

Annual Update 2018/19



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.



AGRI-GENE



AUSTRALIA



Genetics AUSTRALIA

Breeding better Australian herds



Holstein AUSTRALIA



Australasia



Contents

Chair's Report	4
CEO's Report	5
Solutions for herd development.....	6
Highlights 2018/19	8
DataGene Board	16
DataGene Standing Committees.....	19
Four strategic pillars.....	22
Resources available on DataGene's website.....	23



Chair's Report

On behalf of the Board of Directors, it is my pleasure to present DataGene's 2018/19 Annual Update which provides an overview of the year's highlights.

In establishing DataGene, the industry wanted to create a platform for genuine innovation and collaboration, and this is happening in many ways.

I am delighted to report that this year saw the implementation of three major projects: the new Genetic Evaluation System (GESNP), the Central Data Repository (CDR) and DataVat, the web portal that generates customised reports from information in the CDR and genetic evaluation system.

GESNP, the CDR and DataVat are important industry investments, delivered by DataGene and funded primarily by Dairy Australia.

When DataGene was formed in 2016, our funding through Dairy Australia covered the first three years of operations. This year, Dairy Australia committed to a new five-year funding agreement. This gives funding certainty to allow for long-term strategic planning and enables DataGene to continue improving services for our members and dairy farmers. We continue to work closely with our colleagues at Dairy Australia and we thank them for their support.

In a challenging industry operating environment DataGene maintained its revenue streams at similar levels to the previous year. In conjunction with tight expenditure control DataGene achieved a surplus for the financial year of \$276,000 following the capitalisation of significant software development expenditure.

During 2018/19, the industry's Herd Improvement Strategy was refreshed. The first Herd Improvement Strategy was launched in June 2014 and in late 2018 it was agreed that it was timely to review and refresh this strategy. Because DataGene's strategy must be aligned with the Herd Improvement Strategy, it made sense to revise our Five-Year Business Plan during 2019. As a result, DataGene's vision and mission remain unchanged, however our strategic priorities have been aligned to better reflect DataGene's roles in the industry.

DataGene has continued to maintain and build our stakeholder relationships. As at June 2019, total membership of DataGene was 25 members including herd test centres, genetics suppliers and breed associations as well as animal health companies and genomic service providers. DataGene's Standing Committees comprise a range of members and farmers. These Committees contribute enormously to the success of DataGene by providing advice and recommendations and ensuring that a variety of views are heard. A Herd Test Centre Committee was convened during the year to ensure that the herd test sector is regularly engaged with DataGene in a structured way.

Finally, I'd like to thank the many people who have worked with DataGene throughout the year: our members, our project collaborators, our funders, focus farmers, all of the Australian dairy farmers who supply data to the genetic evaluation system, my fellow Board members, and our dedicated staff. While it's been exciting to watch the efforts of many years come to fruition, it has also been demanding for many of our staff and collaborators. We are grateful for your commitment and contributions. A special thank you to our departing director James Smallwood who leaves us after the AGM. His insight and support around the Board table will be missed.

Ross Joblin
Chair
DataGene



CEO's Report

2018/19 was a year of delivering three major infrastructure projects that set the industry up for the future and enable a range of new reports, tools and services to be delivered.

The new GESNP system has the capacity to handle the vast quantities of data involved in the genomic era. And with far more automation and functionality, it has cut processing time for a genetic evaluation run from two weeks to four days. April 2019 was the first public ABV run with GESNP, following over 90 evaluation test runs. GESNP is now routinely used for monthly PBV runs and the public ABV runs. I appreciated the industry's patience as we transitioned to the new system during 2019. Further development of GESNP is underway to provide additional automation and functionality that will continue to improve our service delivery.

Running in parallel with GESNP is the Central Data Repository (CDR), a platform to connect and exchange data from a variety of sources such as on-farm equipment and software, herd test centres, breed societies, vets, milk companies and many others. The CDR infrastructure was largely completed during the year and is now established for industry data suppliers to connect their systems with the CDR. DataGene will be active during the coming year in connecting a range of Australian and international data sources to the CDR.

DataVat is the web portal that allows customised, secure access to various reports, tools and resources that draw upon data in the genetic evaluation system and the CDR. Most modules of DataVat have been built and it is now publicly accessible as a beta test site. It currently has about 400 users, mostly doing bull searches. During 2019/20, further developments will be completed to enable DataVat users to access and share herd data, as well as utilise new reports and tools.

