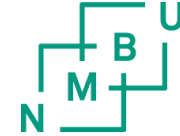




Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences



Norwegian University  
of Life Sciences

# Experiences from the Nordic Interstallion project

Viklund<sup>1</sup>, Å., Furre<sup>2</sup>, S., Philipsson<sup>1</sup>, J., Vangen<sup>2</sup>, O.

<sup>1</sup>Swedish University of Agricultural Sciences

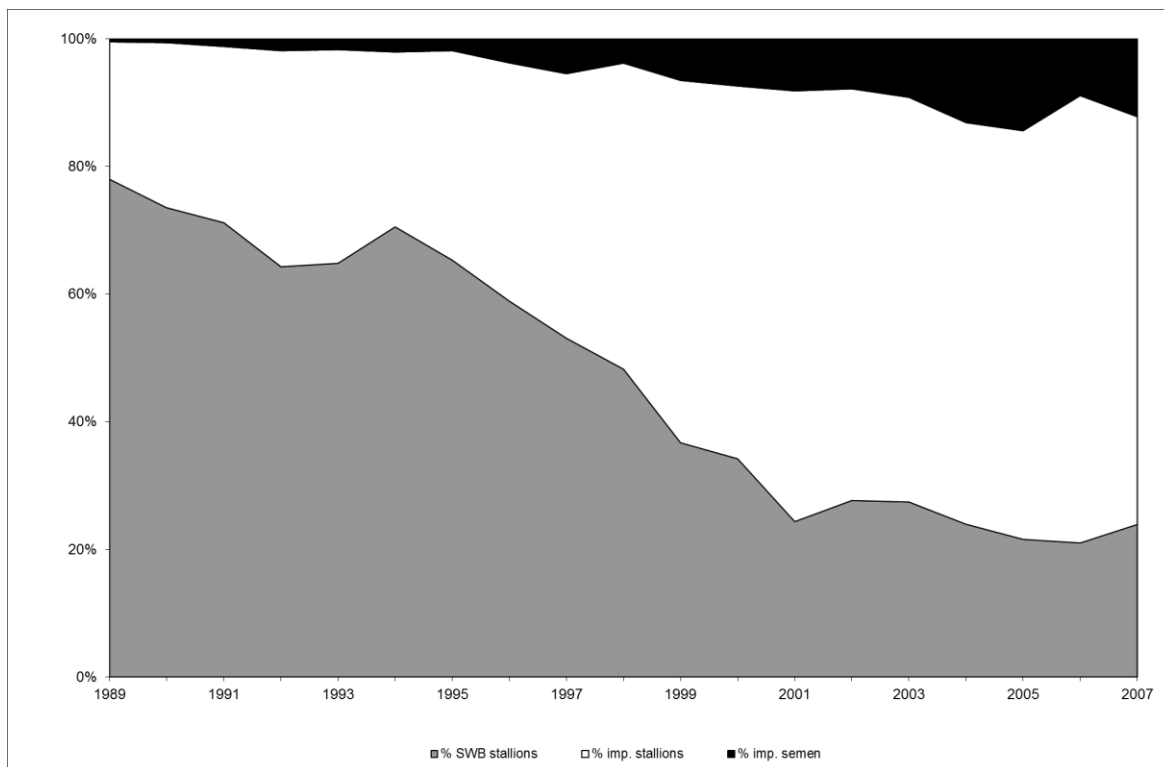
<sup>2</sup>Norwegian University of Life Sciences

# Background

Sport horse breeding is international

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## Example from SWB

- % SWB stallions
- % imported stallions
- % imported semen

**2017: 22%**

(Thorén Hellsten et al. 2009)

# Background

Sport horse breeding is international

Interstallion was formed in 1998

WBFSH, EAAP & ICAR

*“Improve accessibility, understanding and comparability of foreign breeding information across countries”*

2 Interstallion PhD projects

Possible to do joint genetic evaluation!

BUT - no practical implementation due to political issues



**SAME SAME BUT DIFFERENT!**

# Nordic sport horses

Similar breeding objectives

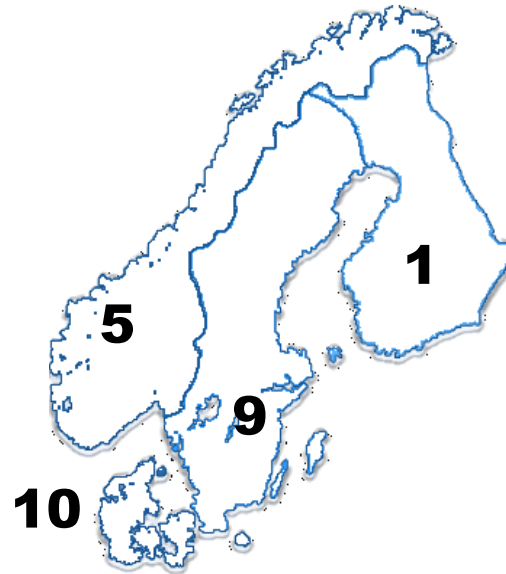
Similar testing procedures of young horses

