



Minutes for the Native Horse Network Meeting 18.-19.11.2022

1. Arrival of participants and lunch together with the Council members
2. Opening of the meeting and acceptance of the day's agenda / Maria Kjetså

Agenda Friday November 18th, 2022, 12:00-17:00

Place of meeting: NordGen house, Alnarp, Sweden

1.	Arrival and LUNCH 12:00-13:00	12:00
2.	Opening of the meeting & adoption of the agenda	13:00
3.	Presentation about the network & background for the meeting (Maria) - Presentation of workshop plan	13:10
4.	Short introduction round of participants - Each participants say something about themselves and their country /organisation/breed(s)	13:30
5.	Coffee Break	14:30
6.	WORKSHOP	15:00
7.	Presentation & Discussion of workshop outcome	16:30
8.	Meeting day ends	17:00

NordGen will provide dinner on Friday evening.

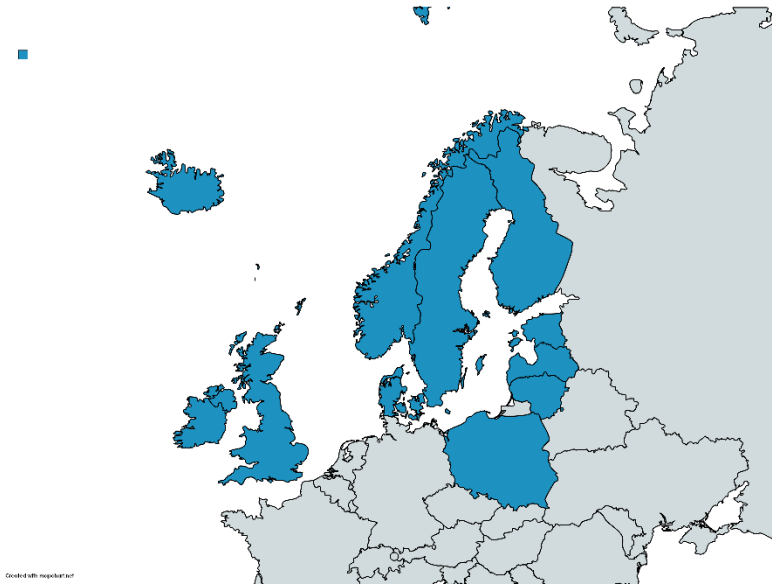
3. Presentation about the network & background for the meeting / Maria Kjetså

About the Network

NordGen arranged the first Native Horse Network meeting in November 2019 in Oslo, Norway, with participants from the Nordic countries and Lithuania. During this meeting there was group work and brainstorming session on how to promote and conserve the native breeds and future actions that could be made. During the COVID pandemic we had some online meetings to keep in touch. One of the results from the network meetings was a working group that applied funding for genomic characterization of the Nordic Native Horse breeds (Project NaNo Horse). The project will be presented at our meeting.

Now the world is open again and we wish to meet in person. Through ERFP ad-hoc action ([European Regional Focal Point for Animal Genetic Resources](#)) we can expand to a new and

broader ad-hoc network – The Network for native horse breeds in the Baltic Sea region and Northern Europe.



Network goals

The goal of the network is focused on the improvement of the management of endangered native horse breeds and contributes to the:

- Conservation and sustainable use of Animal Genetic Resources (AnGR)
- Strengthen collaboration within the European Region searching new regional projects, research, workshops, and knowledge exchange of good practice on national programs.

The aim is that the network is of benefit for the breeders' associations.

The Baltic Sea region and Northern European native horse breeds are mostly indigenous small purebred populations. They represent an economically and historically important genetic resource which over time has been used as the basis for the development of new breeds.

The situation of native horse breeds in the Northern European (and Baltic see region) countries refer on hard breeding work in very small populations trying to avoid inbreeding, therefore the exchange of information and best practices is desirable and the activities in the different countries and different populations can be complementary.

A common strategy can be envisaged to exploit the historical and intangible value of native horse populations in breeding work and to improve the relationship with horse breeders, sport associations and tourism industries.