By the end of 2018/19, DataGene had expanded the number of Ginfo herds to 139, up from 100 at the start of the year. Australia is at the forefront of countries partnering with farmers to maintain a national genomic reference dataset based on cows. It is a significant undertaking but the depth it adds to our genetic evaluation system makes us the envy of many other countries. We have started recruiting more Ginfo herds, with the aim of expanding to 200 herds by mid-2020, to increase the number of Jersey and crossbred animals in the reference population.

The Herd '19 conference in March lived up to its reputation as a 'must attend' event on the herd improvement calendar. This was the sixth Herd conference, and like previous ones it was a rare opportunity for people across the industry to hear about the latest developments and discuss opportunities for collaboration. I'd like to thank our partners Dairy Australia, NHIA and Holstein Australia for their roles in organising and supporting Herd '19.

In closing, I thank all of our members for their continued and valued support of DataGene. I would also like to take this opportunity to express my deepest thanks to the DataGene team for their dedication to helping our industry. The journey we undertook with the genetic evaluation software, CDR and DataVat was not easy. We made tremendous progress during the year and we still have a journey ahead of us. It is an exciting road and I'm glad we are walking it together.

Matt Shaffer
Chief Executive Officer
DataGene



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 for genetics, herd testing, herd recording and data systems. DataGene is owned by industry, its foundation members being Dairy Australia, Australian Dairy Farmers (ADF) and the National Herd Improvement Association of Australia (NHIA). Members include herd test centres, genetics companies, genomic service providers, breed associations and animal health companies (see inside front cover).

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.

Strategic relationships

DataGene has five key strategic relationships:

1. **Dairy Australia**, which is the primary funder of DataGene. It is also a client, with DataGene developing software solutions, such as updates to the Fertility and Mastitis Focus Reports, for Dairy Australia.
2. **Australian Dairy Farmers (ADF)**, which ensures DataGene's priorities and activities reflect the priorities of Australian dairy farmers. ADF is a strong public advocate for herd improvement. DataGene also has many direct interactions with farmers.
3. **National Herd Improvement Association of Australia (NHIA)**, which collectively represents its members, many of which are also members of DataGene. Our relationship with these members is essential in the development of new products and services.
4. **Other members**, such as Zoetis, Neogen and Apiam, provide key relationships for the delivery of DataGene products and services and the development of new products and services.
5. **Victorian Government**. Agriculture Victoria is an in-kind contributor to DataGene. It is also a client for DataGene for some projects, a user of DataGene data and a strategic partner in its provision of research outcomes via DairyBio.

Solutions for herd development

Strategic priorities

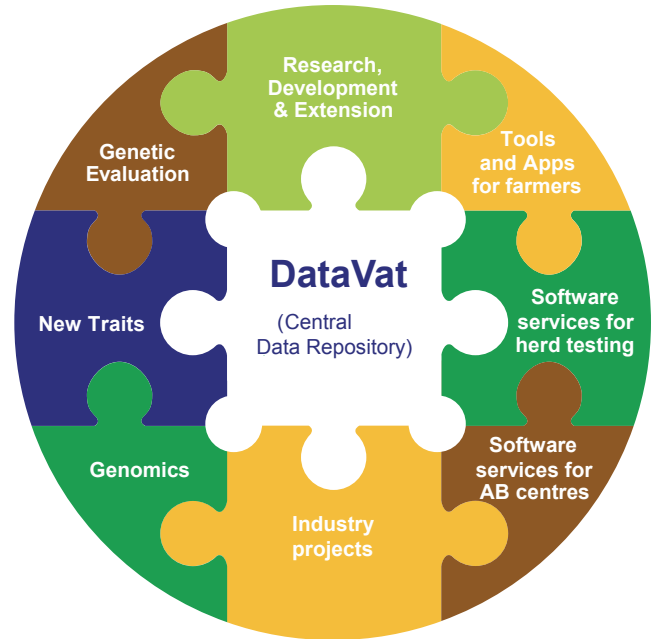
DataGene's activities are managed within three strategic priorities:

1. Genetic Evaluation Services
2. Software and Data Services
3. Service Culture and Collaboration

Pages 8 to 15 present achievements in each Strategic Priority.