Similar recording of competition results

Uses stallions of same origin



# Nordic sport horses breeding



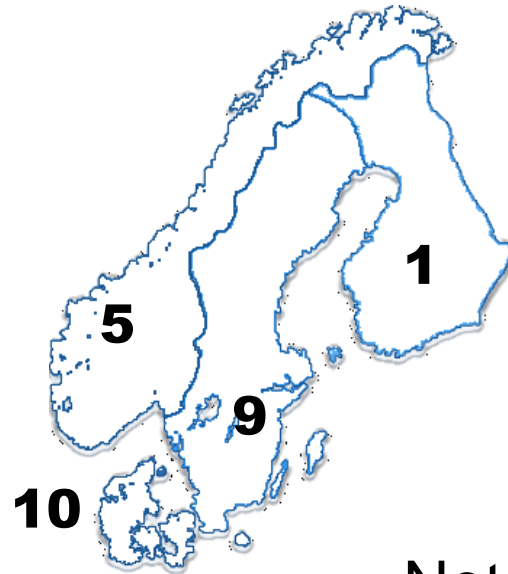
No of offspring in  
Nordic countries

Winningmood van de Arenberg

# Nordic sport horses breeding



Winningmood van de Arenberg



No of offspring in Nordic countries

Not enough offspring in each country for national genetic evaluation!

# Nordic Interstallion 2010-2012

Aim to investigate possibilities for a joint Nordic genetic evaluation

Two universities (NMBU & SLU)

Two professors

One PhD student

One post doc

Four studbooks (Norway, Sweden, Denmark and Finland)

Breeding managers





# TRUST

# Towards a common goal

Win-win project

Horse industry involved from start

Vision about how research can be implemented

Different expectations can be a problem?

Research funds cannot be used for routine evaluations

Different starting points

National BVs in Sweden and Denmark

Unexplored data in Norway and Finland

# Resources

Swedish-Norwegian Foundation for Equine Research provided financing



Competence/Knowledge/Understanding about research

Studbooks provided data and contacts

# Unique horse identifications?!

Big challenge to match horses!

Between studbooks

Between competition data and studbook

Manual work prolonged the project

Universal Equine Life Number (UELN) will improve the situation

752004040002069

Code of birth country

Code of database registered at birth (breed)

National identification number

# Structure

PhD student and Post doc – well defined tasks and good support by professors

Meetings with reference group – open discussion climate

Respect between project members

Small group is beneficial?

Remember to have fun together!

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# Transparency

No problem to access raw data from studbooks and sport organizations

No hidden agendas



# TRUST



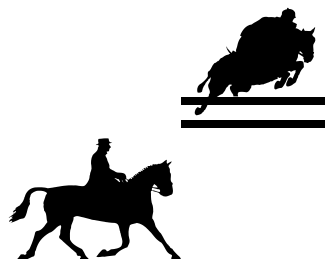
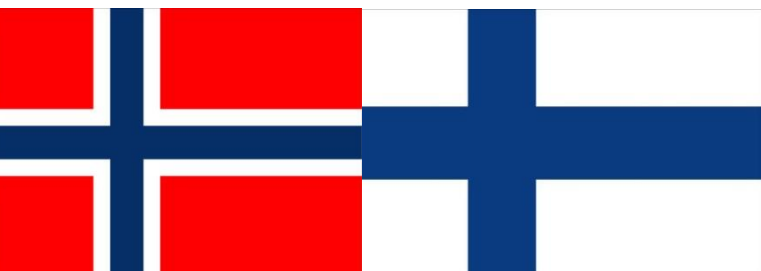
# Conclusions from project

Joint Nordic genetic evaluation is feasible

high genetic connectedness

high genetic correlations

More stallions will get earlier and more accurate breeding values



# What happened after the project?

Routine joint Nordic genetic evaluation is not implemented

Research results showed clear benefits for all studbooks

Decision, and financing, is up to the studbooks

Results led to more research questions

No funding (yet)

Continued collaboration and BVs across countries are a prerequisite for genomic breeding values in the future!

## What did the studbooks think?

”Very good and fruitful project”

”Want to implement routine joint genetic evaluation, but cannot find the finance for set-up”

”Include genomic selection in the future”

”Joint Nordic breeding values for linear traits would be interesting, and may be a good base for genomics in future?”

# Our recommendations

Involve horse industry from the beginning

Competence/Knowledge/Understanding

Vision

Expectations

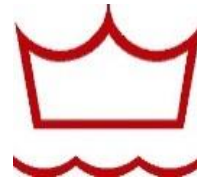
Get to know each other!

Make a "feasability study"

Plan for implementation

Project is not completed before the results are implemented!

# Acknowledgements



STIFTELSEN  
HÄSTFORSKNING

**Swedish-Norwegian Foundation for Equine Research**