## What's ahead in this ABV release

## **December 2025 ABV Release Update**

## **HIGHLIGHTS**

- Implementation of NBO recommendations
- New model for Survival ABV

- Improvements in Red Breeds evaluation
- Changes in expression of type traits with intermediate optimums

# Note animal rankings are not official until 1 pm Monday 8 December

## **NBO** implementation

Expect significant re-ranking of animals in the December release of Australian Breeding Values (ABVs) as a result of implementing the updated National Breeding Objective and a new model for the Survival ABV. The National Breeding Objective is updated every five years to enable farmers to breed herds that meet the future needs of the Australian dairy industry. It follows more than a year of consultation with industry, market analysis and scientific investigation.

We've outlined below the key changes. Read more

## Updated pricing for milk components

The updated pricing for milking components and inputs applies to all indices and all breeds. From December, forecast prices are being used, instead of historical average.

Feed costs have been updated but kept at the same ratio with milk as in the past. However, the protein to fat ratio has moved from 2:1 to close to 1:1, to better reflect forecast milk pricing models.

## **Enhanced Health Weighted Index**

The Health Weighted Index (HWI) now includes the calving ease and gestation length to better reflect the needs of seasonal herds with pasture-based systems. Compared to the current HWI, the expected response to selection depends on the breed:

- Holstein: faster genetic gain for fat, protein, survival, cell count, calving ease and gestation length; and similar gain for fertility.
- Jersey: faster genetic gain for fat, fertility, gestation length, cell count and mastitis resistance.

## **Updated base** (the average animal for breeding values)

The base (or average animal for breeding values) has been updated. From 2025, it will be updated every five years in line with international best practice (Interbull). Read more

#### New model for Survival ABV

A new model is being used to calculate the Survival ABV from December 2025.

Previously, the Survival ABV was a prediction of the probability of survival from year to year. The new model is based on a combination of survival from the end of the first lactation and survival in subsequent lactations. Overall, it gives better predictions of an animal's productive lifetime. Some reranking of animals will occur with the implementation of the new model, with older animals in particular likely to benefit. Read more

#### Improvement in Red Breeds evaluation

A new approach to blending overseas (MACE) information into the single step Red Breed ABV analysis has been implemented. This addresses the issue of the overestimation of the Protein ABV for Red Breed bulls in general but specifically, bulls with overseas information. The result of this change is that the variance of the Protein ABV has been reduced which means in practical terms, some of the higher bulls have dropped a small amount and some of the lower ranked bulls have gone up. This will have a flow on effect to any indices that include Protein ABV (BPI, HWI, SI, ASI).

#### Type traits with intermediate optimums

From December, DataGene is expressing six traits with intermediate optimums (see box). There isn't any change to the way these ABVs are calculated.





DataGene has simply changed the way it expresses these traits to make it easier for breeders to recognise animals that are close to the intermediate optimum.

#### Read more:

Fact Sheet (a quick read): Breeding for improved type Tech Note (more detail) Understanding Type ABVs

#### Expression of traits with intermediate optimums

Lower Higher Breeding values values

	Description	Optimum	Description
Pin Set	High (H)	0	Low (L)
Rear Leg Set	Straight (S)	0	Curved (C)
Bone	Coarse (C)	0	Sharp (S)
Udder Depth	Deep (D)	0	Shallow (S)
Fore Teat Placement	Wide (W)	0	Close (C)
Rear Teat Placement	Wide (W)	0	Close (C)

Intermediate optimum ABVs by breed

-	Holstein	Jersey	Aussie Red
Pin Set	107-114	97-104	101-104
Rear Leg Set	95-97	95-97	93-95
Bone	102-104	103-105	102-104
Udder Depth	100-105	101-107	100-102
Fore Teat Placement	101-109	99-101	99-102
Rear Teat Placement	85-93	97-99	90-95

## 2025 Annual Update

Take a look at DataGene's 2025 Annual Update for some of the highlights of the year's activities.

