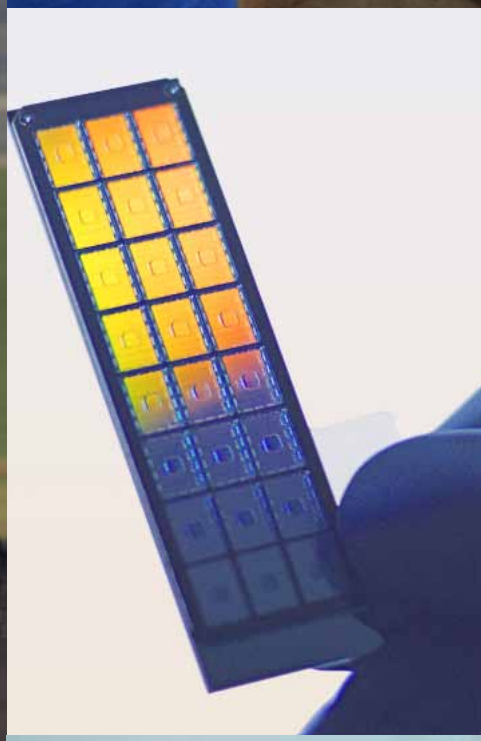
DataGene
Solutions for Herd Development

Annual Update 2024



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.

Dairy Australia

Australian Dairy Farmers

National Herd Improvement Association of Australia Inc. NHIA

ABRI

ABS

AGRI-GENE

Apiam animal health

Australian Red Dairy Breed Aussie Reds

Brown Swiss Australia

Cobden Artificial Breeders Co-op. Ltd.

Farm West

Genetics Australia Breeding better Australian herds

Hico Herd Improvement Co-operative Australia Ltd

Holstein Australia

Jersey Australia

Livestock and Business Centre Limited

LIC Livestock Improvement

NHD National Herd Development

Neogen Australasia

NU-GENES

SEMEX

TasHerd Tasmania's Herd Improvers

VikingGenetics

Wellbred Genetics

Yarram Herd Services

zoetis

Contents

Abbreviations

ABRI	Agricultural Business Research Institute	FVI	Forage Value Index
ABV	Australian Breeding Value	HWI	Health Weighted Index
ADF	Australian Dairy Farmers	iDDEN	International Dairy Data Exchange Network
AGBU	Animal Genetics and Breeding Unit	IT	Information technology
BPI	Balanced Performance Index	MIR	Mid infrared
CDCB	Council on Dairy Cattle Breeding (USA)	NASIS	National AI Sire Identification System
CDR	Central Data Repository	NHD	National Herd Development
DPC	data processing centre (e.g. herd test centre)	NHIA	National Herd Improvement Association of Australia

Chair's Report

Graeme Gillan
Chair
DataGene

This financial year has been a time for fact-finding, listening and planning as the Board prepared a new five-year strategic plan and confirmed its next funding agreement with Dairy Australia. At its core is DataGene's unwavering focus on leading sustainable and profitable agriculture by facilitating data-driven decisions.

The Board engaged a highly skilled external agency to take a really careful look at DataGene's impact. Marsden Jacob and Associates reports a benefit-cost ratio of 16:1 in present value terms from DataGene investments made 2016/17 to 2022/23. The net benefits primarily occur through improvements in rate of genetic gain in the industry, improvements in the efficacy of breeding and herd management decisions and the efficacy of data management and use.

We are not done yet. DataGene's Business Plan 2025-2029 sets out a clear trajectory that builds on the past successes and prioritises investments that are in line with its commitment to a growth strategy. After considerable consultation with our stakeholders, the new plan focuses on efficient and data-driven decision making, improving sustainability and animal performance, capturing value from herd improvement and diversified services while ensuring that DataGene operates efficiently.

A strategy for growth carries risks that the Board has carefully considered in the context of the ever-changing demands of the agriculture sector. DataGene is not immune from pressures that our customers face and you can be assured that the Board and management strive for ongoing efficiency improvements and are working hard to deliver its plan within its financial constraints.

This year the constraints meant that our financial results were below budget. We had started the year expecting to invest significantly in our DataConnect project, which the CEO covers in his remarks, and to have a deficit at year end. We invested significantly to improve data connectivity in the industry through the work of our staff. With our laser focus on data connectivity, we knew we would not be able to find new project work at scale. In the event, the investment in data, coupled with our focus on improving data connectivity, meant that the loss was slightly larger than anticipated. The Board feels strongly that investing in our data future is an appropriate use of our reserves.

Working efficiently doesn't mean taking risky short-cuts and this includes the safety of our IT and data systems. The Board was very happy with the most recent external review that resulted in a higher data security rating for the organisation.

DataGene was created through collaboration and partnership so it is unsurprising that the five-year plan highlights the ongoing and vital roles that our committees, user groups, stakeholders and customers play in the organisation's development. It is people that make our industry. I wish to thank all those who invest their time in participating in various committees and groups, who respond to surveys that ask for your feedback and who share the work of DataGene with colleagues and customers.

I would like to acknowledge Dairy Australia's invaluable financial support on behalf of all dairy farmers. DataGene and Dairy Australia have worked together this year to secure a funding agreement that is an integral part of the new five-year business plan.

To my fellow Directors, I thank you for your ongoing commitment to building DataGene to service the needs of the agricultural community now and into the future. With sincere appreciation, we farewell Daniel Meade as he retires from the Board and I thank him for his contribution and leadership.

With gratitude and sadness, I wish to pay tribute to Christian Hickey, who passed away a few months ago. Christian was a current member of the Genetic Evaluation Standing Committee whose sage advice and dedication was valued at DataGene and throughout our industry.

At this AGM, I conclude my term as a DataGene Director and Chair, as well as 50 years of involvement in the dairy industry. It has been an incredible journey for the industry and DataGene. Through the changes to the Board and the work of management, DataGene continues to look to the future and the opportunities that are available. I am proud of the work already accomplished and confident of the future.

CEO's Report

Matt Shaffer
Chief Executive Officer
DataGene

There is a bit of magic that happens when a team of people with different perspectives come together to find a solution to a common problem. And this year, at DataGene, I am happy to share with you some examples of projects that are making a difference.

DataConnect is a multi-year project to exchange data with on farm software so that DataGene's products and services can be extended to more herds. DataGene is regularly connecting with GEA and DeLaval milking systems and this is increasing the number of herds, cows and records that flow through to our central databases.

The DataGene website is a trusted source of information, learning resources, case studies and more. It is our shopfront to the world. In late 2023, we launched a major upgrade so that our stakeholders can quickly find the information they need. We will continue to work on making our website an efficient and trusted source of information.

Genomics is a powerful tool to improve the accuracy of pedigree records that enables farmers to trade cattle with confidence and to manage inbreeding. DataGene has invested in upgrades to identify and correct parentage issues and remove the hassle-factor for farmers in the process. These upgrades have helped to improve the reference population and will contribute to improving ABV reliability and our farmers ability to correctly identify their cows.

Internationally, we are working with partners that share our vision for enabling efficient data-driven decision making. Some examples include our work with the iDDEN data exchange hub that will link international dairy manufacturers with DataGene and the Global Methane Hub that intends to create a methane research database to help us tackle greenhouse gas emissions globally.

I encourage you to read through this Annual Update for more examples of progress made by our unique and dedicated DataGene team. Together, the team represents an amazingly diverse range of backgrounds and skillsets.

Amongst our staff of 26, we have nine different countries of birth. The average tenure is more than seven years, with our longest serving employee clocking up 22 years including with our predecessor organisations. Technically, we are trained in agricultural science, computer science, bioinformatics, software engineering, strategy, marketing, extension, animal science and even economics. We value the benefits that come from diversity when harnessed to a common mission and I am grateful for the energy and commitment our team brings to every project.

One project that the team is investing a lot of energy and commitment to is the National Breeding Objective (NBO) review. The NBO review is a chance for the industry to understand the breeding priorities of Australian herds currently and to ensure the industry is prepared for the herds of the future. During 2023/24 the Genetic Evaluation Committee approved the parameters and a timeline for the extensive consultation and science work that underpins the review. An industry wide survey was released in late June 2024 to gain insight into the current priorities and future needs of farmers and industry. Thank you to all those who participated in that process! During the current year, we will continue our consultation and the research with a view to releasing any changes in December of 2025. We look forward to further engagement with our stakeholders on this important review!

