News - NAV routine evaluation 7 February 2017

The latest NAV routine evaluation for yield, fertility, type, udder health, other diseases, 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, Danish Red 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.

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

Trait	Denmark	Finland	Sweden
Yield	19.12.2016	11.12.2016	09.12.2016
Type, milkability and temperament	19.12.2016	11.12.2016	09.12.2016
Fertility	21.12.2016	11.12.2016	10.12.2016
Udder health and other disease	19.12.2016	11.12.2016	10.12.2016
Calving	19.12.2016	11.12.2016	10.12.2016
Longevity	19.12.2016	11.12.2016	10.12.2016
Growth	19.12.2016	11.12.2016	13.12.2016
Claw health	19.12.2016	11.12.2016	09.12.2016
Youngstock survival	19.12.2016	11.12.2016	10.12.2016

Data used in genomic prediction

Genotypes were extracted from the joint Nordic SNP data base 25 January 2017. INTERBULL information from December 2016 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 07.02.2012 to 07.02.2014 in the genetic base (average 100).

New name - General Health

The name *General Health* will in the future substitute the name *Other Diseases*, which currently has been used for the breeding value covering resistance against metabolic diseases, reproduction diseases and feet & leg problems. The Introduction of the new name - *General Health* - will take place gradually on NAV homepage, NAV search page etc. in the near future.

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 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 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 NAV Interbull Search.

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 2017 are shown.

Table 2. NAV and INTERBULL release dates in 2017. 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 2017	3	_	
February 2017		7	
March 2017	7		
April 2017	4		4
May 2017		2	
June 2017	8		
July 2017	4		
August 2017		8	8
September 2017	5		
October 2017	3		
November 2017		7	
December 2017	5		5

¹⁾ Genotypes updated; 2) Genotypes and phenotypes updated

You can get more information about the joint Nordic evaluation:

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