Expected outcomes

- Developing material for the breeder's associations and for educational and promotional purposes
- New materials about the history of the breeds and their local values to the region for benefit of local business.
- Share knowledge about the small local horse breeds and promote them to the public

4. Short introduction of participants

Attendees:	Ena Sparre, Knabstrupperforeningen for Denmark, Denmark
	Poul Gerhard Pedersen, Knabstrupperforeningen for Denmark, Denmark
	Haldja Viinalass, Estonian University of Life Sciences
	Harriet Olafsdottir av Gørdum, Faroese Horse Breed Association
	Jens Ivan Gerðinum, Faroese Agricultural Agency
	Jóna Ólavsdottir, Faroese Horse Breeding Association
	Minna Mäenpää, Hippos, Finland (online)
	Anna Veidemane, Latvian Horse Breeders Association, Latvia
	Ruta Sveistiene, National coordinator Lithuania, Lithuania
	Jaana Peippo, NordGen Farm Animals, Norway
	Maria Kjetså, NordGen Farm Animals, Norway
	Mervi Honkatukia, NordGen Farma Animals, Norway
	Olav Stormorken, Norges Dølahestlag, Norway (online)
	Therese Selle, Norsk Hestesenter, Norway
	Beata Smulska, National Institute of Animal Production, Poland
	Linnea Borgenvall, Svensk Ardennerforening, Sweden
	Liselotte Erixon, Svenske Russavelsföreningen, Sweden (online)
	Sofia Mikko, Sveriges Landbruks Universitet, Sweden
	Heidi Wilkin, Knabstrupper breeder in UK, UK (online)
Absent:	Morten Kargo, Aarhus University, Denmark
	Þorvaldur Kristjánsson, Agricultural Advisory Center, Iceland
	Mary McGrath, Irish Native Breed Society, Ireland



Susanne Eriksson, Sveriges Landbruks Universitet, Sweden

Tom Blunt, Rare Breed Survival Trust, UK

6. Workshops

Maria Kjetså presented list of the topics for the workshop discussions. The participants were divided in three groups and allowed to discuss on one or more of the topics. The workshop was open for input and development from the participants.

1. Breed Action plan

Each breed or country could benefit of developing an action plan for conservation to have a clear goal for how to move forward.

- a) Identify Responsibility and structure of the breeds in each country
 - National coordination, breed organisations, individual breeders, individual horse owners
- b) Identify critical needs for the breed and plan how to move forward and meet those needs

2. Information collection /Database

With a living and updated database, it could be easier to monitor the status of the animals and provide statistics and information for promotion and education. Examples of information to be collected in a database:

- Population information
 - Native and English names of breed
 - Population size: Number of animals total, sires, mares and foals
 - Effective population size /Level of inbreeding
 - Conservation Risk status
- Characteristics
 - Breed type (draught, driving, small horse, trotter, work horse ++)
 - Wither height, cannon bone girth, body weight
 - Colour
 - Temperament & other behaviour traits
- Breed history
 - Origin story, first studbook, other information

3. Educational / Promotional material

One goal is to develop educational and promotional material of the breeds. What information is needed, in what format and how to produce it? Examples:



- Information for the breed associations on management on small populations /inbreeding
- Information about the breeds, their history etc. for promotion in social media.

Group 1 / summary.

- Stated that native breeds must be promoted as national treasures to make the native breeds desirable.
- Discussed about the purity of breeds over generations, and pros and cons of pure or crossbreeding strategies in small populations:
 - Breed association are, in general, against even controlled crossbreeding.
 - Although crossbreeding introduces desired genetic variation into a small population, it also reduces the number of purebreds in population.
 - Individuals born as a result of controlled crossbreeding may be included in an open studbook: e.g. Knabstrupper in Denmark and Newforest-s (Sweden) and Newforest-e (England) ponies in Sweden which were first kept as separate “sub-breeds”, but later accepted as one breed.
- Discussed how to avoid multiple studbooks in export situations.
- Shared experiences about linear scoring in horse breeds.

Group 2 / summary.