In closing, I would like to thank the Directors of DataGene for the care with which they guide our organisation. Individually and as a group, the Directors challenge DataGene to be innovative and effective in delivering even more data-driven solutions for our stakeholders. I especially acknowledge Graeme's significant contribution as outgoing DataGene Chair. Graeme has a generous passion for our industry, the people who work in it and the opportunities that it can deliver. We are grateful for his leadership and unwavering support for the team. I look forward to working with our new directors and our new chair to continue delivering for our stakeholders.

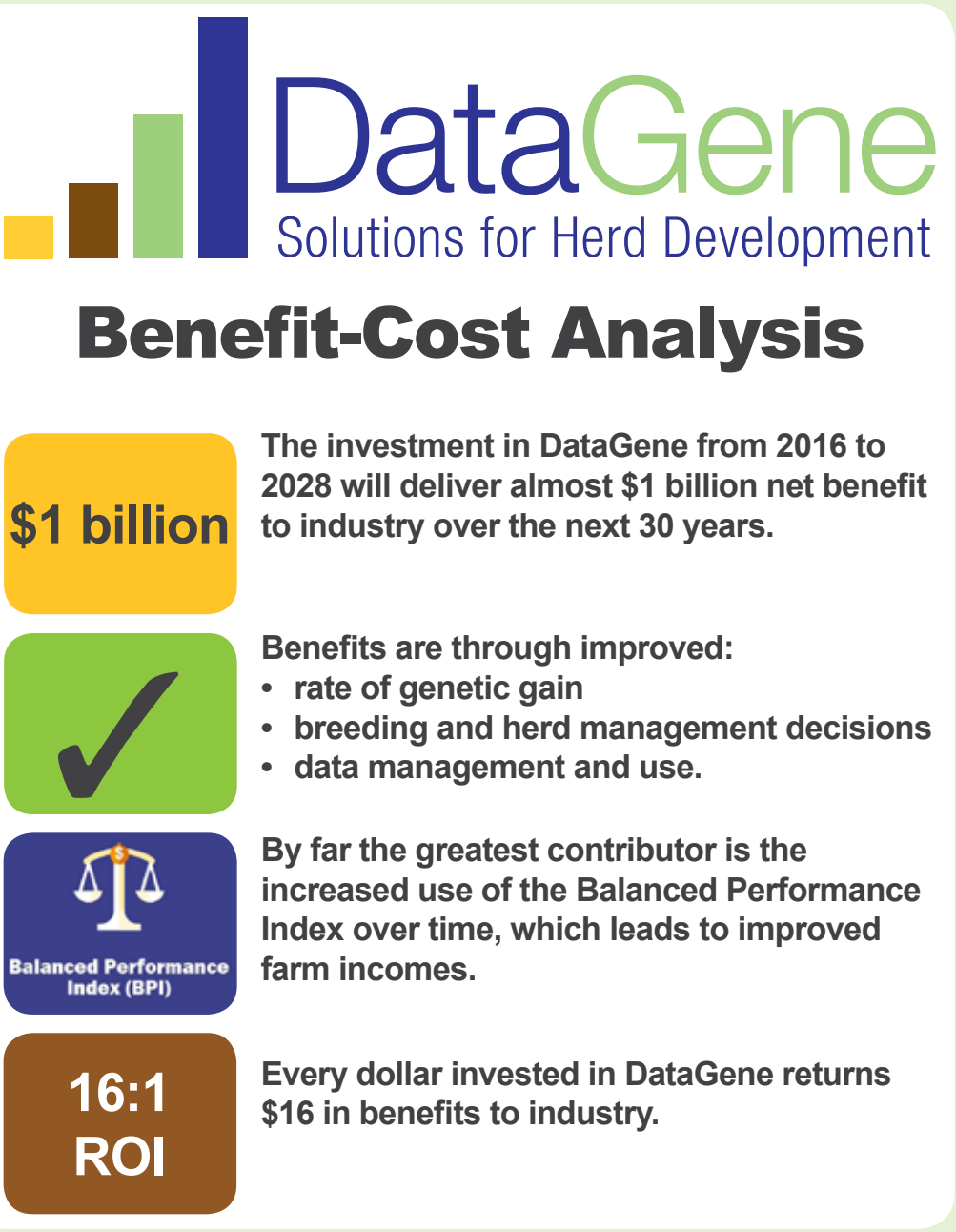
Benefit cost analysis

DataGene's impact

As part of the development of DataGene's 5-year Business Plan and 5-year funding agreement with Dairy Australia, Consultants Marsden-Jacob were commissioned to undertake a benefit-cost analysis of DataGene's activities in December 2023. The analysis assessed DataGene economic impact over two time periods:

- historical: the seven years of DataGene's operations (July 2016 to June 2023).
- forecast: potential returns from future investment over the five years from July 2023 to June 2028.

The assessment attributed benefits from genetic innovations between DairyBio research investments and DataGene as they both contribute to improvements in the rate of genetic gain.



Solutions for herd development

About DataGene

DataGene is responsible for driving genetic gain and herd improvement in the Australian dairy industry. Its key activities are research, development and extension. DataGene performs many pre-competitive herd improvement operations, including genetic services, software development, herd testing, herd recording and data systems. DataGene also provides software and strategy services to deliver solutions for Australian and international customers across dairy and agriculture.

Vision

DataGene enables farmers and industry to maximise profit through data-driven decisions.

Mission

DataGene delivers world-class genetic evaluation, software and decision-making tools to enable Australian farmers to improve their herds and maximise their profit through data-driven decisions and innovative industry services.

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 which provides the research pipeline for genetic evaluation, new traits, improved reliability and novel applications (see page 26).

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 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.

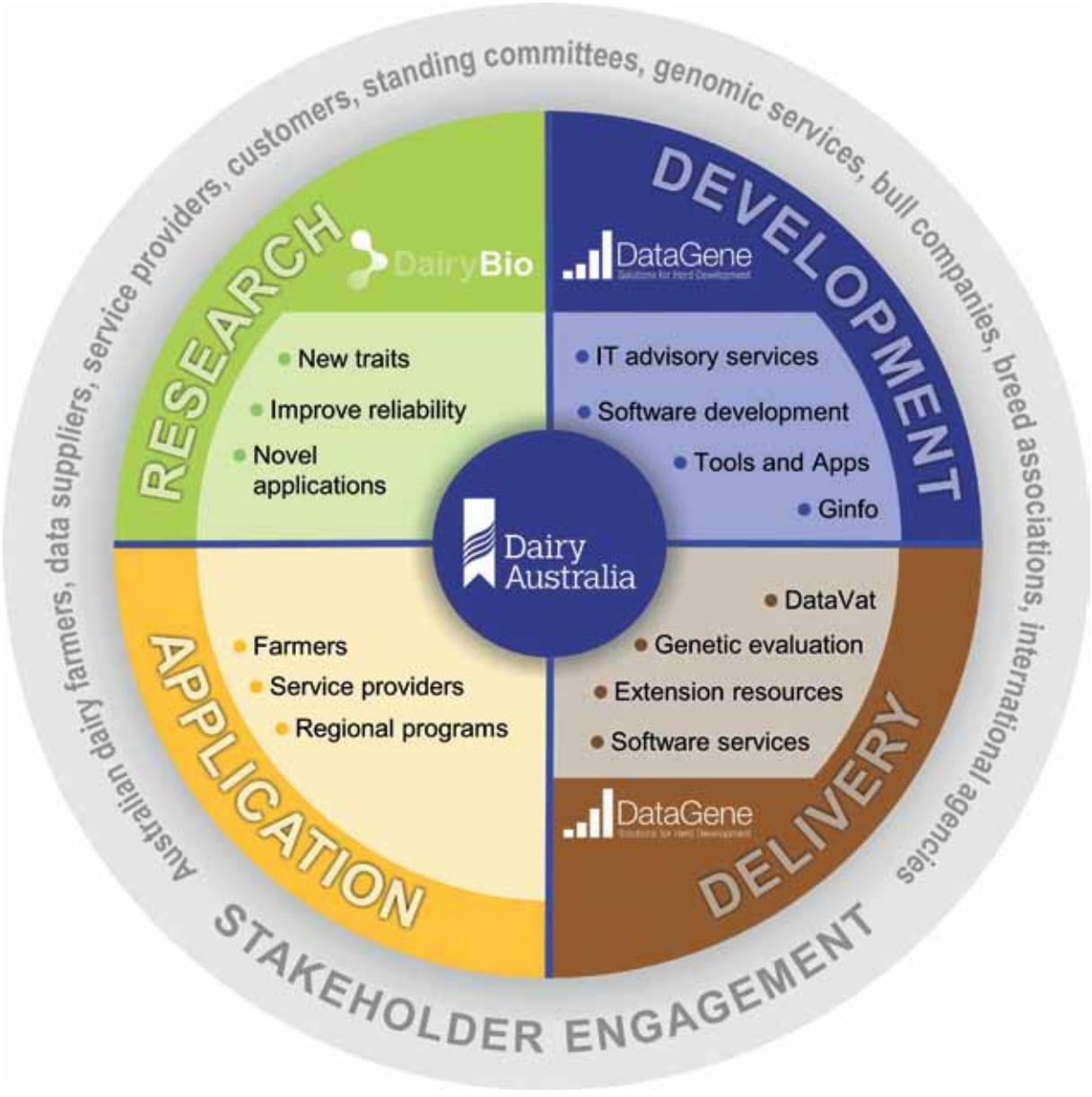
Solutions for herd development

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

DataGene products and services are delivered to Australian dairy farmers either directly or via third parties. Fees are charged in specific cases where there is a direct economic benefit to the individual customer. Some products and services are not charged.

