

News - NAV routine evaluation

2 February 2016

The latest NAV routine evaluation for yield, fertility, type, udder health, other diseases, calving traits, milk ability, temperament, growth, longevity, young stock 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 and Swedish Jersey (only yield and type).

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	16.12.2015	06.12.2015	10.12.2015
Type, milkability and temperament	16.12.2015	06.12.2015	01.12.2015
Fertility	15.12.2015	06.12.2015	12.12.2015
Udder health and other disease	16.12.2015	06.12.2015	12.12.2015
Calving	16.12.2015	06.12.2015	12.12.2015
Longevity	16.12.2015	06.12.2015	12.12.2015
Growth	16.12.2015	06.12.2015	15.12.2015
Claw health	16.12.2015	06.12.2015	12.12.2015
Young stock survival	16.12.2015	06.12.2015	11.12.2015

Data used in genomic prediction

Genotypes were extracted from the joint Nordic SNP data base 20 January 2016.

News in relation to NAV genetic evaluation

Genomic prediction

- GEBV for young stock survival for RDC and Holstein
- GEBV for fat% and protein%

Traditional evaluation

- No changes

Genomic prediction

Young stock survival

GEBVs for young stock survival are published for RDC and Holstein. The reliabilities for GEBVs for young stock survival are about 48% for RDC and 52 % for Holstein. For Jersey it is not possible to calculate reliable GEBV for young stock survival because of a too small reference population.

Fat% and Protein %

GEBVs for fat and protein% are published for all three breeds

Genetic base

EBVs for bulls and females are expressed on the same cow base. This genetic evaluation included cows born from 02.02.2011 to 02.02.2013 in the genetic base (average 100).

GMACE

Interbull GEBVs are available for genotyped Holstein bulls from the countries participating in the GMACE routine evaluation.

The figures can be found on the NAV search page for Interbull EBVs <http://www.nordicebv.info/>

Publication of NTM for Nordic and foreign bulls

A NTM is published if the bull has official EBVs (NAV (G)EBV or international (G) 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.

NAV search page

NAV publish (G)EBVs for herd book registered AI bulls from all three countries at a joint Nordic search page <http://www.nordicebv.info/>

NAV – frequency and timing of routine runs

NAV has 4 evaluations per year including all phenotypic data. In table 2 the future NAV and INTERBULL release dates are shown. NAV does eight extra genomic predictions to get GEBVs based on the newest information for females. The extra runs in 2016 takes place 5.1, 1.3, 5.4, 7.6, 5.7, 6.9, 4.10, and 6.12. After the extra runs GEBVs for females are published on national data bases

Table 2. NAV and INTERBULL release dates in 2016. EBVs released at NAV dates in bold will be delivered to international genetic evaluation.

Month	NAV	INTERBULL
January 2016		
February 2016	2	
March 2016		
April 2016		5
May 2016	3	
June 2016		
July 2016		
August 2016	9	9
September 2016		
October 2016		
November 2016	1	
December 2016		6

You can get more information about the joint Nordic evaluation:

General about Nordic Cattle Genetic Evaluation: www.nordicebv.info

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