



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Network. Guidelines. Certification.

Interbeef: Experiences of a founding member *(Denmark, Finland & Sweden)*

Interbeef webinar – 10/12/2020

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The scope of this presentation

- Short about beef breeding in Sweden
- Cooperation on Nordic and International level
 - Why and how?
 - Ongoing development



Växa: role and responsibility within breeding

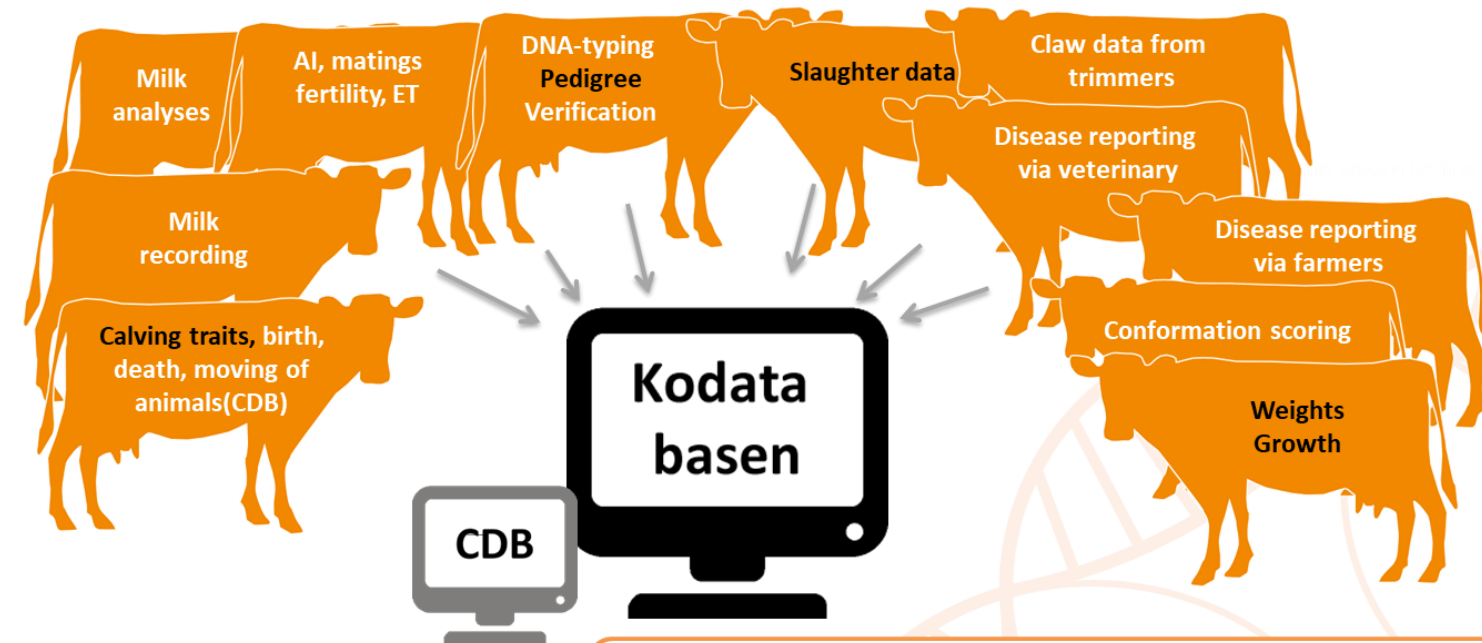
Our aim

To sell products and services developing the farms and improving profitability

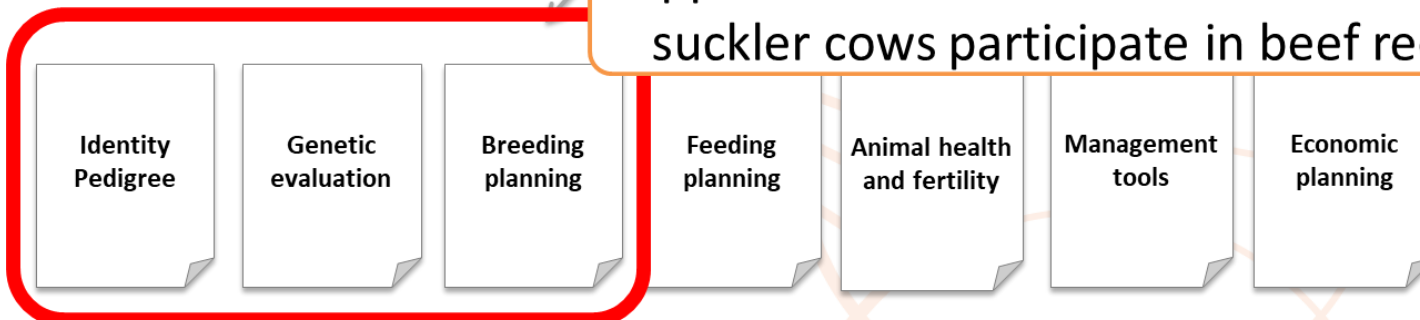
- Official national breeding organization for Swedish cattle breeds
 - 7 dairy breeds and 7 beef breeds
- Responsible for:
 - Breeding goals
 - Breeding values
 - Herd book and data base



Our cattle data base is unique...



Approx. 8 % of the total number of Swedish suckler cows participate in beef recording



National genetic evaluation and prerequisites...

3x/year for 7 beef breeds for calving and growth/carcass traits