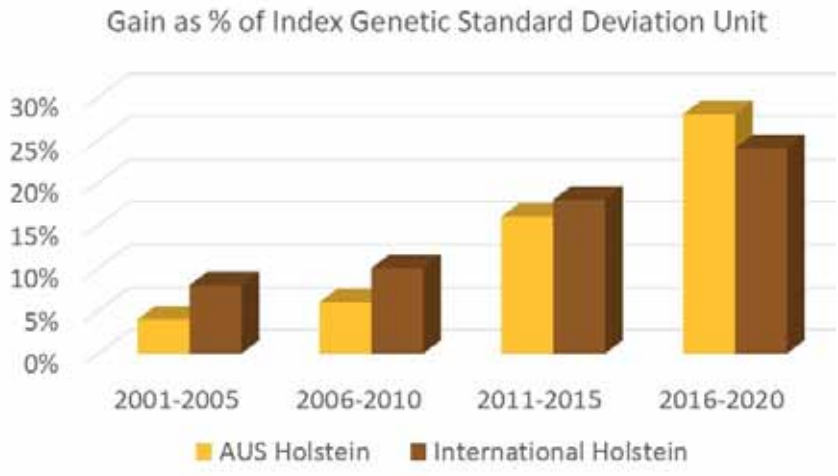
Products and services delivered directly	Fee for service
Good Bulls Guide and App	×
Website (information and data)	×
ABV(g) reports to genomic service providers	✓
Bull proofs to bull companies	✓
Project management services to industry organisations	✓
Centre and inventory software to service providers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

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

Global rates of genetic gain

An independent assessment (AbacusBio 2022) has shown that in the past 20 years the rate of genetic gain in Australian Holsteins has gone from lagging behind international average rates to now exceeding the international average of nine countries across Oceania, North America and Europe. Australia's achievement is the outcome from genuine collaboration across the entire herd improvement industry.

International Comparison



Source: AbacusBio *Includes data from nine countries across Oceania, North America and Europe.*

Performance metrics

DataGene monitors a range of metrics to track performance. This report highlights six of the key performance metrics: Genetic trends, number of cows in the Central Data Repository (CDR), numbers of females genomically tested, numbers of bulls genomically tested, National AI Sire Identification Scheme (NASIS) bull registrations and workability records.

Genetic trends

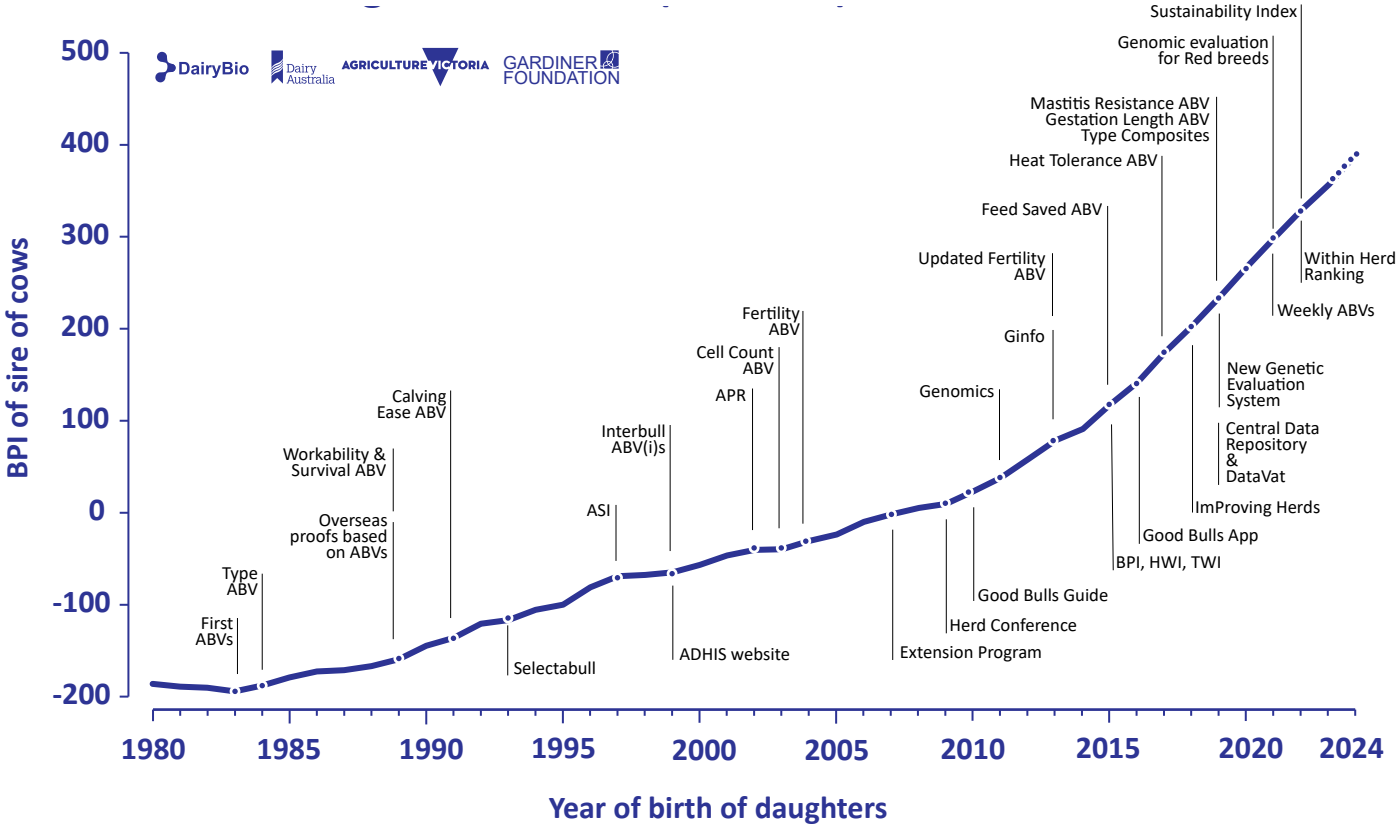
One of DataGene's key purposes is to provide tools and services to improve the rate of genetic gain in the Australian dairy herd. Genetic trends are tracked through the rate of genetic gain of sires of cows for Balanced Performance Index (BPI).

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

Current: For Holsteins, the average rate of genetic gain for BPI in sires of cows over the past 10 years (2013-2023) is $29.18/cow/year. However, progress has accelerated in the most recent five years ($31.24/cow/year).

For Jerseys, the 10-year trend is $16.59/cow/year, with the most recent 5-year trend at $14.03/cow/year.

