

# News - NAV evaluation

## 12 August 2025

### Dairy cattle

The latest NAV official evaluation for yield, fertility, conformation, udder health, general health, calving traits, milkability, temperament, growth, longevity, youngstock survival, claw health, saved feed and NTM took place as scheduled. NAV carried out three evaluations per trait group:

*Holstein evaluation*, including data from: Danish Holstein, Swedish Holstein, Norwegian Holstein, Finnish Holstein, Finnish Ayrshire and Finncattle.

*Red Dairy Cattle evaluation*, including data from: Danish Red, Swedish Red, Finnish Ayrshire, and Finncattle.

*Jersey evaluation*, including data from: Danish Jersey, Swedish Jersey, Finnish Jersey, Norwegian Jersey and French Jersey.

Dates for extraction of data from national databases for the latest official evaluations are given in Table 1.

Table 1. Dates for extraction of data from the national databases

Trait	Denmark	Finland	Sweden
<b>Yield</b>	24.6.2025	23.6.2025	12.6.2025
<b>Type, milkability and temperament</b>	24.6.2025	23.6.2025	13.6.2025
<b>Fertility</b>	24.6.2025	23.6.2025	14.6.2025
<b>Udder health and other disease</b>	24.6.2025	23.6.2025	14.6.2025
<b>Calving<sup>1)</sup></b>	24.6.2025	23.6.2025	14.6.2025
<b>Longevity</b>	24.6.2025	23.6.2025	14.6.2025
<b>Growth<sup>1)</sup></b>	24.6.2025	23.6.2025	14.6.2025
<b>Claw health</b>	24.6.2025	23.6.2025	14.6.2025
<b>Youngstock survival<sup>1)</sup></b>	24.6.2025	23.6.2025	14.6.2025
<b>Saved feed</b>	24.6.2025	23.6.2025	13.6.2025
<b>Pure beef cattle</b>	15.5.2025	14.5.2025	13.5.2025

<sup>1)</sup>Including data for the evaluation of beef bulls used on dairy

### Data used in genomic prediction.

Genotypes were extracted from the joint Nordic SNP data base 2 July 2025. INTERBULL information from April 2025 was included in the genomic prediction.

## News in relation to NAV dairy genetic evaluation

### Dairy pure

- Weight changes in RDC udder index
- Algorithm version included in the model for saved feed
- Missing update of methane registrations

### DairyxDairy

- Change of limit for breed percent

### BeefxDairy

- Reduced Danish data for gestation length

## Beef pure

- Latest evaluation took place 3.6.2025

## Genetic evaluation of dairy breeds

### Weight changes in RDC udder index

In the August evaluation, weight factors were slightly modified in udder index for RDC. Old and new weights for single traits are shown in Table 2. Overall, there is now more emphasis on teat length and thickness, while the weight on udder depth has been slightly reduced. The weights on the other traits remain unchanged. RDC breeders from Denmark, Finland and Sweden have decided the weight changes.

Table 2: Old and new weights for single traits in the udder index for RDC.

Trait	Old weight	New weight
Fore udder attachment	0.20	0.20
Rear udder height	0.08	0.08
Rear udder width	0.05	0.05
Udder cleft	0.12	0.12
<b>Udder depth</b>	0.20	<b>0.14</b>
Udder balance	-	-
<b>Teat length</b>	0.10	<b>0.14</b>
<b>Teat thickness</b>	0.10	<b>0.12</b>
Teat placement, front	0.10	0.10
Teat placement, back	0.05	0.05

The correlations between the new and old udder index are high, which means the new changes only cause little reranking between the bulls. For proven sires, the yearly correlations between the old and new udder index are between 0.96 and 0.98, and between 0.95 and 0.98 for genomic bulls. Over 90 percent of both proven and genomic bulls change maximum 3 index units for udder. There is a tendency for younger animals to decrease slightly in udder index. This was expected due to the reduction in the weight for udder depth, which has a significant effect on the genetic trend for the udder index.

For all female groups, the correlations between the old and new udder index are 0.97, indicating minimal reranking. For genomic tested females without phenotypic registrations, only 3 percent change by more than 3 index units, while it is 5 percent for genotyped females with phenotypes and 2 percent for non-genotyped females with phenotypes.

For RDC, the weight of the udder index in NTM is 0.26. A change of four index units will affect NTM by one unit. Most animals will therefore only change between 0 and 1 in NTM after introducing the new weights in the udder index.

### Algorithm version included in the model for saved feed

Data from body weight cameras is updated so data after 1. of October 2024 is included in the breeding evaluation. Data after 1. of October 2024 is estimated on a new AI algorithm while data before is estimated on a contour algorithm. Algorithm version is added to the breeding model to handle the change in algorithm. The algorithm for the feed intake cameras has been updated continuously over the last years. As for body weight, the algorithm version has been included in the breeding evaluation model.

## **Missing update of methane registrations**

Methane registrations were not uploaded before the deadline. The Methane index is calculated on the same methane registrations as the May round. Smaller changes in the animal's methane indexes can happen according to update of pedigree and genotype files.

## **Change of limit for breed percent**

The limit of uniquely assigned alleles from the breeds Holstein, RDC and Jersey is reduced from 90% to 75%. Females with other breed percent between 10% and 25% will therefor from the August round get official indexes.