- Recognised that conservational breeding that is not aiming to change the breeds, should be clearly separated from selective breeding where the change is desired.
- In conservational breeding, it is best to have many parents with limited number of offspring.
- Discussed how to promote this to the breeders.
- Recognised that the professional promotion / marketing of the native breeds requires, among other things, interest, and knowledge: social media, videos/photos (also old ones!), Facebook, Instagram. History sells well! One must find the right people to do the job!
- Professional marketing needs often to be outsourced and subsequently, it requires budgeting.
- Marketing, however, also increases income for associations through sales.
- New approaches should be tested: adopt a horse, buy a Nordic Farm Animal for Christmas present etc.

Group 3.

- Discussed about “Why we should preserve a breed?”
 - To conserve breeds that are adapted to the Nordic environment.
- Pointed out that in the breeding programs of small native animal populations the aim is to maximize genetic variation and minimize inbreeding - different breeds may need different kind of action plans.
- To manage the small native animal populations, user-friendly EVA-program version is needed (at least better manuals).



- Also, user-friendly databases are needed that could include educational / promotional / historical data.

Agenda Saturday November 19th, 2022, 09:00 – 13:00

Place of meeting: NordGen house, Alnarp, Sweden

+ ONLINE – for participation from breed associations or those who could not attend in person

1.	Welcome with coffee	09:00
2.	Opening of the meeting & adoption of the agenda	10:00
3.	Presentation of Native Nordic Horse Project – Sofia Mikko	10:20
4.	Summary of the outcome from yesterday's workshop - Information for online participants	10:40
5.	Coffee break	11:00
6.	Discussion /Open mic /Any other business - Input from online participants on workshop material from the day before	11:15
7.	Closing of the meeting: -Next steps & next meeting	11:50
8.	LUNCH 12:00-13:00	12:00

1. Welcome with coffee / Maria Kjetså
2. Opening of the meeting and acceptance of the day's agenda / Maria Kjetså
3. Native Nordic Horse project (NaNo) / Sofia Mikko (presentation attached as pdf)
 - Intensive selection (BLUP) allows faster gain of the breeding goals but increases inbreeding.
 - Health and function are important traits, breeding scheme must watch out for hitchhiking deleterious mutations.
 - Compared to Native horse breeds, warm-blooded horse breeds have large breeding pool and subsequently lower risk of inbreeding, but
 - Genetic disorders may hide over generations before exposed
 - Intensive selection may accumulate hitchhiking deleterious mutations
 - Recommendations for the Small native horse populations:
 - Keeps the numbers up!
 - Use many stallions!
 - Parentage control of offspring is very important!
 - Focus on health and welfare!
 - Be aware of a risk of genetic drift, inbreeding and any known inherited disorders.

- In inbreeding, the slope of the curve is important not the level itself.
 - Explained the difference between whole genome sequence and SNP genotyping
 - Talked about the analyses the project will do using whole genome sequence
4. A summary for the workshop from the day before was provided similar to the one in the minutes.
 5. Open mic and discussion
 - Discussed how we could use this meeting to have an outcome. Main suggestions were database and educational material.
 - Database how would it look what would it have
 - Decided that NordGen will make a suggestion for a questionnaire for the breed associations based on their breed stories format.
 - Will send to the attendants of the meeting and agree for the questions. Different questions and information was discussed
 - One initial questionnaire with information on the breed and their history etc.
 - Then once a year a short questionnaire about population size or updates.
 - For the educational material it needs some dedicated time.
 - Brochures might not be best option. Easier with information the breed associations can put on their website. Educational text could be put in database.
 6. Any other Business: Mervi presented the project to map the horse sector in the Nordic countries based on an inquiry from the Nordic council of ministries. Could be an opportunity to show that the horse sector is an important part of the economy & society, not just a “hobby”.
 7. Next steps & next meeting:
 - Next meeting will be online unless we have funding
 - Why not expand to whole of Europe?
 - Next meeting in a year or so, when NordGen has time to arrange.

The meeting was closed and the online participants went offline.

However, the discussion among the physical participants continued and NordGen showed their Breed stories and the Brown Bee Wiki page. The participants agreed that a Native Horse Wiki could be the best option to have a database with information that is accessible to the public but also easy to update and link to educational material etc.