#### **Latest National Stats now available**

Each year DataGene publishes a variety of statistics from national herd recording data. It's a handy reference for industry info and trends. Check out the 2024/25 statistics, hot off the press. (click on the link then scroll down and click on national statistics)

#### **DataGene Board**

DataGene's Annual General Meeting was held on 20 November. Tim Jelbart was re-elected to the DataGene board and to the Chair role. Read more

## Scheduled for implementation in April

Calves represent about a third of the stock on a dairy farm and rearing them involves significant time and money. About 7% of Australian dairy calves are born dead. Research overseas has demonstrated genetic

variation in calf traits, indicating the potential to develop a breeding tool to select for fewer stillbirths. DairyBio research has developed models for a calf traits, for implementation by DataGene.

Implementation is scheduled for April 2026.

#### 2025/26 ABV Release Schedule

	Release	Bull rankings		
December 2025	Tue 2	Mon 8		
April 2026	Wed 8	Mon 13		
August 2026	Tue 11	Mon 17		
December 2026	Tue 1	Mon 7		
Full details: 2026 release schedule 2025 release schedule				

## Connecting data pipelines

Dairy businesses with GEA and DeLaval on farm software are invited to join the DataConnect project which will link their data with DataGene's Central Data Repository.

Connected businesses can access more accurate meaningful herd and animal reports on DataVat. Some data will also be used in the industry's genetic evaluation system, so the connection will contribute to more accurate (and potentially new) Australian Breeding Values and indices. For more information contact Peter Thurn or complete the expression of interest form

## Recent journal articles

Khansefid M, Pryce JE, Shahinfar S, Axford M, Goddard ME, Haile-Mariam M. (2023) Improving accuracy and stability of genetic predictions for dairy cow survival. *Animal Production Science* 63, 1031–1042.

M.M. Axford, M. Khansefid and J.E. Pryce 2025 Industry perspectives on calf *traits Proc 26<sup>th</sup> AAABG* Conference p 162.

A.J. Chamberlain, T.V. Nguyen, J. Wang, X. Wang, C.J. Vander Jagt and I.M. MacLeod 2025. The feasibility of an imputation reference population for structural variation in cattle. *Proc* 26<sup>th</sup> AAABG Conference p 383.

M. Haile-Mariam, M.E. Goddard, M. Axford, J. Newton and M. Khansefid 2025 Correlation of cow mortality and culling (sale) rate with selected type traits in Australian Holstein and Jersey cattle Proc 26<sup>th</sup> AAABG Conference p 166.





M. Khansefid, J.E. Pryce, J.E. Newton, M. Axford, G. Nieuwhof, M.E. Goddard and M. Haile-Mariam. Updating the genetic prediction model for cow survival in Australia *Proc 26<sup>th</sup> AAABG Conference p* 170.

T. Nguyen, J. Wang, A. Chamberlain and I. Macleod 2025 Insights from population-scale long-read sequencing: structural variant characterisation and annotation. *Proc* 26<sup>th</sup> AAABG Conference p 387

T.T.T. Nguyen, M. Axford, P. Thurn, L. Monks, G. Nieuwhof, P. Williams, D. Watson, H. McLaren and M. Shaffer. The 2025 National Breeding Objective review for Australian dairy cattle: insights from stakeholder consultation. *Proc* 26<sup>th</sup> AAABG Conference. p 443.

L.M. Jensen, M. Haile-Mariam, S. Bolormaa and J.E. Pryce 2025 The role of conformation traits in evaluating heat tolerance in dairy cattle. *Proc* 26<sup>th</sup> *AAABG Conference* p 415.

B.J. Sepulveda, C.J. Vander Jagt, A.J. Chamberlain, J. Wang, L.C. Marett, S.R.O. Williams, J.L. Jacobs and J.E. Pryce 2025. Association between rumen and faecal microbiome and enteric methane emissions in dairy cattle. *Proc 26th AAABG Conference* p 221

#### More information

Peter Thurn
Stakeholder Relations Specialist, DataGene
Ph: 0417 575 986 E: pthurn@datagene.com.au

## **Acknowledgement**

DataGene is an initiative of Dairy Australia and the herd improvement industry. DairyBio provides the research pipeline to develop and maintain Australian Breeding Values.



