DataGene has a variety of formal and informal mechanisms that provide stakeholders with input to DataGene's priorities. Formal governance structures include the Board and [Standing Committees](#).

The Genetic Evaluation Standing Committee and Herd Test Centre Committee meet regularly and make a valued contribution to DataGene policies and activities.

A formal standing committee gives members direct influence over DataGene's priorities and program activities. This is not simply an advisory body, but exercises authority as delegated by the Board in areas of industry policy and guidelines. It comprises individuals from within the dairy industry and herd improvement sector who possess relevant skills and experiences. Standing Committee members are nominated by stakeholders and appointed by the Board. It is chaired by a member of the DataGene Board and includes at least one member of the DataGene management team.

Genetic Evaluation Standing Committee

The [Genetic Evaluation Standing Committee](#) provides advice and recommendations to the DataGene Board on specialist matters in relation to genetic evaluation and related technologies.

Members of the Genetic Evaluation Standing Committee as at June 2025 included:

- Sam Simpson (Chair), DataGene board
- Daniel Abernethy, Zoetis
- Andrew Aldridge, ADF
- Janet Auchterlonie, dairy farmer
- Glen Barrett, Jersey Australia
- Steph Bullen, Dairy Australia
- Bryan Dickson, Holstein Australia
- Rob Derksen, Genetics Australia
- Thuy Nguyen, DataGene.
- Trevor Parrish, dairy farmer
- Josh Richardson, Nu-Genes
- Bruce Ronalds, ABS
- Matt Shaffer, DataGene
- Tim Weller, WWS
- Ruidong Xiang, DairyBio

The Genetic Evaluation Standing Committee met twice during 2024/25. The committee received regular progress updates and provided guidance and feedback on the review of the National Breeding Objective; expression of intermediate type traits, movements of young bulls for type traits and the updated Survival ABV. Reports from each meeting are distributed to stakeholders and are available on request.

DataGene consultative committees

Data Access and Standards Standing Committee

The [Data Access and Standards Standing Committee](#) provides strategic oversight and advice to support effective data governance across the Australian dairy industry. This includes advising DataGene and other stakeholders on data sharing standards, policy development, and system operations for key platforms such as the Central Data Repository (CDR) and DataVat.

The Committee plays a critical role in shaping the policies and processes that govern access to herd improvement data. It also oversees a structured process for reviewing and managing exceptions to these policies, ensuring consistency and transparency in how data is accessed and used.

The Committee met once in 2024/25 to discuss key industry data issues, including the data hierarchy framework, data sharing principles, yield calculations from random bail milking data and the ongoing development of DataConnect.

Data Access and Standards Standing Committee members:

- Jim Bruce (Chair), Viking Genetics and DataGene board
- Andrew Aldridge, dairy farmer
- Glen Barrett, Jersey Australia
- Jacqui Biddulph, dairy farmer
- Steph Bullen, Dairy Australia
- Heather Campbell, dairy farmer
- David Chandler, Easy Dairy
- John Crowther, Holstein Australia
- Paul Douglas, STgenetics
- Daniel Espinosa, MSD Animal Health (Alflex)
- Peter Nish, TasHerd Pty Ltd
- Phil Wren, National Herd Development
- DataGene staff

Herd Test Centre Committee

The [Herd Test Centre Committee](#) plays a key advisory role for DataGene, providing strategic input on opportunities to enhance data sources, diagnostic analytics, and reporting platforms such as HerdPlatform and the Central Data Repository (CDR). Its focus is on pre-competitive collaboration, particularly in the development of software, services, and tools that support herd improvement.

The Committee comprises management representatives from National Herd Development (NHD), Hico, Dairy Express, TasHerd, and FarmWest, with contributions from DataGene and secretariat support from Chris Murphy.

The Committee met twice in 2024/25 to discuss a range of strategic and technical topics, including the ongoing development of HerdPlatform and DataVat, enhancements to workability reporting, the 2025–29 DataGene Business Plan, the MIR Conception Report, universal sampling technologies, and the future of modern herd testing.

DataGene Board

DataGene is governed by a skills-based [Board](#). Members are elected on their knowledge and experience in dairy, herd improvement, finance, R&D and governance. The Board must include three directors with direct expertise in dairy farm management. Directors are entitled to serve a three-year term and up to three consecutive terms (i.e. nine years). The ongoing rotation of Directors ensures the ongoing refreshment of skills and experience on the board.