- ✓ Engaged breed organizations and experienced breeders
- ✓ Large amount of good quality data, especially weights
- ✓ Performance test station and Nordic breeding company
- ✓ Good genetic progress for most breeds and traits

Challenges for national beef breeding

- Often small beef breed populations
- Limited with resources
- Weak genetic links (herds, countries)
- Difficult to identify suitable bulls/AI for import/export
- Difficult with genomic evaluation due to few genotypes



Cooperation needed to provide Nordic beef breeders with high quality evaluations and new development



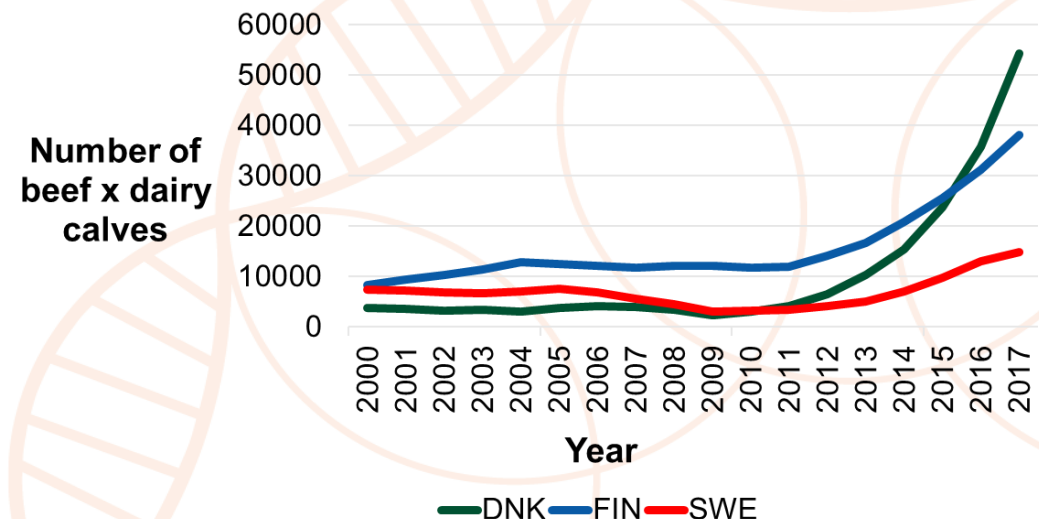
NAV cooperation: dairy and beef

- Dairy breeds – well established
 - Genetic evaluation (2005-), TMI – NTM (2008-), GEBVs (2013-)
 - Joint participation in Interbull
- Beef breeds – increased focus
 - Joint participation in Interbeef
 - Beef x Dairy: genetic evaluation (2018-), Nordic Beef x Dairy Index
 - Purebred beef: genetic evaluation (implementation 2021)