Australian genetic trends (Holstein)



Performance metrics

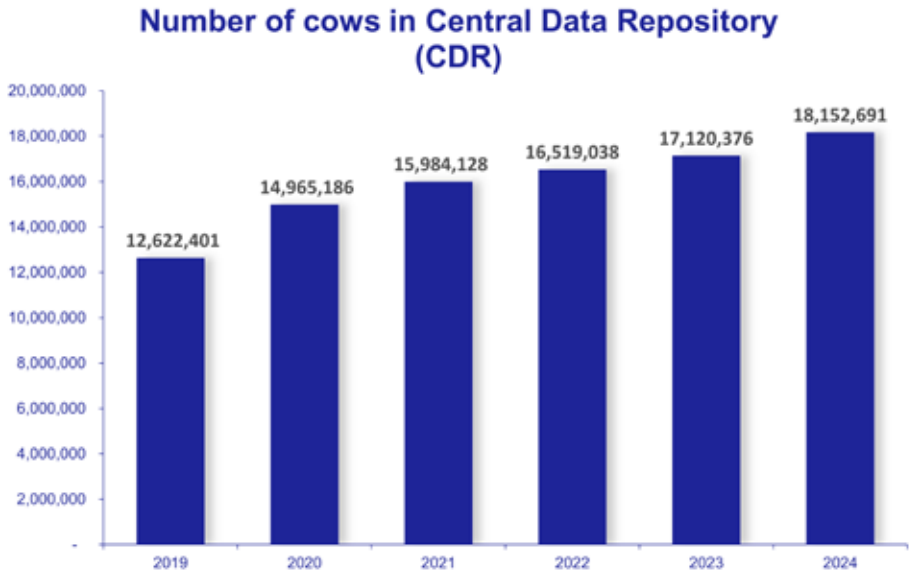
Number of cows with phenotypes in the CDR

DataVat's value will grow by expanding data sources beyond information from herd test centres. Tracking the number of cows in the CDR gives an indication of additional on-farm data sources connecting to DataGene.

Target: increasing annually by 5%

Current: 18.2 million (6.0% increase)

The CDR is Australia's largest database of dairy animal performance records and DataGene is focused on its growth. DataConnect is developing efficient, high throughput connections between the dairy and CDR that enable herds that are not milk recorded to connect. Through programs like Ginfo, the intensity of record keeping of high-value data is increasing. In addition the continued dedication of herd recording farmers means that CDR grows with the birth of every heifer calf.



Female genomic testing

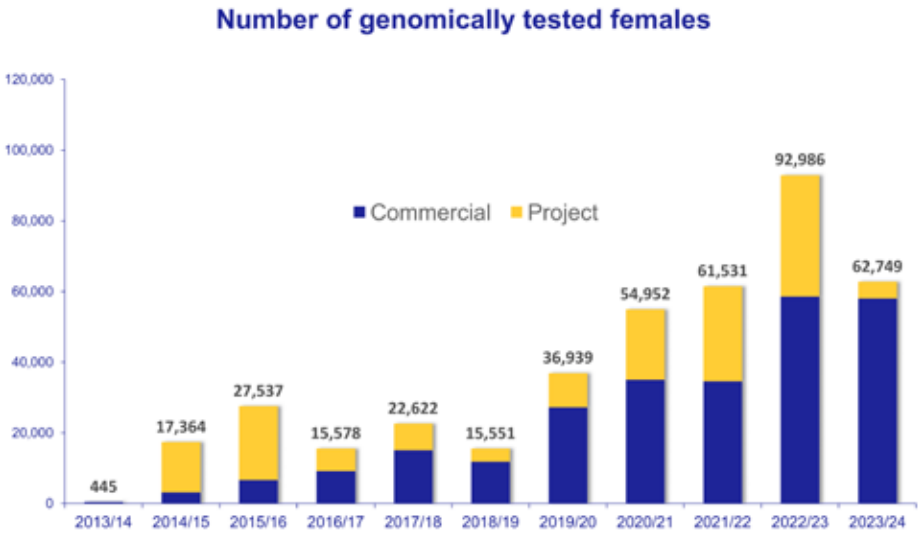
Female genomic testing is a game-changing opportunity for Australian dairy farmers because it allows them to accurately identify the most profitable replacements soon after birth. By quantifying the invisible, genomic testing creates opportunities to fast-track herd genetic gain and productivity as well as diversifying income streams and enhancing business agility.

Target: Minimum of 15% increase in numbers of females tested.

Current: 62,749 (33% decrease)

While the numbers of commercially tested heifers is virtually the same as the previous year, the testing of animals associated with research projects has declined as Ginfo sampling is now up-to-date after covid related disruptions. Ginfo farmers are increasingly investing in calf sampling which is categorised as commercial in this graph.

The growth of genomic testing of females has slowed as changes in market conditions have occurred, such as lower demand for export heifers, dry seasonal conditions in some regions and lower margins between milk price and input costs.



Performance metrics

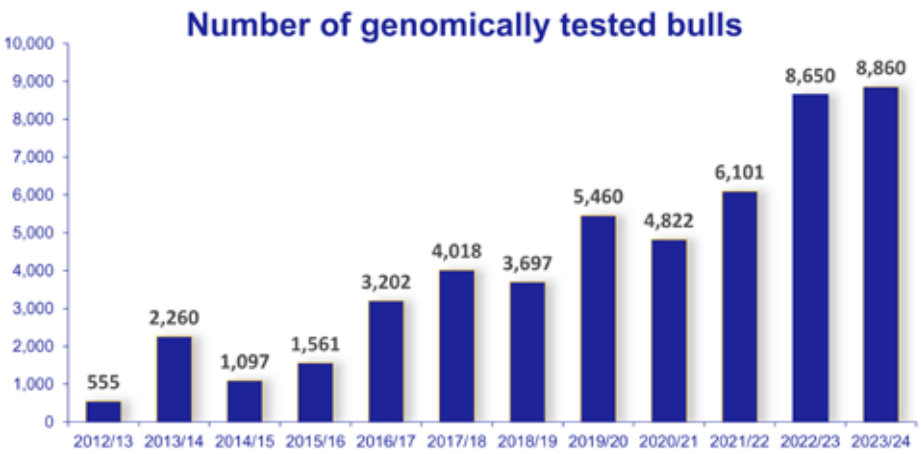
Genomically tested bulls

Increasing the number of bulls that are genomically tested in the Australian genetic evaluation system gives farmers access to the best genetics available. By testing more bulls, the industry can find the best bulls, with the best combination of traits possible.

Target: >3,000/year

Current: 8,860 (2% increase)

It was the third year in a row of record-breaking bull genomic testing numbers. The increased testing is coming from strong bull company participation as well as active registered breeders who now routinely test their young bulls.



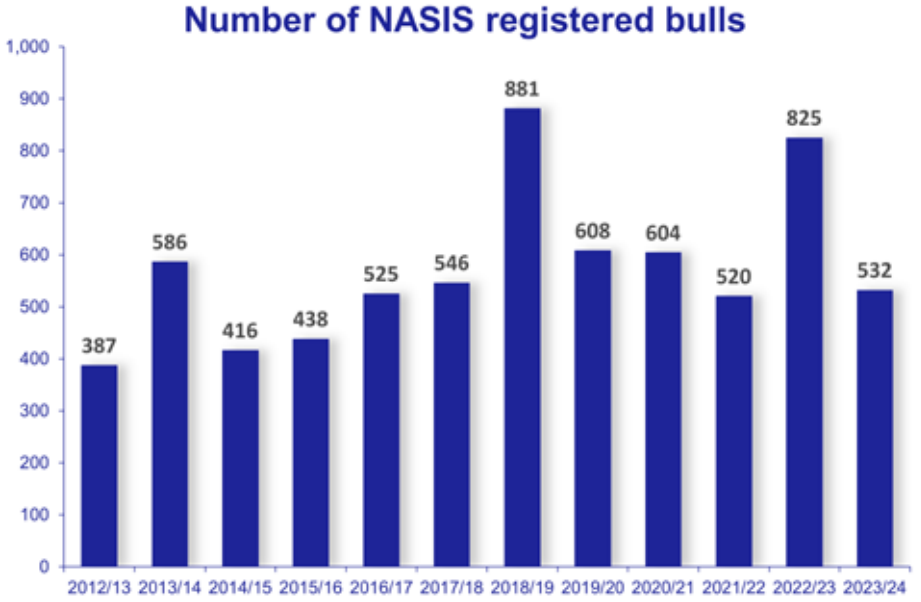
NASIS-registered bulls

The NASIS bull registry is a collaborative industry effort that underpins high quality animal recording in Australia.

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

Current: 532

NASIS registrations this year were consistent with long-term average levels. In coming years, the number of new dairy NASIS registrations each year is expected to taper off as companies select fewer young bulls for their programs. Genomics enables them to accurately target young bull selection to their market needs. The number of beef NASIS registrations is expected to increase to enable the accurate recording of matings and pedigrees that include beef sires.