Tim Jelbart

B. App. Sci (Hons) AAPI
Chair

Tim is a dairy farmer and Holstein breeder from Inverloch, West Gippsland, Victoria. He is the general manager and director of Jelbart Dairy, which is owned by Tim and his brother, comprising a dryland dairy and beef business with 1,100 high-production Holstein milking cows and 1,500 head of dairy replacements and F1 Wagyu calves. The business relies on genomic testing for accurate genetic information, which has resulted in significant genetic gains across the herd in recent years. Before returning to the family farm Tim completed a degree in applied science, specialising in rural property valuation. He was a rural and agribusiness property valuer with CBRE, valuing some of the largest agribusiness assets across Australia.



Jeff Odgers

B. Business (Agricultural Management), Ass. Dip. Farm Management.
Dairy Australia nominated Director, Deputy Chair

Jeff Odgers has more than 35 years' experience in Australian agribusiness; through involvement in large scale dairy farming, and board roles in research, industry services and food manufacturing.

He was Dairy Australia Chair from 2017 to 2020, serving as a non-executive director between 2013 and 2021. Jeff led Murray Dairy Inc as board Chair from 2008 to 2012, during a time of significant evolution in the region's farm systems.

Jeff was also a non-executive director of Bega Cheese Limited 2011-2020 and prior to that Tatura Milk Industries Limited from 2009 to 2011.

He has a deep understanding of the value chain and a passion for farming and encouraging the adoption of technology. Jeff is a strong believer in the capacity of the dairy industry to create and put tools in the hands of farmers, as an enabler towards strengthening their businesses.



DataGene Board

Alexander Ball

B Rural Science (Hons), PhD
Director

Alex Ball and his wife operate a stud beef enterprise at Armidale NSW. Having spent 18 years in various roles with MLA, Alex has extensive knowledge of the development and implementation of genetic evaluation systems. He managed the national sheep recording program Sheep Genetics and was instrumental in the establishment of across-flock, across breed and Merino evaluations for the sheep industry. He has managed national R&D programs and conducted evaluation of genetic investments in Australia and internationally. In his roles with Herefords Australia Alex was responsible for the implementation of single step evaluation for that breed. Since 2018 Alex has operated a private consultancy service, Rural Analytics, delivering a wide range of projects for agricultural clients. He sits on working groups for Cattle Australia and NFF and is a director of the SRS genetics company.



David Barber

PhD (Ruminant nutrition), B. Agr. Sci (Hons), Assoc Dip Applied Science, Cert Animal Husbandry.
Director

David Barber is actively involved with his family's 180-cow dairy farm, Range View Farm at Marburg, Queensland. He also runs a small nutrition consultancy business in south-east Queensland providing advice to dairy and beef farmers on nutrition and feeding management to improve productivity and profitability.

David's roles with the farm include feed supply and procurement, feeding management; heifer rearing and breeding management, dairy-beef production; and assisting with day-to-day activities such as milking, feeding and repairs and maintenance.

He has more than 40 years' experience in agricultural production systems, having held both research and extension roles, mostly with the Queensland Department of Agriculture and Fisheries. David brings to the board a deep understanding of the production system, operating environment and unique challenges faced by the Northern dairy industry and the drivers of the uptake of research findings and motivations for farmers to implement new practices.



James (Jim) Bruce

Director

Jim Bruce has worked most of his career in the Australian genetics supply chain, including with Semex, ABS, Phoenix Genetics, Genes Diffusion, Genex, Elders Genetic Services and Elders Rural Services. Jim is currently the Country Manager (Australia & NZ) for VikingGenetics. These roles have given him insights into the different systems operating in Australia, USA, Canada and France. He has experience in both dairy and beef artificial breeding and genetics and the opportunities and challenges for herd improvement in Australian livestock industries. He is Chair of DataGene's Data Access and Standards Standing Committee.



DataGene Board

Sam Simpson

M Marketing (Agribusiness), B App Sci (Agric), Grad Dip Agribusiness, Dip Frontline Management
Director

Sam and her husband operate at 450-cow dairy farm, Craiglands Holsteins, at Larpent in South Western Victoria. They have been members of Holstein Australia for 18 years and genotyping their animals since 2015. Sam runs the herd's breeding program as well as the business finances, HR and information systems. She is the Chair of DataGene's Genetic Evaluation Standing Committee. She is actively involved in a number of industry groups including promoting dairy to the local community and school groups. Craiglands Holsteins was a focus farm for the ImProving Herds project and Sam was a member of the MIR for Profit project steering committee. Before taking on a full-time role with the farm, Sam spent 10 years as a sheep officer and Farm\$mart Project Manager with the Victorian Department of Primary Industries.



