



Nordic Implementation Workshop Genomic Selection in Dairy Cattle

12. December 2012

Program Nordic Implementation Workshop Genomic Selection in Dairy Cattle – 12. December 2012

10:00 Welcome (Søren Borchersen – 5 min)

Overview of current status and future directions: Types of data available, technologies, costs etc. (Christian Bendixen – 10 min)

Overview of current status and future directions: Use of different types of data for predicting breeding values (Mogens Sandø Lund – 20 min)

Future directions: Use of one-step approach (Ismo Stranden/Ole Fredslund Christensen – 10 min)

Future directions: Use of haplotypes based on 50K in Nordic Red (Ismo Stranden – 10 min)

Future directions: Use of haplotypes based on HD data in Holstein (Beatriz Cuyabano – 10 min)

Plenum discussion of current status and future directions (facilitator: Gert Pedersen Aamand)

12:00 Lunch

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13:00 *Overview of current status & future directions: Recessive lethals*
(Goutam Sahana – 20 min)

Plenum discussion of current status and future directions (facilitator: Dirk-Jan de Koning)

13:45 *Overview of current status and future directions: Breeding plans*
(Lars Nielsen - 10 min)

Future directions: Use of reproduction technologies (Jarmo Juga – 10 min)

Future directions: Use of EVA (Kenneth Byskov – 10 min)

Future directions: Small breeds (Jørn Rind Thomasen – 10 min)

Group discussion of current status and future directions

14:45 *Coffee*

Group discussion of current status and future directions cont.

15:30 Plenum discussion of current status and future directions
(facilitator: Jarmo Juga)

16:00 Thank you!

• Genomic Selection – development

- First results for Holstein August 2008 – Start use in Selection
- First results for Jersey June 2009
- First results for Red Breeds October 2009
- First results with EuroGenomics – Reference HF March 2010
- Official Breeding Values Autumn 2010
- Collaboration with GENO, Norway, 2011
- Cooperation with US Jersey, December 2012



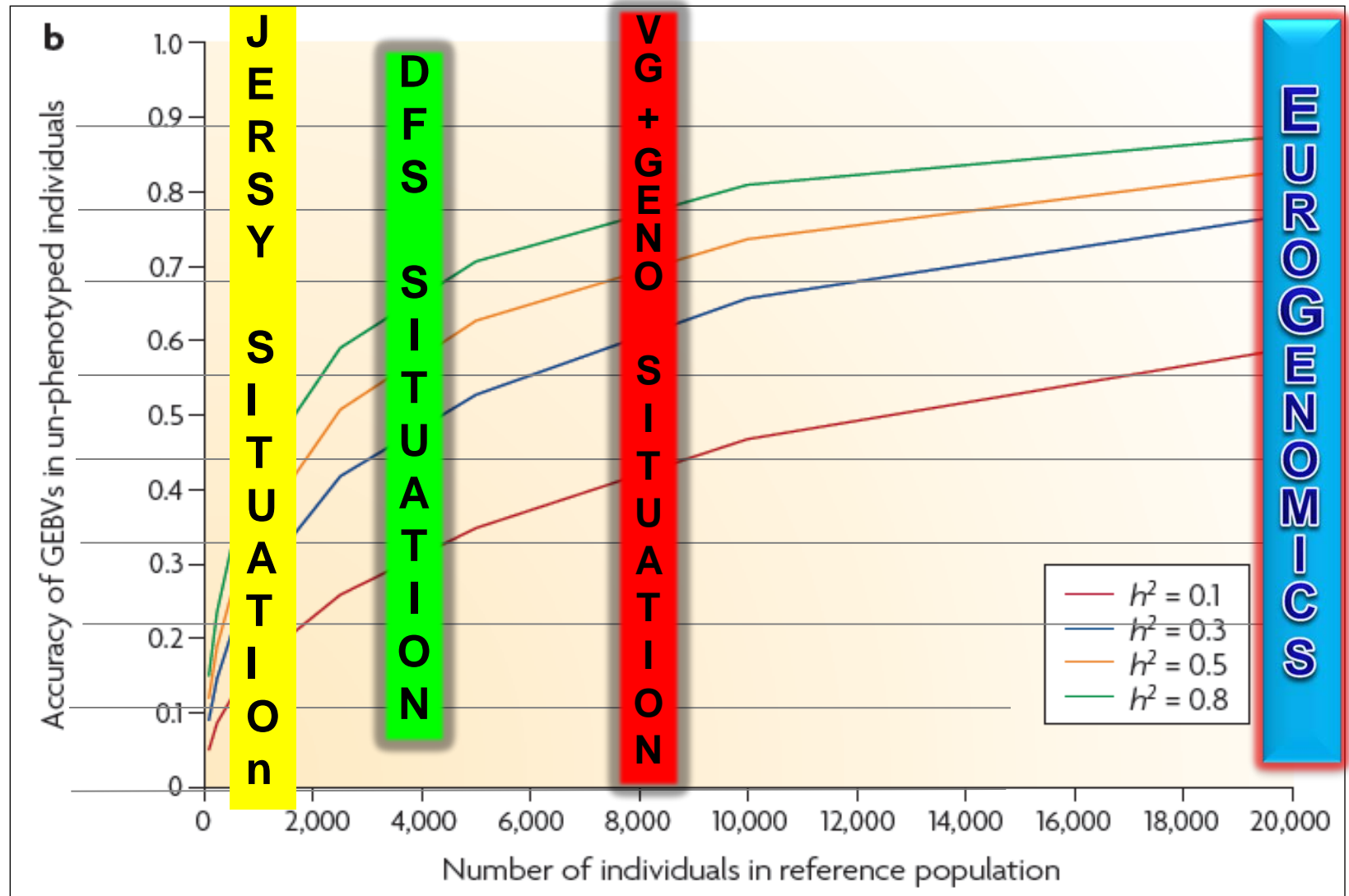
• Nordic Typings done 2008-2012

BREED	FEMALES	MALES	TOTAL
VikingRed	3480	10039	13519
Holstein	5613	12202	17815
Jersey	911	2411	3322
TOTAL	10004	24652	34656

• **Reference last evaluation 2012**

- **RDC: 7,198 includes app. 2,850 GENO Bulls**
- **Holstein: 23,607 includes app. 19,450 EuroGenomic Bulls**
- **Jersey: 1,191 soon including app. 2,500 USJ Bulls**
- **Total all breeds: 32,000 Bulls, Incl. App. 22,300 Bulls
soon > 25,000 from partnership abroad**

Reliability and size of reference population



Goddard & Hayes, 2008