Performance metrics

Workability

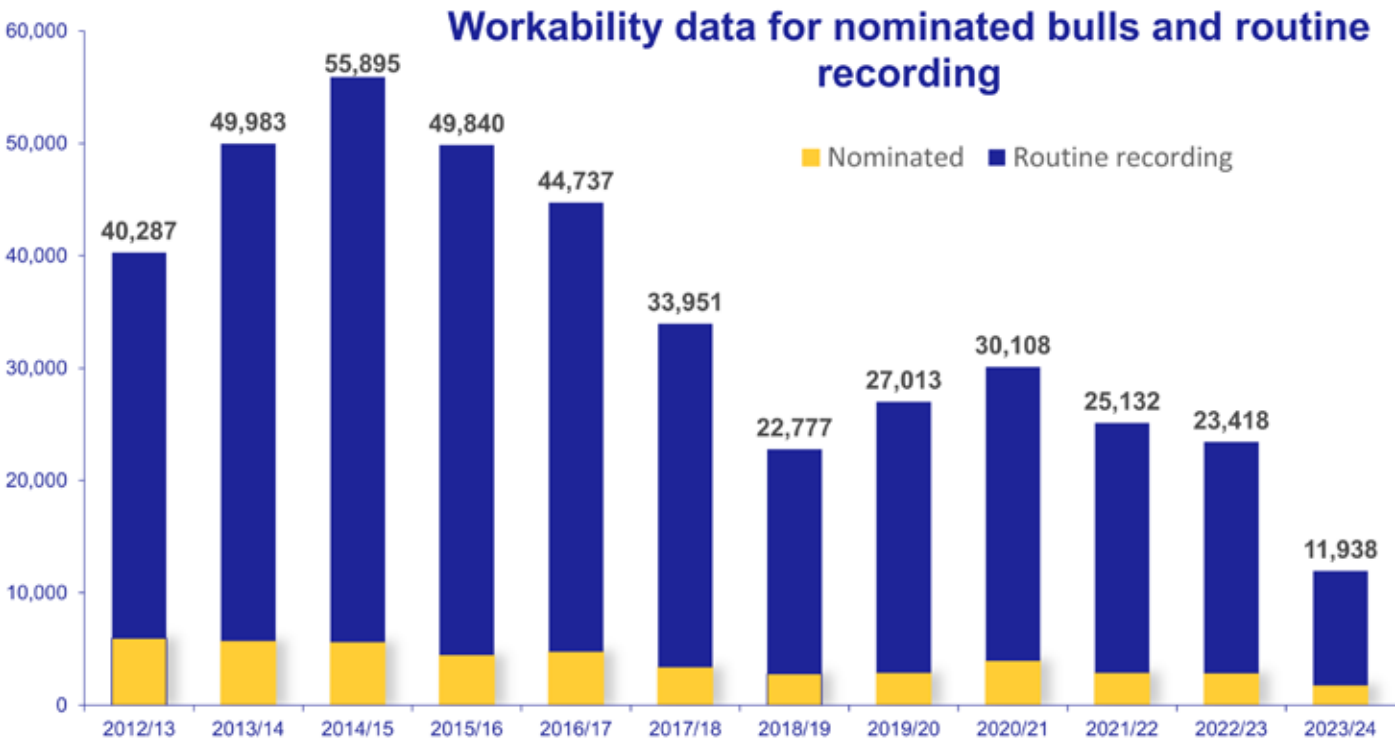
DataGene needs a minimum number of workability reports to calculate reliable ABVs for Milking Speed, Temperament and Likeability (these traits are included in the breeding indices).

Farmers are asked to report workability scores on all 2-year-old heifers via their herd management software (Easy Dairy, Mistro Farm) or their herd test centre.

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

Current: 1,779 for nominated sires and 10,159 via routine collection

Farmers value workability traits because they are important to an efficient milking routine. Cows that are slow to milk or are unsettled in the dairy are a nuisance. Unfortunately, there has been a gradual decline in the number of workability record collections over time through both routine recording and bull company nominations. The decline in workability collection is unsustainable and will be reviewed as part of our routine business planning activities.



Highlights 2023/24

Strategic Pillar 1: Data-driven decisions

Strategic Pillar 1: Data-driven decisions

DataGene manages the Central Data Repository (CDR) and DataVat on behalf of the Australian dairy industry. Combined, they offer new opportunities for improved decision-making based on data.

Priorities for 2019-2024 include:

- Develop and support new decision tools
- Expand and secure data from a variety of sources
- Drive and support industry innovation.

Key deliverables

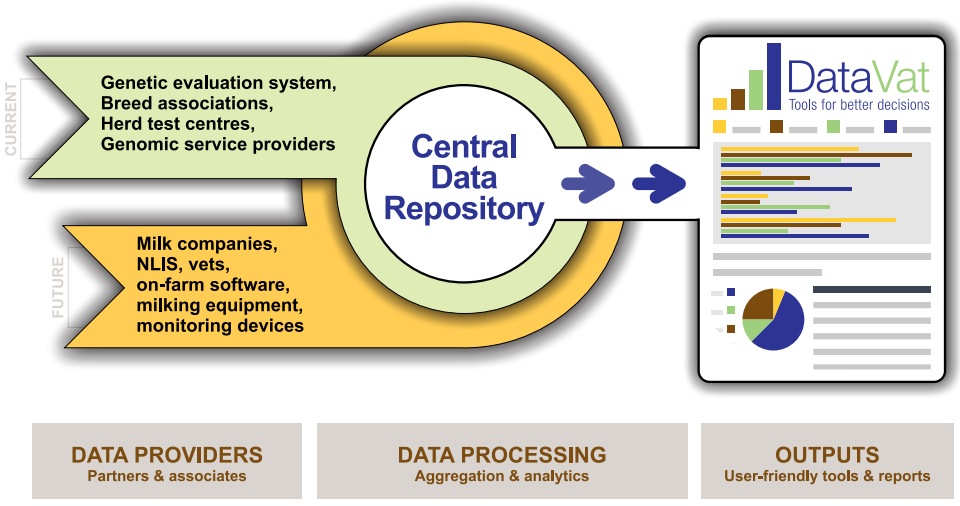
- ✓ CDR enhancements
- ✓ DataVat redevelopment
- ✓ Within Herd Ranking Tool
- ✓ HerdPlatform enhancements
- ✓ DataConnect
- ✓ iDDEN

DataVat

DataVat is a web portal that allows customised, secure access to various reports, tools and resources that draw upon data in the Central Data Repository (CDR), including information in the genetic evaluation system. DataVat is home to a diverse range of tools and reports, some of which 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 (CDR)

The CDR is an IT platform to connect data from a variety of external sources, such as herd test centres, breed associations, on-farm equipment and software, vets, milk companies, monitoring systems such as NLIS and the genetic evaluation system. Information and data from the CDR feeds into tools and resources delivered via DataVat.



Highlights 2023/24

CDR enhancements

During the year a variety of enhancements were made to the Central Data Repository, including automating data synchronisation with breed societies and herd test centres, the provision to record beef calves, an API for a genomic service provider and automation of national statistics reports. While these are largely 'behind the scenes' enhancements, they have automated tasks that were previously manual, improving efficiency and quality (through reducing opportunities for human error). Work is also in progress for enhancements to facilitate the DataConnect project, such as automating data importing to enable adding farms at scale and new import flexibility for farm systems with varying levels of data quality (see page 16).

DataVat redevelopment

In the time since DataVat was developed (in 2016), industry needs, IT technology and the services delivered have evolved. During the year the DataGene team undertook a detailed review of user and system requirements as the first step towards documenting the business requirements for redeveloping this valuable industry portal. This is a multi-year project.

Within Herd Ranking Tool

Released in 2023, and accessible through DataVat, the Within Herd Ranking Tool enables farmers to compare animals of different breeds and crossbred animals within their herd. Enhancements were made this year to make the tool more user-friendly by delivering it as an interactive screen display (rather than an Excel spreadsheet).

HerdPlatform enhancements

HerdPlatform gives dairy farmers access to their herd test results in an interactive format. Accessible through DataVat.com.au, HerdPlatform is a set of tools and report that draw upon a farm's herd test data. Each herd's information on HerdPlatform is be updated within a few days of herd testing. HerdPlatform was a collaborative development, involving DataGene and participating herd test centres (Dairy Express, NHD, HICO, Farm West) and ABRI.

This year, DataGene provided training and extension support for Dairy Express in its first year using HerdPlatform as the single delivery mechanism for herd test results to their clients. Improvements were made to two particular tools offered via HerdPlatform: the Within Herd Ranking tool and the MIR Conception tool.