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 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	✓

Products and services delivered through third parties	Fee for service
HerdData App (via herd test centres)	✓
Herd Test Dashboard (via herd test centres)	×
Genetic Progress Report	×
Extension messages (via Regional Development Programs)	×

Highlights 2018/19

Strategic Priority 1: Genetic evaluation services

Providing world-class genetic evaluation services drives genetic gain and allows farmers to breed more profitable cows. DataGene is focussed on:

- Increasing the reliability of Australian Breeding Values (ABVs).
- Improving service delivery.
- Increasing the uptake of services by farmers and industry.

The Genetic Evaluation Standing Committee gives industry direct influence over genetic evaluation policies and priorities for future development (refer to page 19).

Genetic evaluation

This year saw the transition to a new genetic evaluation system for monthly runs of Provisional Breeding Values (PBVs) and public runs of Australian Breeding Values (ABVs). The new system replaces a system that was more than 20 years old, used outdated technology and could not handle the increasing volumes of data in the genomic era. This has been a multi-year IT project, with further development occurring in 2019/20 to provide additional functionality and greater automation (refer Strategic Priority 2 for more details).

The first public ABV release with the new system occurred in April 2019. In preparation for this, the genetic evaluation system ran over 90 times to ensure confidence in the results. DataGene collaborated with its Genetic Evaluation Standing Committee and a group of industry technical experts to work through implementation.

The April 2019 ABV release also saw the removal of residual survival from the three indices: BPI, HWI and TWI.

The decision to remove residual survival out of the indices was made by industry through the Genetic Evaluation Standing Committee. Residual Survival was introduced to capture the economic value of traits that influence survival that are not measured (e.g. lameness and metabolic disorders), while avoiding double counting those traits already included in the indices. However Residual Survival had proven challenging to implement and caused some instability from run to run. This led to larger than expected movements of bulls between runs. Using the indices for selection decisions will continue to breed for survival, as the six trait groups in the indices are those that influence profit and longevity in the herd: Production (ASI), Fertility, Cell Count, Feed Saved, Type and Workability. Survival will continue to improve through breeding for the BPI.

Key deliverables

- ✓ New genetic evaluation system implemented
- ✓ Residual survival removed from indices
- ✓ Ginfo expanded to 139 herds
- ✓ MIR for Health field data collection

Highlights 2018/19

MIR for Health

DataGene is working with DairyBio to investigate the application of MIR (mid infrared) technology to analyse herd test milk samples for indicators of health status, such as fertility and lameness. MIR provides a new way of economically gathering performance data (phenotypes) from a large number of cows with less reliance on expensive collection at research centres. This information could be used in two ways:

- By farmers and their advisers to monitor current status of the herd.
- For the development of Australian Breeding Values (ABVs) so that farmers can identify and breed animals with improved genetics for health traits.

DataGene is responsible for on-farm sample collection for this project. Intensive field trials were undertaken in 2018/19. During Spring 2018, the team visited selected Ginfo herds in Tasmania and Gippsland, Victoria. Blood samples were collected from more than 1000 cows and lameness scores from 5000 cows in very early lactation. These cows are genotyped and have milk samples analysed using mid infrared spectrometry.

MIR for Health builds on the foundation research undertaken in the MIRforProfit project which ran from 2015 to 2018. To ensure the project has a lasting legacy, a project short report and video were prepared after the completion of the project. Both are available on DataGene's website.



Spring 2018 MIR field collection: Erika Oakes, Andrea Henry and Mike Axford.

Highlights 2018/19

Ginfo

Ginfo is Australia's national reference herd for genetic information. Managed by DataGene and funded by Dairy Australia, Ginfo is a large-scale genotyping project that provides genetic and performance information to increase the reliability of Australian Breeding Values (ABVs) and indices.

The reference population includes commercial dairy herds with excellent records, including Holstein, Jersey and Australian Reds. The herds are located across Australia's eight dairying regions.

Ginfo includes detailed information on more than 30,000 cows including their genotypes, classification scores and performance data from herd testing.

Ginfo data is used by DairyBio researchers to develop genomic breeding values for traits that are difficult to measure, such as Heat Tolerance and Feed Saved. The data also contributes to improvements in the reliability of ABVs and indices, particularly Daughter Fertility ABVs.

In March 2019, DataGene held its second Ginfo Forum to bring together participating farmers for an update on research in progress and new tools in development for farmers. About 30 farms were represented at the forum which was held the day before Herd '19. The group was given a preview of DataVat and was among the first to see figures out of the new genetic evaluation system (GESNP).

