

Interpreting heifer genomic results

Genomic testing provides a lot of information on each animal. This fact sheet offers tips for those starting out with genomics to understand how to interpret the results and identify what information is most relevant for herd management decisions.

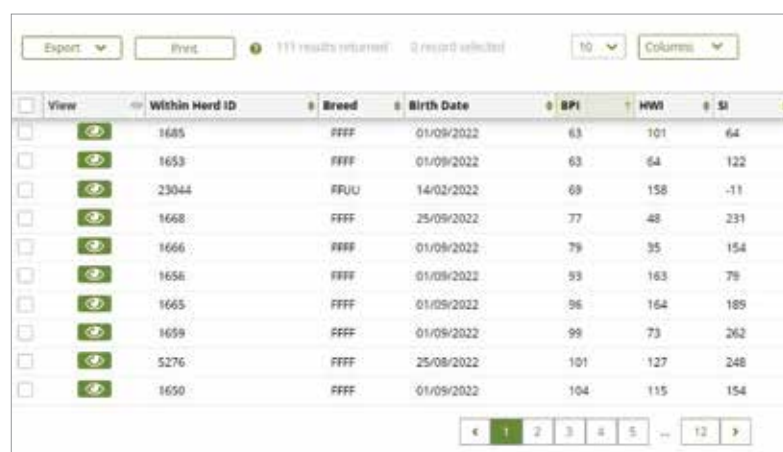
You will receive your results directly from your genomic service provider by email, web service or app. The results from all the animals genomically tested are also available by logging into your herd's DataVat account (regardless of which genomic service provider you used). This fact sheet outlines tips for interpreting results using DataVat tools.

Some of the first decisions dairy farmers tend to make from heifer genomic testing include sorting to sell heifers, filter for priority traits and to check for data gaps which causes animals to come back without results.

Sorting to sell

If you are trying to decide which heifers to sell, start by finding the column in your results that shows the index that best suits your business and look at this number first. It might be Balanced Performance Index (BPI), Health Weighted Index (HWI) or Sustainability Index (SI). Sort your results on that number with the lowest number on the top. These are the animals to consider selling.

Example of DataVat online tool with genomically tested heifer results listed

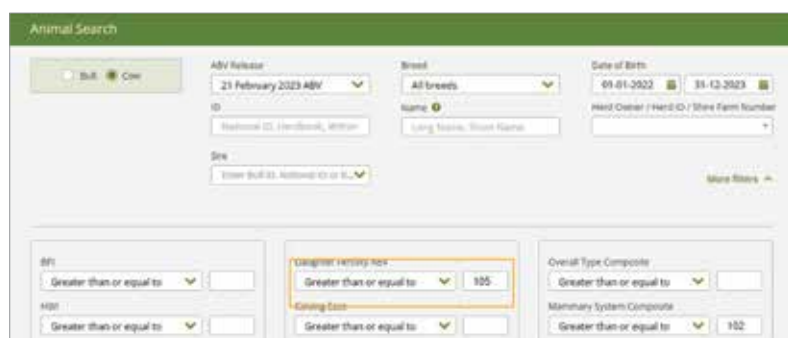


View	Within Herd ID	Breed	Birth Date	BPI	HWI	SI
<input type="checkbox"/>	1685	FFFF	01/09/2022	63	101	64
<input type="checkbox"/>	1653	FFFF	01/09/2022	63	64	122
<input type="checkbox"/>	23044	FRUJ	14/02/2022	69	158	-11
<input type="checkbox"/>	1668	FFFF	25/09/2022	77	48	231
<input type="checkbox"/>	1666	FFFF	01/09/2022	79	35	154
<input type="checkbox"/>	1658	FFFF	01/09/2022	93	163	79
<input type="checkbox"/>	1665	FFFF	01/09/2022	96	164	189
<input type="checkbox"/>	1659	FFFF	01/09/2022	99	73	262
<input type="checkbox"/>	5276	FFFF	25/08/2022	101	127	248
<input type="checkbox"/>	1650	FFFF	01/09/2022	104	115	154

Filter for priority traits

To further refine your list, you might want to prioritise one or two other traits and set a certain cut off level for your herd. For example, if fertility is a priority you may set a Fertility ABV less than 105 to identify the least fertile heifers. You can do this by setting filters in the Animal Search on DataVat.

Your list now shows you the heifers that are candidates for selling.



Animal Search

ABV Release: 25 February 2023 ABV

Breed: All breeds

Date of Birth: 01-01-2022 to 31-12-2023

ID: Registered ID, Herdbook, Within

Name: Using Name, Short Name

Herd Owner / Herd ID / Share Farm Number

Sex: Enter Bull ID, Allowup ID or SL

More filters

BPI: Greater than or equal to

Fertility ABV: Greater than or equal to

Overall Type Composite: Greater than or equal to

Longer Herring now: Greater than or equal to 105

Running Date: Greater than or equal to

Machinery System Composite: Greater than or equal to 102

Mind the gaps

Check to see if there are animals without results. If there are, it is usually because of an inconsistent genotype of a sire or dam on the calf's record. It's a good idea to respond quickly to any queries from your genomic service provider about the parentage of animals so that you can get a quicker result. Find out more.

Terrific Tuesdays

Your genomic service provider's system and DataVat are updated most Tuesdays with the latest genomic results. You can check new animals as well as see any updates for heifers and bulls that you have previously tested.

Next steps to build the strategy

Once you've got the hang of sorting animals based on your chosen index, and filtering for priority traits, you are ready for delving a bit deeper into your herd's genomic results. You can start thinking strategically about the traits that are important to your business, monitoring genetic trends, selecting sires that match your priorities, identifying terminal dams (i.e. those that may be joined to beef/not used to breed replacements), haplotype carriers and sharing your results.

Here are some examples:

- Plan the matings for the group of animals you've just received results for. Are some females prioritised to receive beef semen so they don't produce replacement heifers for your herd?
- Check your herd's trends for important traits to see if they are on track and revise your sire selection if you are not satisfied.
- Share your results with staff and your trusted advisors to ensure that the whole team is working towards your strategy (you can do this on DataVat).
- Check for genetic conditions or haplotypes to make sure animals aren't carrying worrisome defects.
- Explore! Speak with an advisor or contact DataGene to learn more about the information contained in every results report.

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.

Contact Datagene

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