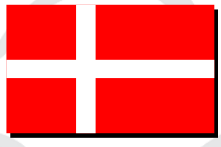
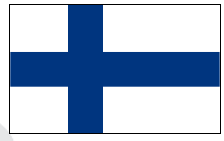
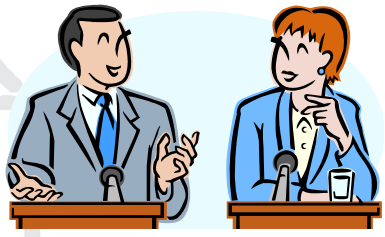
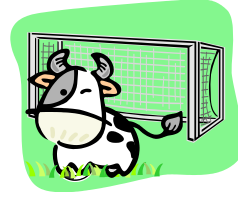
NTM today – how was NTM developed in 2008, assumptions, what has been changed in NTM from 2008 to 2017

Gert Pedersen Aamand





Joint Nordic Breeding Goal – a positive debate lead to the NTM

NAV
Nordisk Avlsværdi Vurdering • Nordic Cattle Genetic Evaluation

Process – joint Nordic breeding goal

Economic basis 2007

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Expectations for the future – traits getting bigger/smaller value 5-10 years ahead

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Joint Nordic Breeding Goal

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Economic basis 2007 - survey of traits analysed

- **Yield:** Milk, Protein and Fat production
- **Beef production:** Net daily gain, EUROP form score
- **Calving traits:** Calf vitality and calving ease
- **Fertility:** Periods Calving to 1st AI, 1st to last, Number of AI's
- **Udder health:** Frequency of mastitis and SCC
- **Other health traits:** Metabolic, Feet & legs, reproductive diseases
- **Longevity**
- **Conformation:** Body, Feet& legs, Udder
- **Milking speed, Temperament**

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Nordisk Avlsværdi Vurdering • Nordic Cattle Genetic Evaluation

Process – joint Nordic breeding goal

Economic basis 2007

Best possible estimates for the current economic situation in Finland, Sweden and Denmark

We did not find very big country differences

(Work done by project group of geneticists)

Process – joint Nordic breeding goal

Expectations for the future – traits getting bigger/smaller value 5-10 years ahead

- Like looking in the crystal ball
- Signals about economic, animal welfare, future rules for keeping cows, ethical views etc.

Note in 2008 milk prices also increased a lot - remember to look at the value of yield traits in a longer perspective

Process – joint Nordic breeding goal

Joint Nordic Breeding Goal

- Final decisions made at a workshop involving representatives from all Nordic Breeding organizations
- Result - NTM-index close to the theoretical recommendations

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Used weights compared to model weights - 2008

Trait	RDC	HOL	Jersey
Yield	Same	Same	
Growth	Lower – no weight	Same	Lower – no weight
Fertility	Same	Same	+ 25%
Birth	Same	Same	Same
Calving	Same	Same	Same
Udder health	Same	Same	Higher +10%
Other health	Same	Same	Same
Frame	Same	Same	Same
Feet & legs	+50%	+50%	Same
Udder	+250%	+100%	+6%
Milking speed	Same	Same	Same
Temperament	Same	Same	Same
Longevity	Same	Same	Same
Claw health (2011)	-	-	-
Youngstock (2016)	-	-	-

Used weights compared to model weights – 2008 – changes 2012-2016

Trait	RDC	HOL	Jersey
Yield	Same - Slight increase	Same	Same - Slight increase
Growth	Same	Same	Same
Fertility	Same	Same	+ 25% - Slight decrease
Birth	Same	Same	Same
Calving	Same	Same	Same
Udder health	Same	Same	Higher +10% - Slight decrease
Other health	Same	Same	Same
Frame	Same	Same	Same
Feet & legs	+50%	+50%	Same
Udder	+250%	+100%	+6%- Increase +25%
Milking speed	Same - Slight increase	Same	Same
Temperament	Same	Same	Same
Longevity	Same -Slight decrease	Same	Same - Slight decrease
Claw health (2011)	Same	Same	Same
Youngstock (2016)	Same	Same	Same

Breeding goal for subindices

Trait	RDC	HOL	Jersey
Yield	Changed 2014	Changed 2013	
Frame		Changed 2014	Changed 2013
Udder	Changed 2013		Changed 2015

Process – upgrade NTM

(group work focus on input to create)

Economic basis 2017

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Expectations for the future – traits getting bigger/smaller value 5-10 years ahead

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Upgrade NTM