## **Publication of NTM for Nordic and foreign bulls**

NTM is published if the bull has official EBVs (NAV (G)EBV or international EBV) for Yield, Mastitis and Type. By official means for NAV EBVs that the NAV thresholds are met, and for international EBVs (IB EBVs) that Interbull EBVs for the single bull exist. For traits without a NAV (G)EBV or an IB (G)EBV a NAV pedigree index is calculated.

For bulls with a Nordic herd book number the pedigree index follows the principles described in the October 2008 routine information. For foreign bulls without a Nordic herd book number the pedigree index is calculated in as  $\frac{1}{2}(\text{EBVsire}-100) + \frac{1}{4}(\text{EBVmgs}-100) + 100$ . If EBVsire or EBVmgs is not official NAV EBVs then 100 is used.

## **Publication of EBVs/GEBVs**

Official EBVs/GEBVs for bulls used for AI in Denmark, Finland or Sweden are published at the [NAV Bull Search](#).

Official NAV GEBVs for foreign AI bulls not used for AI in Denmark, Finland and Sweden are published at [NAV homepage](#). The excel sheets also include GEBVs for bulls used for AI in Denmark, Finland and Sweden. The excel sheets include AI bulls that are 10 months to 5 years old at the date of publication and is mainly useful for foreign AI-companies.

Interbull EBVs/GEBVs are published at the [NAV Interbull Search](#).

## **Genetic evaluation of beef bulls used in dairy herds**

The latest NAV official evaluation for AI beef bulls based on their crossbred offspring from dairy cows for gestation length, birth, youngstock survival and carcass traits took place as scheduled. Extraction date for the data can be found in table 1. Breeding values for AI beef bulls are estimated four times per year, in connection to the NAV routine genetic evaluation for dairy breeds, and EBVs are published at [NAV Beef Search](#).

## **Reduced Danish data for gestation length**

Danish data for gestation length from 2023 to 2025 was not included in the August breeding evaluation. Bulls with mainly Danish data from offspring born in 2023-2025 will not get index for gestation length in the August evaluation, even they have had official index for gestation length in the May evaluation.

## **Genetic base**

The genetic base for beef bulls evaluated based on dairy crosses is defined as relative breeding values with a mean of 100 and standard deviation of 10. The genetic base animals for beef bulls

evaluated based on dairy crosses constitutes of 2-5 year old crossbreds born after beef breeds which can be used in all 3 countries.

### **Fee for EBV of beef bulls based on beef × dairy crossbred offspring**

Nordic Cattle Genetic Evaluation (NAV) conducts a genetic evaluation of AI beef bulls based on beef × dairy crossbred offspring for young stock survival, gestation length, calving and carcass traits. A fee system was introduced 1.1.2020 for the service. It means a fee must be paid for all bulls getting publishable EBVs for the first time after 1.1.2020. No fee needs to be paid for bulls already having official EBVs before 1.1.2020. To get published EBVs the following criteria should be fulfilled for each bull:

- The EBV should meet the criteria for publication.
- A one-time fee of currently 1,300 euro per bull should be paid.

More information about the genetic evaluation and the publication criteria can be found at [NAV homepage](#).

## **Genetic evaluation for Purebred Beef animals**

The latest genetic evaluation of purebred beef animals took place on 3 June 2025. NAV publish EBVs for calving, growth and carcass traits based on phenotypes from purebred beef Angus, Charolais, Simmental, Hereford, Limousine, Highland Cattle, Blonde d'Aquitaine, Belgian Blue, Dexter, Galloway, Grauvieh, Piemontese, Salers, Shorthorn cattle. Breeding values for growth, slaughter quality, and milk for the five breeds AAN, CHA, HER, LIM, and SIM are estimated in a genomic SS model. Breeding values for pure beef cattle are estimated four times per year (table 3), and all breeding values are published at [NAV Beef Search](#).

## **NAV – frequency and timing of official runs**

NAV has 4 large dairy evaluations per year, which include updated phenotypic and genomic data, and additional eight small runs including updated genotypes. In table 3 the NAV and INTERBULL release dates for 2025/2026 are shown. The beef evaluation based on beef × dairy crossbreds take place along with the large NAV dairy runs 4 times a year. The NAV pure beef evaluation has its own time schedule.

Table 3. NAV and INTERBULL release dates in 2025/2026. EBVs released at NAV dates in bold will be delivered to international genetic evaluation.

Month	Dairy Cattle			Beef Cattle	
	NAV Small run <sup>1)</sup>	NAV Large runs <sup>2)3)</sup>	INTER- BULL	NAV Pure Beef	INTER-BEEF
<b>January 2025</b>	7				
<b>February 2025</b>		4			25
<b>March 2025</b>	4			4	
<b>April 2025</b>	1		1	15	
<b>May 2025</b>		6			
<b>June 2025</b>	3			3	
<b>July 2025</b>	1				
<b>August 2025</b>		12	12		
<b>September 2025</b>	2				
<b>October 2025</b>	7				14
<b>November 2025</b>		4		4	
<b>December 2025</b>	2		2		
<b>January 2026</b>	6				

<sup>1)</sup> Genotypes updated; <sup>2)</sup> Genotypes and phenotypes updated; <sup>3)</sup> Beef × dairy evaluation

You can get more information about the joint Nordic evaluation:

General about Nordic Cattle Genetic Evaluation: [www.nordicebv.info](http://www.nordicebv.info)

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