Developed by DairyBio, the **MIR Conception Tool** helps farmers determine the most appropriate type of semen (sexed, conventional or beef) for a particular cow, to avoid wasting expensive semen on sub-fertile cows. Initially the tool was available to herds tested through HICO and Dairy Express. During the year, the validation work was completed to predict conception using MIR data from herd testing machines used by National Herd Development (NHD) and others.

The MIR Conception Tool helps farmers avoid wasting expensive semen on sub-fertile cows.

Highlights 2023/24

DataConnect

DataConnect is a multi-year project that explores ways the industry can work, pre-competitively and collaboratively, to tackle the challenges farmers experience when exchanging and integrating data. This is the next step towards the vision of enabling farmers to make data-driven decisions with a pipeline that allows single data entry; multiple uses.

DataGene has been working with a variety of milking equipment manufacturers, on-farm software providers and a corporate dairy company to identify the best mechanisms to connect their data to the CDR and to provide customised solutions as needed. Proof-of-concept connections were showcased at the AGM in November 2023 and DataGene has continued to add connections through the year. DataConnect has demonstrated the potential to feed large volumes of historical and daily data, including new types of data, into the CDR. A significant amount of work has been completed to automate the connections and work through the variety of challenges encountered when merging various data sets.

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

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 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.

During the year, Lely signed an agreement with iDDEN making it seven international companies that 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 faces a challenge in exchanging data between the many farms that are using outdated (legacy) versions of equipment manufacturers' onfarm software and dairy data organisations. iDDEN is in the process of exploring options for older software versions that have been marketed in the past 5-10 years (but are not the latest versions) and are still actively being used. This will be of particular benefit in Australia where the uptake of robotics and current software versions is lower than in many other countries.

iDDEN
The international dairy data exchange network

iDDEN has agreements with the following companies:

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

Highlights 2023/24

Strategic Pillar 2: Increased farm profitability through herd improvement

Genetics contribute about 30% of production gains on Australian dairy farms. DataGene's genetic evaluation system underpins these gains. A key goal is to increase the number of farmers breeding replacements from bulls carrying the Good Bulls icon and keeping the best genetic animals in their herds by using Australian Breeding Values and indices to make breeding decisions.

Priorities for 2019-2024 include:

- Increase reliabilities
- Improve service delivery
- Increase farmer and industry service uptake
- Increase the number of genomically tested females.

Key deliverables

- ✓ Good Bulls strategy
- ✓ Mastitis Resistance ABV
- ✓ Genetic reporting
- ✓ Red breed genomics
- ✓ Semen fertility

Good Bulls Strategy

One of DataGene's key roles is to support farmers to breed higher performing, more profitable and sustainable dairy herds. The two core elements of DataGene's extension strategy are the Good Bulls Strategy and promoting genomic testing of females (see page 19).

The aim of the Good Bulls strategy is 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.

During the year DataGene increased the minimum BPI required for Holstein bulls to qualify for Good Bulls status. This was to reflect the ongoing genetic gain in the breed and ensure bulls carrying the Good Bulls icon are a true representation of superior bulls in the breed. From August 2023, to feature in the Good Bulls Guide, a Holstein bull must be 1.5 standard deviations above the Holstein Breed average for Balanced Performance Index. This increased threshold still gives farmers plenty of choice, with about 800 Holstein bulls qualifying when the new threshold was implemented.

Genetics contributes 30% of production gains on Australian dairy farms.

Good Bulls

Bull choices made easy

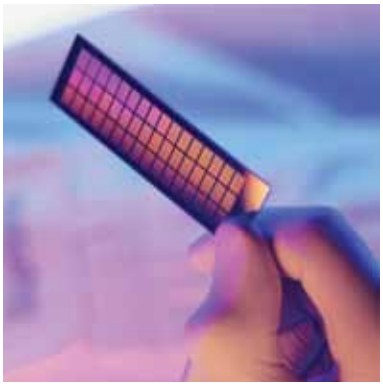
Highlights 2023/24

Mastitis Resistance ABV

In April 2024, DataGene implemented a refined model for the Mastitis Resistance ABV. The benefits included more stable bull rankings for this trait and a more accurate reflection of reliability for the trait. The Mastitis ABV is a multi-trait ABV that includes 3-5-day clinical case records, somatic cell count and udder depth.

Genetic reporting

Haplotypes by their nature can be difficult to call. Not all SNP chips have the relevant SNPs to call all haplotypes. DataGene and DairyBio completed work to call the main Holstein haplotypes ((HH1-6) and the Jersey haplotype (JH1). However, the identification of new haplotypes is ongoing. With new haplotypes, we have been accepting calls from external providers to report on as many haplotypes for as many animals as possible.



Additionally, DataGene has improved the reporting of parentage updates and parentage changes to make it easier for Ginfo farmers to make pedigree correction decisions. These upgrades have helped to improve the reference population and will improve farmers' ability to correctly identify their cows.

Semen fertility

DataGene has paused the publishing of Semen Fertility Values, following a thorough review which identified concerns about the reliability of the values. The increase in use of sexed semen and incomplete recording of it in on-farm software has impacted the quality of data used to create these values. DataGene continues to explore ways to address this and is encouraging farmers to record the type of semen being used as accurately as possible (sexed vs conventional).

Red Breed genomics

During the year DataGene automated genomic evaluations of Red Breeds. With the automation work complete, Red Breed evaluations moved to DataGene's routine schedule, with more than 40 evaluations a year rather than the previous six evaluations.

Red Breeds are now evaluated 40 times a year rather than the previous six evaluations.

Highlights 2023/24

Strategic Pillar 3: Improved animal performance from R&D

Genomics and other technological advances present opportunities to improve animal performance through herd improvement R&D. The data collected by the Central Data Repository (CDR) and Ginfo enable the development of breeding values for traits that are difficult to measure, such as health traits, and enable the industry to use new technologies such as MIR (mid-infrared).

One of DataGene's main strategic priorities is to increase the rate of genomic testing of females in the Australian dairy population. This strategic pillar also includes Ginfo, the industry's national reference data set of genetic information. Ginfo includes genotypes (genetic/DNA information) and phenotypes (performance information) which underpin the reliability of Australian Breeding Values (ABVs) and indices.

Priorities for 2019-2024 include:

- Deliver new health breeding values
- Use genomics and other technology (MIR) to predict future performance.

Key deliverables

- ✓ Sustainability Index
- ✓ Heifer genomic testing
- ✓ Ginfo
- ✓ Clinical Mastitis app

Sustainability Index

The Sustainability Index is a relatively new breeding tool, introduced in August 2022 for farmers who want to fast-track genetic gain for reduced greenhouse gas emissions. About half of Australian dairy farmers and herd improvement advisers consider the Sustainability Index when making breeding decisions, according to an online survey undertaken on behalf of DataGene in June 2024. This indicates rapid uptake, although the results indicate that most people consider use the Sustainability Index in conjunction with the Balanced Performance Index, which is to be expected.

Clinical Mastitis app

DataGene has been part of a team working on a multi-year project to develop a Clinical Mastitis app for Australian dairy farmers. It will enable more prudent use of antibiotic treatments while maintaining or improving animal welfare and production. DataGene's role has been to provide the IT development for the app. During 2023/24 development and user acceptance testing was completed, with field trials underway during the second half of 2024.

Development of the Clinical Mastitis app is a collaboration between DataGene, Dairy Australia, the University of Technology Sydney, Charles Sturt University and the University of Sydney with support from Food Agility and Coles.

Heifer genomic testing

Genomic testing of females gives farmers the opportunity to fast-track genetic gain in their herds. Heifers can be tested as young calves, so that early decisions can be made about their future in the herd. Genomic testing became available to the Australian dairy industry in 2011. The initial update was by bull companies (testing males) but over time the technology has been adopted by dairy farmers resulting in a sustained growth in the number of females tested. Despite challenging seasonal conditions (including lower export heifer demand), the number of females tested in 2022/23 was matched in 2023/24, indicating that farmers value the genomic results.

Genomic results enable dairy farmers to make early decisions about the future of heifers in their herd.

Feature Project: Ginfo

Ginfo: Australia's genomic reference population

Australia is one of the few dairy industries to have a national reference herd for genetic information, Ginfo. This information underpins genomic testing in Australian dairy herds by matching performance data (phenotypes) with genetic markers (genotypes).

As well as improving the reliability of existing ABVs and indices, Ginfo enables researchers to develop breeding values for traits that are difficult to measure such as Heat Tolerance and Feed Saved. For example, the reliability of the Heat Tolerance ABV in Holsteins improved by 10% in August 2024, as a result of an expanded reference population and more SNP markers in the evaluation.

