



National Breeding Objective Review 2024/25

Your herd. Your asset. Your future.

Breeding dairy cows for the future

The National Breeding Objective (NBO) describes the collective breeding priorities for Australian dairy herds. Its purpose is to enable farmers to breed herds that meet the future needs of the Australian dairy industry.

While Australian Breeding Values (ABVs) express a bull or cow's genetic potential for a single trait such as fertility or protein kilograms, most farmers want to improve more than one trait in their herd.

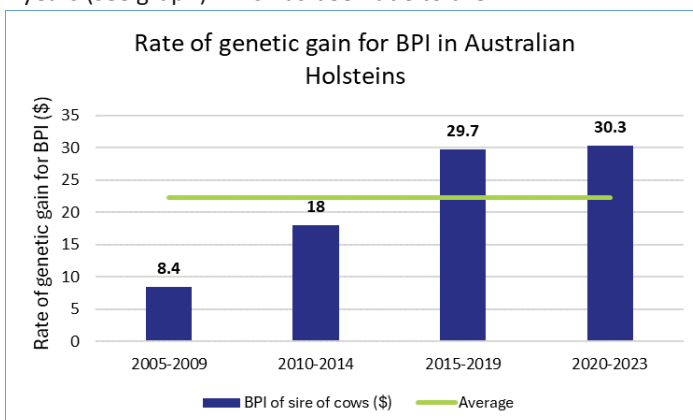
The NBO supports genetic selection pressure for an *agreed group of desirable traits*, providing direction for both bull and cow breeding across the country.

National Breeding Objective (NBO)

The current National Breeding Objective for the Australian dairy industry is aimed at increasing net farm profit and sustainability. It is expressed through the three breeding indices – Balanced Performance Index (BPI), Health Weighted Index (HWI) and Sustainability Index (SI).

Since their introduction, there has been a positive and sustained increase in the utilisation of Australian indices, especially the BPI.

The rate of genetic gain in the sires used to produce Australian cows has more than tripled over the past 15 years (see graph). This has been due to the



combination of an increased awareness and use of the BPI by bull companies and farmers, the use of genomics to select young bulls and heifers to breed replacements and the implementation of the Good Bulls extension strategy.

Why review?

The National Breeding Objective must evolve over time in response to the changing needs of dairy businesses, new knowledge and breeding technologies. As the NBO evolves, so do the indices. DataGene has a policy to review every five years the NBO and the index formulated to meet this objective.

The last review, undertaken in 2019/20 resulted in changes in trait weightings for BPI and HWI and removed the Type Weighted Index (TWI). In August 2022, DataGene introduced the Sustainability Index (SI) for fast tracking genetic progress for reduction in greenhouse gas emissions. In December 2022, the weight on milk volume in the indices was updated to better reflect the current Australian milk pricing.

2024/25 review

The purpose of the 2024/25NBO review is:

- To check that the National Breeding Objective as expressed through the BPI reflects farmer needs for breeding sustainable and profitable herds over the next 10 years.
- To develop indices based on strong scientific principles which are in line with farmer preferences and meet the agreed NBO.
- To inform the future direction of research priorities.

Review process

Australian indices influence the next generations of Australian dairy herds so it is important to have a collaborative process involving farmers, scientists, processors, herd improvement organisations and farm advisors.

DataGene leads the NBO review process under the guidance of the [Genetic Evaluation Standing Committee](#).

The review process set by DataGene also involves a team of scientists, independent analysts and Dairy Australia personnel

The detailed activities and timelines for the National Breeding Objective Review are outlined in the graphic below.

The process for the 2025 NBO review involves three main stages:

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

The detailed activities and timelines for the National Breeding Objective Review are outlined in the graphic below (blue: consultation; brown: analysis; yellow implementation). It is expected that the review will be complete by Autumn 2025 with an implementation date of December 2025

Key themes

The Genetic Evaluation Standing Committee has identified the following areas of focus during the current NBO review:

1. Use of current indices
2. Future needs
3. Breeding for sustainable and profitable cows
4. Heat tolerance
5. Indices for specific production systems
6. Jersey-specific indices
7. Updating the average (base)
8. Inbreeding

The [NBO Discussion Paper](#) provides more details on these.

Consultation

The review process includes three formats of consultation:

- A voluntary, online survey open to anyone in the Australian dairy industry.
- In-depth telephone interviews with dairy farmers.
- Stakeholder meetings or workshops for in-depth technical discussions.
- Stakeholder discussion and agreement on the final recommendations.

Stakeholder involvement

Different stakeholder groups are involved in different stages of the process. The process is designed to enable input from farmers, industry and scientists. The Genetic Evaluation Standing Committee will provide final advice to DataGene, based on the review findings.

Timelines

The process and timelines for the National Breeding Objective Review are outlined below. It is expected that the review will be complete by Autumn 2025 with an implementation date of December 2025. The timing of the implementation is planned around the main breeding seasons with a December release the most practical option for farmers and commercial organisations.

More information

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May 2024