During the year, DataGene ran a process to recruit more Ginfo herds with the aim of expanding to 200 by the middle of 2020. By June 2019, there were 139 farmers involved in Ginfo. Another recruitment phase, scheduled for early 2020, will focus on increasing the number Jersey and cross bred animals in the reference population.

Ginfo is a collaboration of DataGene, Dairy Australia, Holstein Australia, Jersey Australia and the Victorian Government (DairyBio).



Highlights 2018/19

Strategic Priority 2: Software and data services

DataGene provides software and data services to both internal and external clients. These services are designed to enable farmers and service providers to make better, more timely management decisions. DataGene is focussed on:

- Building and maintaining data systems infrastructure.
- Developing and maintaining industry solutions.

New Genetic Evaluation System

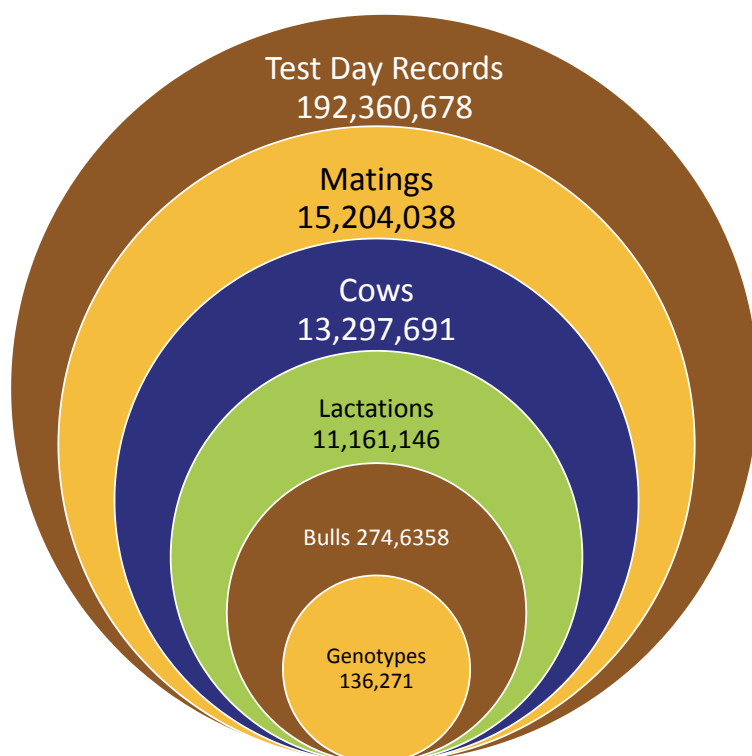
An intense focus of 2018/19 was to bring the Genetic Evaluation System New Platform (GESNP) to fruition for the April 2019 ABV run. While further refinements will be made to the system in the coming year, this is an important milestone in a large, multi-year IT project. A major investment for the Australian dairy industry, the new system has cut the processing time for a genetic evaluation run from two weeks to four days. Automation of many tasks enables a run to be performed with a single click. It has the capacity to process the vast volumes of data generated by modern genomics. The new system is written in modern, widely-used programming language which allows easier maintenance and future development.

DataGene's extensive testing showed the new system is as good as, or better than, the old system at predicting future performance across the traits. Animal rankings are expected to be more stable over time. The testing process involved multiple comparisons of the results from the old and new system for individual traits, movement of bull rankings between the old and new system, including the Good Bulls Guide, stability across time (ABV runs) and forward predictions from the old and new system. The testing also assessed performance across breeds, performance in females and compliance with Interbull trend validation criteria.

Key industry users were involved in the testing process, receiving results from test runs for reality-checking, feedback and discussion. Development during 2019/20 will see additional functionality and further automation.

Key deliverables

- ✓ Genetic Evaluation System New Platform (GESNP) implemented
- ✓ Central Data Repository (CDR) IT platform
- ✓ DataVat beta version operational
- ✓ Redeveloped Body Condition Score app for Dairy Australia



Highlights 2018/19

Central Data Repository

Running in parallel with GESNP is the major IT project to develop a Central Data Repository (CDR) for the Australian dairy industry. The CDR is an IT platform to connect data from a variety of external sources, such as on-farm equipment and software, herd test centres, breed societies, vets, milk companies, monitoring systems such as NLIS and the genetic evaluation system. Information and data from the CDR feeds into tools and resources available on the DataVat website (see below).

