

## INTRODUCTION

---

The latest genomic routine international evaluation for calving traits took place as scheduled at the Interbull Centre. Data from 16 countries were included in this evaluation.

International genetic evaluations for calving traits of bulls from Australia, Austria-Germany, Belgium, Canada, Denmark-Finland-Sweden, France, Germany, Hungary, Ireland, Israel, Italy, Netherlands, Norway, Switzerland, the United Kingdom, and the United States of America were computed. Holstein data were included in this evaluation.

CAN, DEU, DFS, GBR, ITA, NLD submitted GEBVs.

dce: CAN, DEU, DFS, GBR, ITA, NLD

dsb: CAN, DEU, DFS, , ITA, NLD

mce: CAN, DEU, DFS, GBR, ITA, NLD

msb: CAN, DEU, DFS, , ITA, NLD

## CHANGES IN NATIONAL PROCEDURES

---

Changes in the national genetic evaluation of calving traits are as follows:

GBR (HOL) Some bulls are no longer published.

DFS (HOL) Adjusted their regression procedure.

## INTERBULL CHANGES COMPARED TO THE DECEMBER ROUTINE RUN

---

No changes in Interbull procedures

## DATA AND METHOD OF ANALYSIS

---

Eleven Holstein populations sent GEBV data for up to 38 traits, while classical EBVs for the same traits were used in the analyses. Young bull GEBVs from the GEBV providers have been converted to the scales of all countries participating in classical MACE. A bull will get a MACE EBV or a GMACE EBV but not both.

From those eleven countries, National GEBVs of bulls less than seven years of age and with no classical MACE proofs were included for the breeding value prediction with a further requirement of either a MACE-PA or a GMACE-PA (for young genomic bulls with young genomic sires) being available.

## SCIENTIFIC LITERATURE

---

The international genetic evaluation procedure is based on international work described in the following scientific publications:

VanRaden, P.M. and Sullivan, P.G. 2010. International genomic evaluation methods for dairy cattle. Gen. Sel. Evol. 42:7

Sullivan, P.G. and Jakobsen, J.H. 2012. Robust GMACE for young bulls methodology. Interbull Bulletin 45, Article 1.

Sullivan, P.G. 2012a. GMACE reliability approximation. Report to the GMACE working group of Interbull. GMACE\_rels 2013

Sullivan, P.G. 2012b. GMACE variance estimation. Report to the GMACE working group of Interbull. GMACE\_vce 2013

Sullivan, P.G. 2012c. GMACE Weighting Factors. Report to the GMACE working group of Interbull. GMACE\_gedcs 2013

Jakobsen, J.H. and Sullivan, P.G. 2013. Trait specific computation of shared reference population. Reference sharing Nov 2013

NEXT ROUTINE INTERNATIONAL EVALUATION

-----  
Dates for next routine run can be found on <http://www.interbull.org/ib/servicecalendar>

NEXT TEST INTERNATIONAL EVALUATION

-----  
Dates for next routine run can be found on <http://www.interbull.org/ib/servicecalendar>

PUBLICATION OF INTERBULL ROUTINE RUN

-----  
Results were distributed by the Interbull Centre to designated representatives in each country. The international evaluation file comprised international proofs expressed on the base and unit of each country included in the analysis. Such records readily provide more information on bull performance in various countries, thereby minimising the need to resort to conversions.

At the same time, all recipients of Interbull results are expected to honour the agreed code of practice, decided by the Interbull Steering Committee, and only publish international evaluations on their own country scale. Evaluations expressed on another country scale are confidential and may only be used internally for research and review purposes.

Table 1. National evaluation dates in GMACE run August 2015

Country	Date
CAN	20150801
DFS	20150812
ITA	20150707
NLD	20150801
GBR	20150719
DEU	20150811

Table 2.

-----  
Number of bulls in reference population for dce

CAN	25436.0
DFS	1384.0 24447.0
ITA	23280.0 989.0 23740.0
NLD	1752.0 23808.0 1240.0 25709.0
GBR	23898.0 1209.0 23090.0 1528.0 24012.0
DEU	1497.0 24053.0 1122.0 24073.0 1322.0 25768.0

-----  
Number of bulls in reference population for mce

CAN	19886.0
DFS	1373.0 24907.0
ITA	18395.0 982.0 18606.0
NLD	1693.0 24252.0 1203.0 25707.0
GBR	18776.0 1199.0 18261.0 1479.0 18858.0
DEU	1477.0 24504.0 1107.0 24528.0 1306.0 26228.0

-----  
Number of bulls in reference population for dsb

CAN	23151.0
DFS	1380.0 24211.0
ITA	21090.0 985.0 21546.0
NLD	1733.0 23571.0 1222.0 24978.0
DEU	1492.0 23810.0 1118.0 23738.0 25405.0

```
-----  
Number of bulls in reference population for      msb  
-----  
CAN 18220.0  
DFS 1366.0 24784.0  
ITA 16822.0 978.0 17029.0  
NLD 1666.0 24133.0 1181.0 25484.0  
DEU 1470.0 24376.0 1103.0 24398.0 26076.0
```