News - NAV routine evaluation 7 August 2018

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

Holstein evaluation, including data from: Danish Holstein, Swedish Holstein, Finnish Holstein, Finnish Ayrshire and Finn Cattle.

Red Dairy Cattle evaluation, including data from: Danish Red, Swedish Red, Finnish Ayrshire, Finnish Holstein and Finn Cattle.

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

Extraction dates

Dates for extraction of data from national databases are given in table 1.

Trait	Denmark Finland		Sweden
Yield	22.06.2018	11.06.2018	14.06.2018
Type, milkability and temperament	22.06.2018	11.06.2018	15.06.2018
Fertility	22.06.2018	11.06.2018	15.06.2018
Udder health and other disease	22.06.2018	11.06.2018	15.06.2018
Calving	22.06.2018	11.06.2018	15.06.2018
Longevity	22.06.2018	11.06.2018	15.06.2018
Growth	22.06.2018	11.06.2018	16.06.2018
Claw health	22.06.2018	11.06.2018	15.06.2018
Youngstock survival	22.06.2018	11.06.2018	15.06.2018

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

Data used in genomic prediction

Genotypes were extracted from the joint Nordic SNP data base 4th July 2018. INTERBULL information from April 2018 was included in the genomic prediction.

News in relation to NAV genetic evaluation Genomic prediction No changes

Traditional evaluation

No changes

Genetic base

EBVs for bulls and females are expressed on the same cow base. This genetic evaluation included cows born from 07.08.2013 to 07.08.2015 in the genetic base (average 100).

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 ½(EBVsire-100) +1/4(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 <u>NAV</u> <u>Bull Search</u>.

Official NAV GEBVs for foreign AI bulls not used for AI in Denmark, Finland and Sweden are published at <u>NAV homepage</u>. 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 month to 5 years old at the date of publication, and is mainly useful for foreign AI-companies.

Interbull EBVs/GEBVs are published at the <u>NAV Interbull Search</u>.

NAV – frequency and timing of routine runs

NAV has 4 large evaluations per year, which include updated phenotypic and genomic data, and additional eight small runs including updated genotypes. In table 2 the NAV and INTERBULL release dates for 2018 are shown.

Table 2. NAV and INTERBULL release dates in 2018. EBVs released at NAV dates in bold will be delivered to international genetic evaluation.

Month	NAV Small run ¹⁾	NAV Large runs ²⁾	INTERBULL
January 2018	2		
February 2018		6	
March 2018	6		
April 2018	3		3
May 2018		2	
June 2018	6		
July 2018	3		
August 2018		7	7
September 2018	4		
October 2018	2		
November 2018		6	
December 2018	4		4

¹⁾ Genotypes updated; ²⁾ Genotypes and phenotypes updated

You can get more information about the joint Nordic evaluation: General about Nordic Cattle Genetic Evaluation: <u>www.nordicebv.info</u> Contact person: Gert Pedersen Aamand, Ph.: +45 87405288 <u>gap@seges.dk</u>,

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