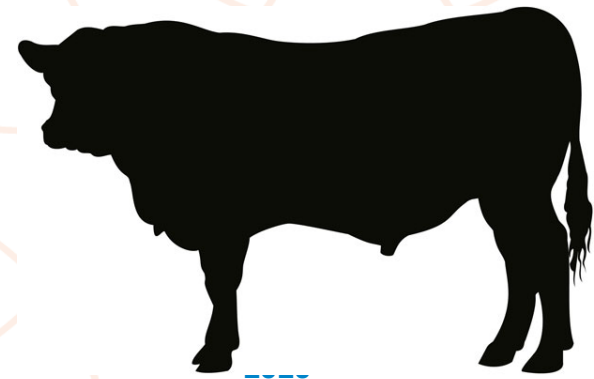
Nordic evaluation of AI beef sires used on dairy

- Increased used of beef semen in dairy herds
 - Dairy farmers wants to select beef bulls (across breed) giving profitable crossbred calves
- Nordic Breeding values
 - Calving and carcass traits
 - Future development : youngstock survival length of pregnancy



Nordic evaluation of purebred beef breeds

- Developed from the joint work within Interbeef
- Phase 1 – implementation 2021
 - Breeds: CHA, LIM, SIM, HER, ANG
 - Single EBVs for calving, growth and carcass traits
- Phase 2 – add more breeds and traits
 - Fertility



DFS activities in beef genomics

- No national or nordic genomic evaluation yet
- Three ongoing research projects in DFS; expected amount of genotypes to be collected
 - CHA 2000 and HER 2000
 - Major beef breeds 2000 per breed
 - Crossbred calves (Beef x dairy) 12 000
- More genotypes will be available now when pedigree verification is performed by genomic analysis



DFS participation in Interbeef

- Routine for all breeds (5) and traits (3)
 - CHA, LIM, SIM, AAN and HER
 - weaning weight, birth weight and calving
- Publication 2x/year on top list (search page to be developed)
- Delivered data for test runs and research projects

Rough number of DFS animals with records (expressed in thousands)

| | AAN | CHA | HER | LIM | SIM |
|---------------------|-----|-----|-----|-----|-----|
| Calving ease | 140 | 324 | 296 | 313 | 198 |
| Birth wt | 113 | 290 | 259 | 231 | 150 |
| 200d wt | 57 | 181 | 149 | 98 | 78 |

Main reasons for participation Interbeef

- International genomic evaluation
- Evaluation for new traits
- Benefit from shared knowledge and development
- Facilitate benchmarking, marketing and exchange of bulls
- Possibilities to improve national data and pedigree...
- ... and to integrate foreign information in our evaluations



Example from our top list of internationally official males for CHA, trait AWW

| Ranking | International ID | International name | Birth year |
|---------|---------------------|--------------------|------------|
| 1 | CHASWEM020923201015 | LARGO AV SONARP | 2015 |
| 2 | CHAFRAM005706034572 | ILESTLA | 2013 |
| 3 | CHAFRAM005815616045 | LEADER | 2015 |
| 4 | CHASWEM064631190809 | ENOK AV NYBO | 2009 |
| 5 | CHAFRAM007122154071 | JOYAU | 2013 |

Conclusions

- National beef breeding in Sweden is well-organized but genetic progress is limited by small populations and lack of resources
- Nordic and international cooperation is needed to facilitate exchange of genetics and to increase progress by including new traits and genomics



Read more on www.nordicebv.info under Beef cattle