The infrastructure to exchange data from varied sources is largely complete. The next step is for industry data suppliers to connect with the CDR. As connecting to the CDR is entirely optional on the part of data suppliers, DataGene has no control over the timing or number of organisations connecting. However, DataGene does have a role in encouraging and supporting organisations to connect. We expect data suppliers to come on line progressively over the next year or two.

DataGene continues to work with its international partners to enable data to move between major international on farm systems and the CDR.

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) and information from the genetic evaluation system. It is currently a beta testing site, with further functionality still in development.

In April, a small number of industry people were given login access to DataVat. These were mainly bull company and genomic service provider personnel who needed to access and enter information in relation to the ABV run.

By mid-2019, DataVat had about 400 users, with most using it for bull searches. A small number of dairy farmers have been registered as test users. Early feedback indicates that although the system works, data quality issues are more visible and may cause some challenges with initial setup. This has highlighted the need to provide support to first time users. In the coming year further functionality will be added to DataVat such as the capacity for herd owners to authorise service providers access to their DataVat records.

Functionality offered by genetic evaluation system /DataVat	DataVat	ADHIS website
View/Search the library of active and non active bulls	✓	✓
List/Filter to find a bull team based on minimum criteria	✓	×
Compare current ABV to a past ABV	✓	✓
List/View/Search/Sort the library of top genotyped females	✓	×
See ABVs for restricted bulls (if a bull owner)	✓	✓
See ABVs for genotyped and non genotyped cows (if a herd owner)	✓	×
See Genetic Progress Report (if a herd owner)	✓	×
See Genetic Futures Report (if a herd owner)	✓	×
See Fertility Focus Report (if a herd owner)	✓	×

Highlights 2018/19

Industry projects

DataGene has been commissioned to undertake some specific projects for the industry. An example of this is the Body Condition Score App. Dairy Australia commissioned the redevelopment of this app, which was delivered to app stores for IOS and Android in January.



Data services

DataGene provides a range of direct services to herd improvement companies including:

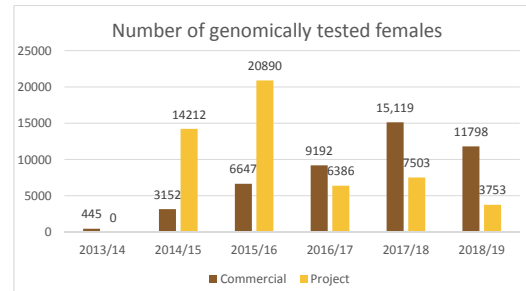
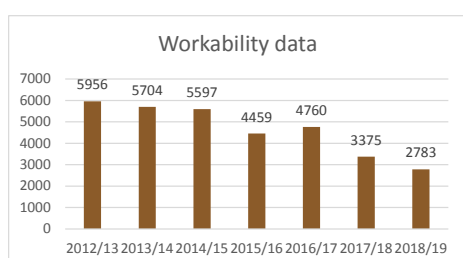
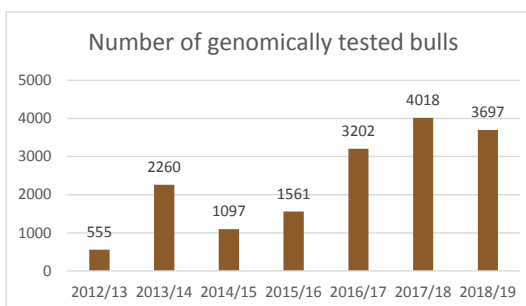
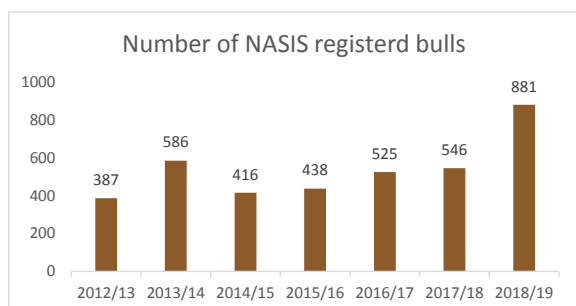
- Bull registration on the National Artificial Breeding Sire Identification Scheme (NASIS)
- Genomic testing
- Provisional Breeding Values (PBVs)
- Daughter Progress Reports
- Workability scores.

The accompanying graphs show trends in uses for DataGene's services.

The number of bulls registered on NASIS increased significantly this year, on the back of very strong bull testing. More NASIS-registered bulls means dairy farmers have more choice than ever and better quality bulls to select from.