Ginfo data is used in a wide range of DairyBio research projects. Current examples include projects on transition cow health, survival/longevity and calf vitality. This research will ultimately lead to new or improved Australian Breeding Values.

Ginfo wouldn't be possible without the participation of 157 commercial dairy herds with excellent records located across Australia's eight dairying regions.

During the year, about 19,000 new genotypes from Ginfo herds contributed to the national reference population, bringing the total population to about 83,000 cows. The reference population also includes 14,725 bulls.

Ginfo is a collaboration of DataGene, DairyBio and Dairy Australia.

Ginfo fun facts

- ✓ Almost 5% of cows with fertility records and 10% of calving records come from Ginfo, which is incredible given records date back to the 1980s and Ginfo is only 10 years old.
- ✓ Almost a third of genotyping conducted in Australia is by Ginfo farmers (including cows and calves)
- ✓ Almost a third of workability data received by DataGene in 2023/24 was from Ginfo farmers.

Genomic testing

Genomic testing analyses an animal's DNA from a sample such as ear tissue or a tail hair, to predict future performance. DataGene produces genomic Australian Breeding Values and indices to predict future performance under Australian conditions. Samples are easy to collect and can be taken at the same time as routine husbandry procedures such as ear tagging or disbudding.

Feature Project: Ginfo

Ginfo herd boosts fertility

Genomic data is now helping Riverina NSW dairy farmers, Bernard and Jenny James continue their quest for improved fertility.

The fact it has also underpinned a 372% increase in the herds' Balanced Performance Index (BPI) during the past four years, has been a bonus.

The 430-cow Ginfo Holstein herd at Womboota, has also recorded a "quite significant and rare" lift in its Fertility Australia Breeding Value (ABV) from 103 to 109 in the nine years until 2023. This impressive fertility improvement meant the James' herd has tracked above the national average for fertility since 2018.

Bernard said addressing their herd's fertility nine years ago resulted in an overall genetic improvement.

"Having better fertility gave us more heifers to work with and we could use the BPI (Balanced Performance Index) as a tool to cull with and decide which cows and heifers to breed to sexed semen," he said.

In early 2024, the James' herd was 217 BPI and ranked 32 for Holstein herds in the country.

As a Ginfo herd Bernard and Jenny began genomic testing earlier than many other farmers but didn't do much with the data for years.

Now, with an increase in their herd's fertility, this genomic information – specifically their BPI – is used to determine which cows are joined to sexed semen.

"We work out how many heifers we want (as replacements), double that amount and use sexed semen to breed these from our heifers and best BPI cows," Bernard said.

"The rest goes to Angus. Not getting Freisan bull calves is a big plus."

National Herd Development (NHD) helps Bernard and Jenny select a team of three-to-four Good Bulls each year, and this has also contributed to their genetic improvement.

Herd production has steadily improved, with the 630-kilogram average herd producing about 685 kg of milk solids/cow each lactation. The herds' somatic cell count sits at 90,000-100,000 cells/mL and Bernard and Jenny also haven't had to buy any cows for five years.

NSW Riverina dairy farmer Bernard James' 430-cow Ginfo herd recorded a significant lift in its Fertility Australia Breeding Value (ABV) from 103 to 109 in the nine years to 2023.

Highlights 2023/24

Strategic Pillar 4: Service provision

Strategic Pillar 4: Service provision

DataGene needs to be continually improving and diversifying its services to fulfil its vision of enabling farmers and the industry to maximise profit through data-driven decisions.

Priorities for 2019-2024 include:

- Build and maintain DataGene and industry infrastructure
- Develop and maintain industry solutions
- Establish new revenue streams.

DataGene website

During the year DataGene rebuilt and launched a new-look website. Designed to be more user-friendly it also has a modern interface that is easier to update and maintain by staff. This website houses DataGene's vast library of learning resources, reports and corporate information. Genetic evaluation data and reports are delivered via a separate, interactive website, DataVat.com.au.

Security audit

DataGene received a rating of 4 out of 5 in its 2024 audit of internal security which was undertaken by an independent evaluator, Cyber Shield Non-Profit. DataGene's security rating improved from 2+ to 4, largely due to significant improvements observed by the auditors since the 2022 assessment, even with an expanded scope of testing. Positive highlights included consistent use of multi-factor authentication, use of a password vault, significant reduction in external network attack surface, deployment of endpoint detection technology, a decrease in identified issues and improvements in secure email gateway functionality.

Standing 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. Formal governance structures include the Board, Standing Committees and User Groups (see pages 30-31).

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

Key deliverables

- ✓ DataGene website
- ✓ 5-year business plan
- ✓ Security audit
- ✓ Standing Committees
- ✓ FVI
- ✓ Contracted projects

Highlights 2023/24

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.

During the year, development work was completed for a new trait for forage quality based on metabolizable energy (ME) content and yield. This will be published for the first time with the 2024/25 FVI release.

Business plan

In June 2024, DataGene and Dairy Australia finalised and signed a new 5-year funding agreement based on a new Business Plan (2025-2029). Combined, the funding agreement and business plan provide clear direction about DataGene's business priorities for the coming five years which in turn guide specific deliverables for our annual operating plans.

This five-year Business Plan sets out how DataGene plans to service the agricultural sector now and into the future to enable sustainable and profitable agriculture through data-driven decisions.

DataGene's Business Plan for 2025-2029 delineates the priorities and achievements that the organisation aims to accomplish over the five years from July 2024 to June 2029. This plan encompasses four primary functions:

1. Defining DataGene's course: The plan sets a clear trajectory for DataGene for the forthcoming five-year period.
2. Establishing goals and objectives: Aligned with the organisation's vision and mission statements, the plan outlines specific goals and objectives.
3. Building on past successes: The plan aims to consolidate the progress made under the previous Business Plans to further enhance the organisation's standing.
4. Identifying investment areas: DataGene identifies key domains where investments will be directed to bolster services and capability.

This plan is the result of a significant consultative process. A series of business planning meetings and workshops with internal and external stakeholders were conducted over an 18-month period. Priority areas were tested through an online survey of DataGene stakeholders. This survey, conducted in July 2023, gathered feedback from farmers, broader industry participants, and DataGene staff. The survey sought insights about priorities and recent developments that could affect DataGene's 5-year Business Plan.

Highlights 2023/24

Contracted projects

When DataGene was formed in 2016, it received most of its funding from Dairy Australia, with some income from fees-for-services through genomic testing, export heifer certification, software services and NASIS bull registration. In recent years, DataGene has diversified its income through new services both within the Australian dairy industry and further afield where its expertise can add value, particularly in IT, change management and digital strategies. For more information refer to page 25.

Global methane hub

DataGene has been contracted to gather and document the requirements for the Global Methane Hub through Wageningen University. This database is expected to offer a storage and exchange platform for methane related phenotypes and genotypes for the global ruminant industries. Other key partners in this are Lactanet, the International Committee on Animal Recording (ICAR) and their Standing Committee Interbull. DataGene's services on this project include project management, workshop facilitation, technical analysis and business requirement documentation. The project is in its early stages and scheduled for completion by the end of 2024.

Zetify

Zetify engaged DataGene to work with their leadership team to develop engagement models for working with an off-shore IT team. DataGene delivered an onboarding process for four new staff at the off-shore IT team sharing DataGene's delivery framework and experiences in working with them, where the challenges could be and the cultural context.

Software development and IT strategic consulting

DataGene provides software and strategy services and has a portfolio of services to deliver solutions for Australian and international customers across dairy and agriculture. This suite of services has enabled DataGene to diversify its income stream and create opportunities for collaboration and learnings that benefit our stakeholders.

DataGene has a specialist team of IT and change management professionals that has built up a skillset around IT project management, working with large complex data sets, managing large-scale global projects, the ability to scale on demand and assessing change readiness. Further development of these skillsets helps to maintain DataGene's genetic evaluation and milk recording software and provide improved services to customers.

Project delivery is underpinned by the DataGene Delivery Framework (DDF). This framework combines elements of traditional project management methodologies such as Prince2 and waterfall with Agile development practices. This approach allows for structured planning while maintaining the flexibility to adapt to changing requirements and emerging technologies.

Current projects include: strategic analysis of data and technology requirements; assessment of change readiness and people capability; project scoping, design and management; data collaboration solutions; and implementation of new tools and systems. Working with our offshore development partner, DataGene uses established, proven and repeatable methods and processes to deliver projects from concept through to implementation.

