

NAV news

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Development activities 2020

- Saved feed
 - Metabolic eff
 - Saved feed in NTM
- International cooperation
 - Eurogenomic harmonisation
 - French Jersey
 - Norwegian Jersey and Holstein

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Development activities 2020

- Genomic prediction
 - GEBV more single traits
 - Include "special" informative SNPs
 - Single step
 - Dairyxdairy

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NAV development activities 2020

- Beef
 - Beefxdairy – young stock survival
 - Pure breed – calving, growth and carcass traits

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Implementation plan NAV 2020

Saved Feed

- Metabolic efficiency
- Saved feed in NTM



$$\text{EBV(Saved Feed)} = V1 \times \text{EBV(Maintenance)} + V2 \times \text{EBV(metabolic)}$$

Based on RFI (requires feed intake observations)

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Implementation plan NAV 2020

Genomic prediction

- GEBV for single traits for the following traits groups: Claw health traits, General health traits, Fertility traits, Calving traits
- Use extra SNPs on the EG chip

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Genomic prediction – do we achieve what we expect?

	RDM		Holstein		Jersey	
	Obs. decline	Gen. trend	Obs. decline	Gen. trend	Obs. decline	Gen trend
Y-index	5.5	4.6	5.6	4.7	3.7	4.5
NTM	9.6	7.6	10.6	8.4	6.5	6.7

- Close to expectation – only a slight over evaluation
- Ongoing focus to ensure genomic prediction is as accurate as possible

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Implementation plan NAV 2020

Traditional model/international cooperation

- Include Norwegian data routinely in NAV Jersey and Holstein evaluation
- Include French Jersey in NAV jersey evaluation
- EG harmonization fertility



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Harmonisation Eurogenomics

How to get more valuable information from foreign ref. bulls?

Harmonize data collection, data editing, trait definition, genetic model, published proofs

Increased genetic correlation (Interbull)

Increased GEBV reliability

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Implementation plan NAV 2020

Beef



- Fee system beef bulls used on dairy
- Modified genetic base beefxdairy
- BXD youngstock survival

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Beefxdairy – modified genetic base

- FEB20 genetic base for beef bull evaluated based on dairy crosses:
- The new genetic base (=100) constitutes of beefxdairy 2-year old offspring belonging to beef breeds used in all three countries (minus BBL)

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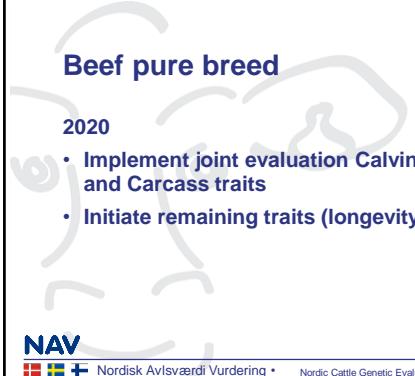
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Beefxdairy – genetic base

EBV	Effect of new minus current base definition expressed in EBV units
NBDI long	7.7
NBDI short	2.8
Birth	-1.6
Calf survival lact 1	-2.1
Calf survival lact 2+	-1.5
Calving ease 1	-2.4
Calving ease 2+	-1.4
Growth long	8.7
Growth short	5.8
Daily carcass gain	4.6
Carcass conformation	8.2
Carcass fat score	-6.2

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Beef pure breed

2020

- Implement joint evaluation Calving, Growth and Carcass traits
- Initiate remaining traits (longevity, fertility etc.)

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