This year saw a slight drop in the use of genomic services, in response to unfavourable seasonal conditions, however we expect this to recover and continue increasing in the coming year.

Of growing concern is the continued decline in workability collection and reporting, despite DataGene's efforts in recent years to promote its importance. DataGene will work with industry to encourage more dairy farmers to report workability scores for their first lactation heifers.



Highlights 2018/19

Strategic Priority 3: Service culture and collaboration

This priority underpins the delivery of DataGene's services to industry (Strategic Priorities 1 and 2). DataGene is focussed on:

- Developing and maintaining internal systems and controls
- Developing a high-performing team
- Communicating with stakeholders

A variety of formal and informal mechanisms give stakeholders influence over DataGene's priorities. Formal governance structures include the Board, Standing Committees and User Groups (refer to pages 16 to 21).

DataGene had a leading role in establishing a joint office for industry herd improvement organisations within the AgriBio building at La Trobe University. Since November 2018, DataGene, Holstein Australia, Jersey Australia and the National Herd Improvement Association of Australia (NHIA) have been co-located in the office, affectionately referred to as Dairy House. The facility enables sharing of resources and collaboration on projects of mutual interest. Being in the AgriBio building puts the industry in close proximity to the animal and plant genetic research teams from Agriculture Victoria and DairyBio. The Gardiner Dairy Foundation was a generous contributor to the foundation of the shared office facility.

Key deliverables

- ✓ Revised 5 year Business Plan
- ✓ Dairy House
- ✓ Herd '19
- ✓ ImProving Herds legacy resources



Highlights 2018/19

DataGene 5 Year Business Plan

During the year DataGene revised its 5 Year Business Plan to align it with the industry's updated Herd Improvement Strategy. The first Herd Improvement Strategy was launched in June 2014 under the auspices of the Herd Improvement Industry Strategic Steering Group (HISSG). It led to the formation of DataGene and funding support for DairyBio. Given the significant changes in the industry and operating environment since then, the industry reviewed progress to date and updated the strategy in 2018/19.

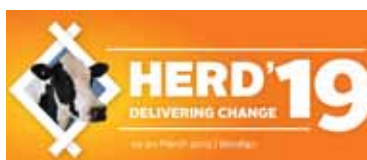
In DataGene's revised 5 Year Business Plan (2014/2019), the vision and mission remain unchanged, however the strategic priorities have been aligned to better reflect the organisation's roles in the industry:

1. Improved decision making from data
2. Increased animal performance through herd improvement
3. Improved animal performance from R&D
4. Improved and diversified services.

See page 22 for more information on DataGene's four strategic pillars.

Herd '19

More than 230 people attended Herd '19, held in Bendigo in March. Held every second year, the Herd conferences have become a 'must attend' for people involved at all levels of dairy herd improvement. With a theme of *Delivering Change*, the program featured leading scientists and farmers from around the world. Equally important is the spirit of learning and collaboration among attendees who may not otherwise meet in person very often. Organisation of Herd '19 was a collaboration of DataGene, NHIA, Holstein Australia and Dairy Australia.



ImProving Herds

The ImProving Herds project provided concrete evidence of the value of herd improvement to dairy farm businesses. With the project completed in mid-2019, DataGene prepared a series of resources to enable the project to have a lasting legacy. These included a series of farmer case studies, videos and reports. DataGene also supported DairySA in delivering field days at two ImProving Herds focus farms. These provided an opportunity for detailed discussions about what the ImProving Herds findings meant for individual farms and how genomics can contribute to a dairy business.



DataGene Board

DataGene is governed by a skills-based board. Members are elected on their knowledge and experience in dairy, herd improvement, finance 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).

Ross Joblin

LLB (Hons), Dip Corporate Management, FAICD, FCIS

Chair and Dairy Australia-nominated Director

Ross has a broad range of commercial experiences in operations management, corporate strategy, mergers, acquisitions, start-ups and human resources. Ross Joblin was a member of Dairy Australia's senior management team from 2010 to 2017. As Group Manager Business Operations, he was responsible for strategic planning, finance, issues management, corporate communications, human resources, IT and legal affairs. Prior to joining Dairy Australia, Ross held a range of roles as a corporate lawyer and senior manager in listed public companies. Ross has also worked with a number of industry boards in the areas of board governance and effectiveness.