Josie Zilm

B Ag Sci (Hons), MBA, GAICD
Director

Josie Zilm has spent most of her career in agricultural banking including a variety of roles with National Australia Bank and a period with Fonterra, Tasmania. Located at Gippsland, Victoria, she is also a beef and fodder producer, former deputy chair of the Herd Improvement Co-operative Australia (Hico) and former deputy chair of the Southern Rural Water Groundwater and Rivers Forum.

Josie works with industry stakeholders, the supply chain and government to understand the challenges and opportunities across the agricultural sector.

She is a partner in Amella Pastoral, an irrigated beef grazing property producing grass-fed Angus cattle and irrigated fodder production.

With an honours Degree in Agricultural Science, an MBA and as a graduate of the Australian Institute of Company Directors, Josie has a solid understanding of agriculture and corporate governance and director responsibilities.



Case study: DataConnect

Adding Moore data to boost breeding values

Julie Moore always knew data was important for her family's dairy business. The NSW farmer keeps meticulous records – health information, calving, joining and everything in between.

This data enabled Julie, her husband Michael and son Stuart to continually develop their registered Fernbrook Holstein and Meadowvale Guernsey operations, while boosting production, fertility and type.

Outside their farmgate at Fernbrook, near Dorrigo in NSW, the Moores' same detailed herd records play a greater role in improving the accuracy of Australian Breeding Values (ABVs) – every day.

The Moores – who were already a [Ginfo](#) herd and part of the industry reference population – were one of the first dairy businesses to take part in DataGene's [DataConnect](#) project.

"We thought 'why not?', we are already gathering the information with our herd's GEA collars," Julie explained.

"The industry can get the information every night, from what we've fed into the system each day – mating, calvings, health traits, mastitis – anything. It's just two computers talking to each other, no extra work involved, to improve the stream of information."

DataConnect is a multiyear project exploring how the industry can work collaboratively with data integration and exchanges, making it easier for farmers to make better data-driven decisions.

The project explores how data can be entered once into a pipeline, connected to the industry's Central Data Repository, and used throughout the industry multiple times.

DataGene is working with individual farmers to connect their systems – initially those using GEA and DeLaval – to enable data exchange with the Central Data Repository.



The Moore family's data is being used to improve the accuracy of Australian Breeding Values (ABVs).

Julie said the process of connecting was straightforward and quick. “We had a five-minute online meeting with DataGene’s IT person who set things up for us remotely.”

Data from the Moore’s herd management software, which also collects their collar data for their 170-head herd, is fed into DataGene every night.

Their herd data is added to various sources of data, by DataGene, from Australia and around the world to improve the accuracies of ABVs – enabling farmers to breed for a range of traits with more confidence and create new ABVs.

Julie said contributing their data to the industry continues to payback for their farm business.

“More accurate ABVs, for us, is all about sire selection,” she said.

“We want proven results, we don’t want ‘pie in the sky’ figures. The more accurate ABVs are, the easier it is for us to make decisions.”

The Moores’ breeding objectives include increasing production and improving type – especially udder conformation and body capacity.

Since becoming a Ginfo herd seven years ago and adding genomic testing to their extensive data collection toolkit, which also includes herd recording and classification – the Moores have noticed consistency throughout their herd.

“We are getting higher production, more consistently, and more consistency with our type,” Julie said.

“More of our first-calf heifers are (scoring) 84-85 on their first classification where, before, they were probably only 80. With the better, and more consistent, type we don’t have as many udder conformation faults – as many deep udders – more udders are snug on the cow and this means we are not culling as many second calvers for udder problems. The cows are also more capacious, which means they are eating more grass and producing more milk.”

After three months of working with the GEA collars, Julie said they’d achieved an increase in first mating success which provides a return on their investment through decreased semen costs.



Stuart Moore and his parents, Julie and Michael.

She said the collars inform them how long a cow has been on heat and this has enabled them to better time artificial insemination, compared with traditional heat detection methods.

Julie and her family view record keeping as essential for a registered herd, but it also enables them to have an accurate account of what’s happening within their business.

“We’ve been here 22 years, but we collected data – everything from calving to cow treatments – before that, probably for the past 24 years,” she said.

“That information enabled us to notice patterns with certain cow families. We identified a mastitis issue with one family by tracing it through the data.

“That’s the beauty of data – and data collected on computers. As long as the hard drive doesn’t die and you’ve got it backed-up, you can always keep it to refer to.”



DataGene Limited
AgriBio
5 Ring Road
La Trobe University
BUNDOORA VIC 3083
1800 841 848
enquiries@datagene.com.au
www.datagene.com.au
ACN 613 579 614



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.
September 2025.