

NAV Pure bred Beef evaluation – status update

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Park Inn Copenhagen, Engvej 171, 2300 Copenhagen , 22 September 2022



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Ongoing and plans

1. Subindices
2. Transfer of Pedigree
3. Calving traits check up
4. More breeds
5. Fertility

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NAV – Subindices

The NAV board approved 24 November 2021 to establish 7 joint Nordic subindices



**June 2022 – note:
Joint Nordic subindices for beef cattle**

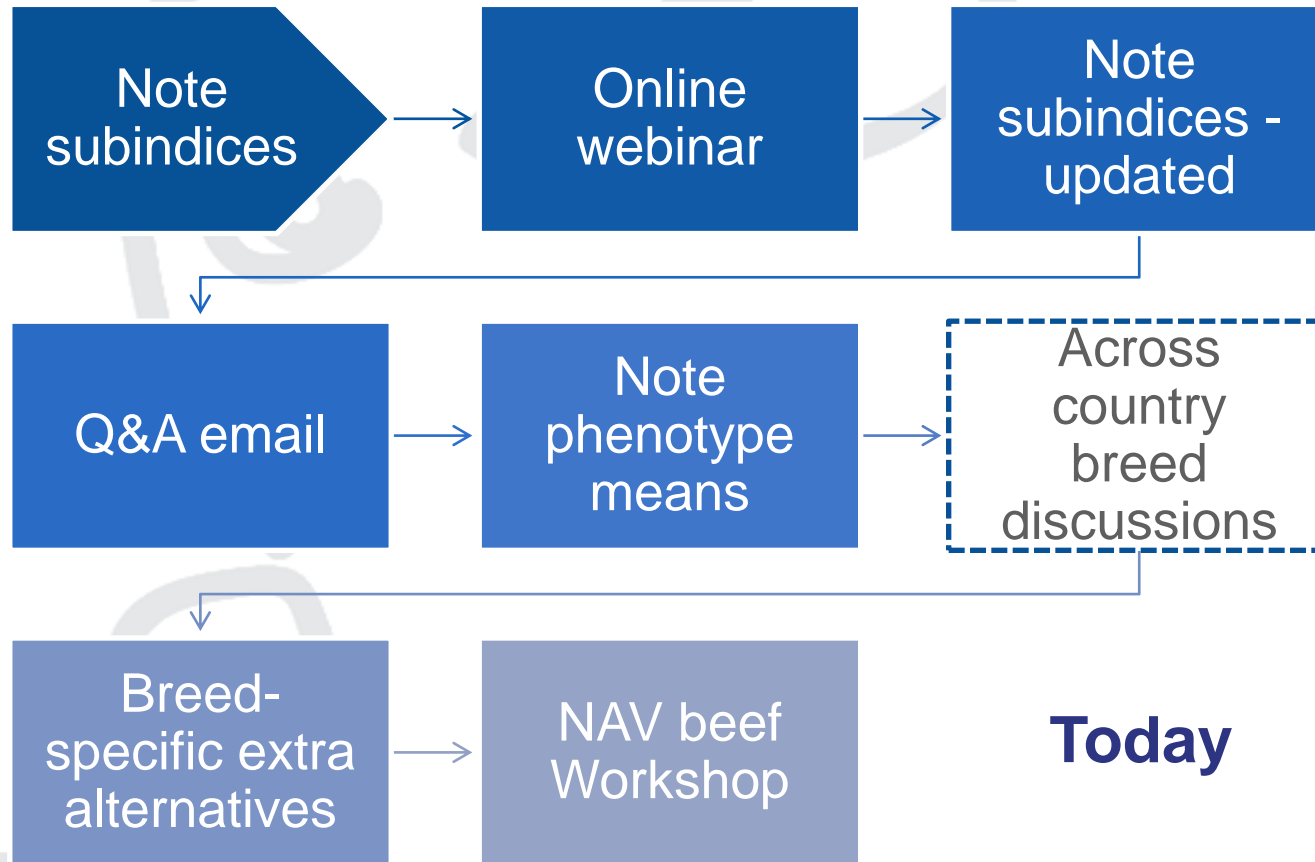
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NAV – Subindices

June 2022



Today

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NAV – Subindices, after today

22 September
2022

NAV beef
workshop

Joint
recommendations
for subindex
weights?
webinar

NAV Board
approval

Publication of NAV
Beef Subindex

@ 2023

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Transfer to the new NAV pedigree

- **Today:**
 - Pedigree created to participate in Interbeef as DFS
 - With only beef animals
 - Problems with double identities, bull names etc.
- **In February 2023:**
 - NAV common pedigree with dairy and beef animals
 - Up to date with changes and corrections
 - Reduce problems with double identities

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Status calving evaluation

- Weakness in the Danish data
- Investigations suggest that:
 - The large number of Danish animals with missing sire information is causing problems in the estimation of breeding values

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Status calving evaluation

- Denmark: 45 to 66% (LIM and HER, respectively) of animals with records in the calving evaluation have missing sire
 - Finland and Sweden < 1%
- Very difficult to optimally estimate maternal and direct genetic effects for calving ease and calf survival from Danish data
- Affects mean and the spread of breeding values

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Exploring – calving evaluation

Remove animals with calving observations and missing sire information.

PROS

- Delete possible crossbreds
- Increase the power to estimate maternal effects
- Address the large standard deviation of breeding values and mean problems

CONS

- Animals that are deleted from the evaluation will not get a breeding value

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More breeds

Add:

- Blonde d'Aquitaine
- Highland cattle
- Belgian blue
- ...rest of breed currently having a national evaluation

To the PbB evaluation for carcass and calving traits

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More traits

Develop a genetic evaluation for **fertility**

- Develop NAV models
 - Today, only DNK has a national evaluation for fertility
- Estimate new genetic parameters
- Presentation of the breeding values as in the calving and growth/carcass evaluation (same definitions of genetic base; mean and standard deviation)

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NAV – fertility evaluation

- Calving interval + another trait that is not affected by right censoring of data, example:
 - Calving rate (%; success/failure)
- Consider effects of seasonal calving pattern in the definition of fertility traits (intervals)
- Interbeef: Calving Interval
 - Under investigation: number of calvings until 78 months of age .

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Sum-up & timeframe

1. Subindices

✓ February 2023 (in practice)

2. Transfer of pedigree

✓ February 2023

3. Calving trait check up

✓ After implementation of new pedigree (early 2023)

4. More breeds and fertility

NAV ✓ Ongoing work under 2023