The DataGene Board (from left): Tim Jelbart, Simone Jolliffe, Craig Lister, Matthew Shaffer (CEO), Ross Joblin (Chair), Graeme Gillan, James Smallwood and Lucinda Corrigan.

DataGene Board

Tim Jelbart

B. App. Sci. (Hons), AAPI

Director

Tim Jelbart is a dairy farmer from Inverloch, West Gippsland, Victoria. He manages Jelbart Dairy, a 1,000-cow Holstein herd that he owns with his brother. The business has used its herd improvement program to build a significant income stream from the sale of high genetic merit livestock. Before returning to the farm, Tim was a property valuer with Colliers International, where he developed strong analytical skills. He is excited to see the new genetic evaluation system now operating and looking forward to using DataGene's new tools, for example DataVat. These innovations will enable him to make informed and timely decisions based on his own herd and industry data. Jelbart Dairy was a Genetics Focus Farm in the ImProving Herds Project and hosted the National Muster field day which reported the project findings. The herd's detailed records have been used for industry R&D projects such as Ginfo and MIR for Health. Tim was appointed to the DataGene board in November 2018.

Graeme Gillan

Director

Graeme Gillan is chair of the National Herd Improvement Association of Australia (NHIA) and 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.

Lucinda Corrigan

BScAg (Hons), FAICD

Director

Lucinda and her husband run 3,500 performance-recorded Angus cattle based at 'Rennylea' in the NSW Murray Valley near Albury. Over the past 30 years, they have developed one of Australia's leading genetics businesses via the dedicated use of Breedplan for genetic improvement and a highly accurate database of phenotypes and genotypes. Lucinda has significant experience in governance, business management, marketing, research and innovation via executive roles within the textile industry and as a director with the Graham Centre for Agricultural Innovation, four Cooperative Research Centres and Meat & Livestock Australia. In 2007, Lucinda received the Helen Newton Turner Medal from the Association for the Advancement of Animal Breeding and Genetics in recognition for her contribution to animal breeding and genetics.

DataGene Board

Simone Jolliffe

BRurSc, GAICD

Director

Raised on a beef property and completing a Bachelor of Rural Science, Simone had a lifelong interest in animals, genetics and their production potential long before she joined her husband in the dairy industry. Together they milk about 250 cows near Wagga Wagga in NSW. Simone has held a range of industry roles at the local, state and national level over many years. They include the Australian Dairyfarmers and Dairy NSW boards and the NSW Primary Industry Minister's Advisory Council. She has also been actively involved in local Holstein Australia committees and a variety of community organisations.

Craig Lister

BBusMan(AgMan)

Director

Craig Lister is a dairy farmer and Holstein breeder from Calivil, Northern Victoria. Craig was Chair of the ImProving Herds project steering committee and a former director of Murray Dairy and Chair of the Murray Dairy industry steering group. Craig has strong financial analysis, data interpretation and strategic planning skills. He holds a Bachelor of Business (Agricultural Management), backed up by experience in agricultural consulting, industry research and development projects and his own farm business. Craig is an advocate for the on-farm application of genetic evaluation and livestock improvement technologies. His herd currently ranks in the top 10 in Australia for Balanced Performance Index (BPI), the genetic merit index for profit.

James Smallwood

BAGSc

Director

James is General Manager of ABS Australia, one of the leading suppliers of genetics to the Australian dairy industry. Before joining ABS in 2013, James and his wife owned and operated dairy farms in New Zealand. He also continues to perform consultancy roles off farm. Graduating with a Bachelor of Agricultural Science from Massey University in New Zealand, James has lengthy experience in international agribusiness, management and farm management via roles with Promar International and Meat & Wool New Zealand.

DataGene Standing Committees

DataGene's standing committees enable members to have direct influence over DataGene's priorities and program activities. These committees are not simply advisory bodies, but exercise authority as delegated by the Board in areas of industry policy and guidelines. Members are 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. Each Standing Committee Chair is appointed by the DataGene Board and each Standing Committee 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.

Committee members include:

- Simone Jolliffe (DataGene Board and Committee Chair)
- Rohan Butler (Holstein Australia)
- Jo Dickson (Farmer representative)
- Patrick Glass (Australian Dairyfarmers representative)
- Christian Hickey (National Herd Development – NHD)
- Tim Humphris (Farmer representative)
- Vaughn Johnston (Semex)
- Jennie Pryce (Agriculture Victoria)
- Bruce Ronalds (ABS Australia)
- Rohan Sprunt (Jersey Australia)
- Trevor Saunders (Farmer representative)
- Peter Thurn (Genetics Australia)
- Dairy Australia representative
- DataGene staff
- Agriculture Victoria staff

The Genetic Evaluation Standing Committee met twice during 2018/19. The committee received regular progress updates and provided feedback on the major IT infrastructure projects (Genetic Evaluation System New Platform – GESNP, the central data repository – CDR and DataVat web portal) and scientific issues, such as genetic trends, breeding values under development and industry projects.