Our technical capabilities include:

- Data integration platforms
- Change management Managing Change
- Decision support tools
- Mobile applications
- Cloud-based solutions
- Big data analytics
- Blockchain for traceability
- IoT integration
- Genetic evaluation systems
- 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.

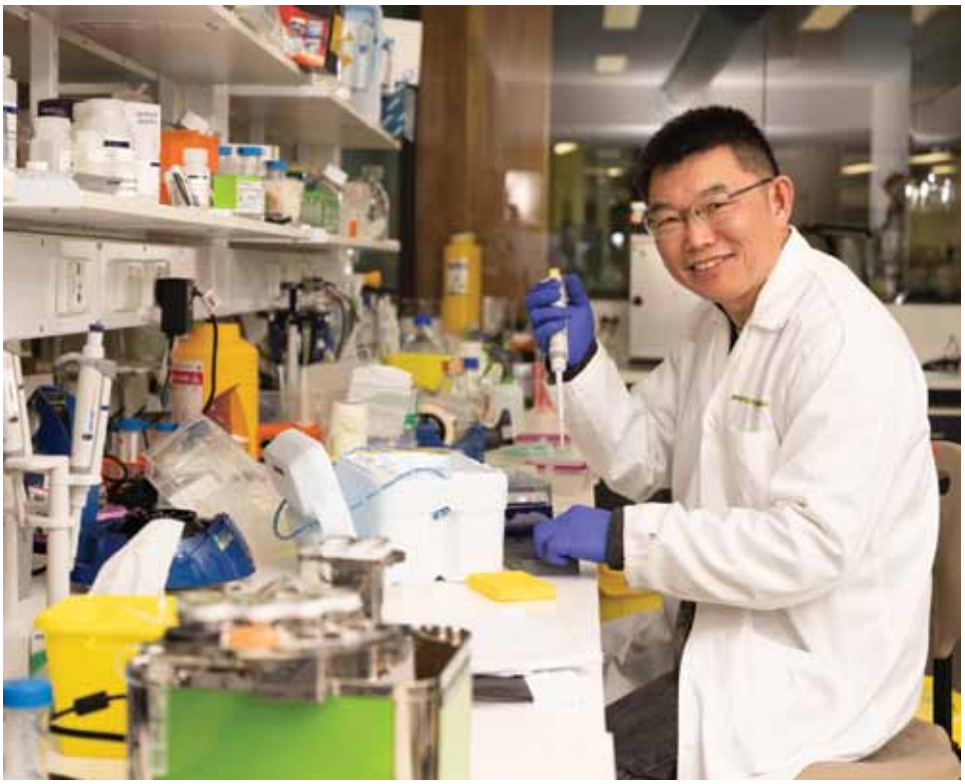
DataGene works closely with stakeholders and industry to understand farmer priorities which can be translated to research opportunities for innovative solutions.

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
- Improved Heat Tolerance ABV for Jersey and Holstein cattle
- More accurate identification of recessive lethals and haplotypes
- An inventory of structural variants in Holstein and Jersey 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.



Dr Jianghui Wang from the Genomics and Cellular Sciences team at Agriculture Victoria Research prepares a DNA sample for genome sequencing.

DairyBio

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 in 2023 included:

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

The Genetic Evaluation Standing Committee met four times during 2023/24. The committee received regular progress updates and provided feedback on DataGene's 2024-2029 Business Plan, the themes and consultation process for the 2024/25 review of the National Breeding Objective, expression of intermediate optimum type traits, semen fertility, Good Bulls Guide threshold and termination codes.

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 Committee provides strategic advice and guidance to stakeholders in the dairy industry, including DataGene. It establishes the guidelines for the operation of the CDR and DataVat and provides advice on the development and implementation of data standards to support industry data sharing. The Committee guides the development of policies and processes for the access and use of herd improvement industry data and develops and oversees a process for handling requests for exceptions to these policies.

The committee met twice during 2023/24, discussing issues such as data management and authority, data sharing, recording beef on dairy, yield calculations, DataConnect and DataVat.

Data Access and Standards Standing Committee members:

- Sam Simpson, (Chair), DataGene Board
- Andrew Aldridge, Farmer Member
- Glen Barrett, Jersey Australia
- Jacqui Biddulph, Farmer Member
- Steph Bullen, Dairy Australia
- Heather Campbell, Farmer Member
- David Chandler, Easy Dairy
- John Crowther, Holstein Australia
- Paul Douglas, STgenetics
- Daniel Espinosa, MSD Animal Health (Allflex)
- Peter Nish, TasHerd Pty Ltd
- Phil Wren, National Herd Development
- DataGene staff.

Herd Test Centre Committee

The primary objective of the Herd Test Centre Committee is to provide advice and recommendations to DataGene in relation to opportunities such as new data sources, new diagnostic analysis, and enhanced software and reporting including HerdPlatform and the Centralised Data Repository (CDR). The scope of the Herd Test Centre Committee is on pre-competitive discussions, including software and service development. HerdPlatform is a tool on DataVat that gives farmers interactive access to their herd test results and new herd recording and herd improvement tools, reports, and services.

The committee is made up of management representatives from National Herd Development (NHD), Hico, Dairy Express, TasHerd and FarmWest, with input from DataGene and secretariat support from Chris Murphy. The committee met twice in 2023/24, discussing topics such as DataVat, HerdPlatform, workability reporting, DataGene's 2025-29 Business Plan, MIR Conception report, universal samplers and modern day herd testing.

Vale Christian Hickey

Christian Hickey was a dairy industry stalwart who spent his entire career contributing to improving farmers' understanding of genetics and herd improvement skills. He worked for National Herd Development (NHD) for more than 25 years during which time he saw the implementation of genomics, sexed semen and an innovative training program for AI technicians. The provision of quality services and advice was Christian's utmost priority, and he was well regarded by his peers for his dedication to herd improvement and ensuring the very best outcomes for farmers.A valued member of DataGene's Genetic Evaluation Standing Committee and Herd Test Centre Committee, Christian could be relied on for a frank and constructive contribution to any discussion.

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.

Graeme Gillan

Chair

Graeme is the former chair of the National Herd Improvement Association of Australia (NHIA) and former CEO of Holstein Australia. His involvement with dairy herd improvement spans more than 45 years working with several leading Australian genetics companies. Over this time Graeme has been involved at the coal face of herd improvement innovations including expanding the sources of genetics, the introduction of computerised mating programs and increasing the gene pool of the Jersey breed in the 1990s, overseas investment in Australian genetics in the 2000s and the promotion of genomics since 2010. He is passionate about the industry's role in influencing priorities for research, development and extension programs, to ensure herd improvement continues to deliver value to Australian dairy farm businesses.

Jeff Odgers

B. Business (Agricultural Management), Ass. Dip. Farm Management.

Dairy Australia nominated Director

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 2017-2020, serving as a non-executive director between 2013 and 2021. Jeff led Murray Dairy Inc as board Chair 2008-2012, 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 2009-2011.

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 own and operate a stud beef enterprise at Armidale NSW. Having spent 18 years in various roles with MLA, Alex has extensive knowledge of the development of 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 also sits on working groups for Cattle Australia and NFF and is a director of the SRS genetics company.

Tim Jelbart

B. App. Sci (Hons) AAPI

Director

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. Tim is currently the chair of the Genetic Evaluation Standing Committee.

Daniel Meade

Dip Agriculture, Dip Agronomy, GAICD

Director

Daniel and his wife Michaela are co-owner operators of Boonderoo Pastoral Company, milking 400 cows at Kolora, south-west Victoria. Their focus is on maximising pasture production and home-grown feed efficiency whilst breeding an efficient cow that suits this system. In 2017, Daniel received a Nuffield scholarship to investigate how agricultural organisations engage with farmers. Before starting dairy farming in their own right in 2018, Daniel spent 10 years as a dairy agronomist, and studied at Glenormiston Agricultural College. Daniel was first elected to Moyne Shire Council in 2016 and has served as Deputy Mayor and Mayor. He has also held positions on numerous community organisations including WestVic Dairy, VFF, CFA and on local sporting clubs.

DataGene Board

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.

Sam Simpson

Director

MMarketing (Agribusiness), BAppSci(Agric), GradDipAgribusiness, DipFrontlineManagement

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 Data Access and Standards Standing Committee and 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.

DataGene acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples.

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DataGene

Solutions for Herd Development

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September 2024.