DataGene Standing Committees

In addition to making technical decisions about the details of specific ABVs, policy decisions by the committee during the year included:

- Removal of residual survival from the Australian indices (BPI, TWI, HWI), from the April 2019 ABV release.
- Release of bull evaluations from GESNP from March and cow evaluations from April with the public release.
- Cows and heifers to be separated in public lists of genomic ABVs.
- Approach for review of the National Breeding Objective which is scheduled for 2019/20.

Reports from each meeting are distributed to stakeholders and are available on www.datagene.com.au.

Herd Test Standing Committee

The Herd Test Standing Committee provides advice and recommendations to the DataGene Board on specialist matters in relation to herd testing and related software and technologies.

Committee members include:

- Chris Murphy (Chair) – Chris Murphy Advisory
- Phil Wren – National Herd Development Co-Op Ltd.
- Michael Lee – Herd Improvement Co-Operative Australia Ltd.
- Alan Blum – Yarram Herd Services Inc.
- Geoff Potts – Dairy Express/Agricultural Business Research Institute
- Nick Brasher – FarmWest
- Matt Shaffer – DataGene

Formed early in 2019 the committee met twice during 2018/19. The Committee came together initially to respond to and implement the recommendations of the Herd Test Services Review & Options Paper. The Committee also initiated a project on “Service provider use of herd test centre data, tests and services” which provided recommendations on priority diagnostic tests, new services and collaborative opportunities.

The committee received regular progress updates and provided feedback on DataVat and the Central Data Repository (CDR) and topics such as new services, upgrades to herd test reporting and engaging with other service providers.

DataGene Standing Committees

Data Services Standing Committee

The Data Services Standing Committee provides advice and recommendations to the DataGene Board on specialist matters in relation to opportunities for new tools and services that help farmers make data-driven decisions.

The committee did not meet during 2018/19.

User groups

User groups provide an additional level of industry consultation. Each informal group comprises a small number of active users on a specific DataGene software product or tool. Their role is to ensure a better alignment of resources to fulfil user needs and to identify and prioritise refinements and improvements to DataGene products. User Groups meet as required.

Data Governance Group

The Data Governance Group is a technical group that develops policies and processes for the use and sharing of data. This will be increasingly crucial as the central data repository becomes operational. The Data Governance Group also makes detailed technical decisions about the way data is handled, presented and disseminated to industry.

This group did not meet during 2018/19.

Four strategic pillars 2019-24

Improved decision making from data



STRATEGIC PRIORITIES

- Develop and support new decision tools
- Expand and secure data
- Drive and support industry innovation

Increased farm profitability through herd improvement



STRATEGIC PRIORITIES

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

Improved animal performance from R&D



STRATEGIC PRIORITIES

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

Improved and diversified service offerings



STRATEGIC PRIORITIES

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

Online resources

Available at www.datagene.com.au

[ABV Pocket Guide](#)

[Australian Breeding Values](#)

DataGene Annual Operating Plan: [Quick overview](#) [Full document](#)

DataGene 5 Year Business Plan: [Quick overview](#) [Full document](#)

DataVat:

[Fact Sheets](#)

Farmer case studies [on herd improvement topics](#)

Good Bulls Guide [booklet](#), [video](#)

Good Bulls App information and [video](#)

HerdData App information and [video](#)

Herd Improvement Strategy 2019-2024: [Quick overview](#) [Full document](#)

Herd 19 [proceedings](#)

Herd 19 [Research updates](#)

ImProving Herds: [Findings and case studies](#)

ImProving Herds videos: [Bulls on a budget](#), [The Business of Breeding](#)

MIR for Profit [short report](#)

MIR for Profit [video](#)

[Research Updates](#)

[Tech Notes](#)

Available at uat.datavat.com.au

[Animal search](#)

[Haplotype reports](#)

[Genomic value tool](#)

Customised tools and reports based on herd's own data, [via login](#)

Tools and services for herd improvement industry



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