

2024
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NEWSLETTER



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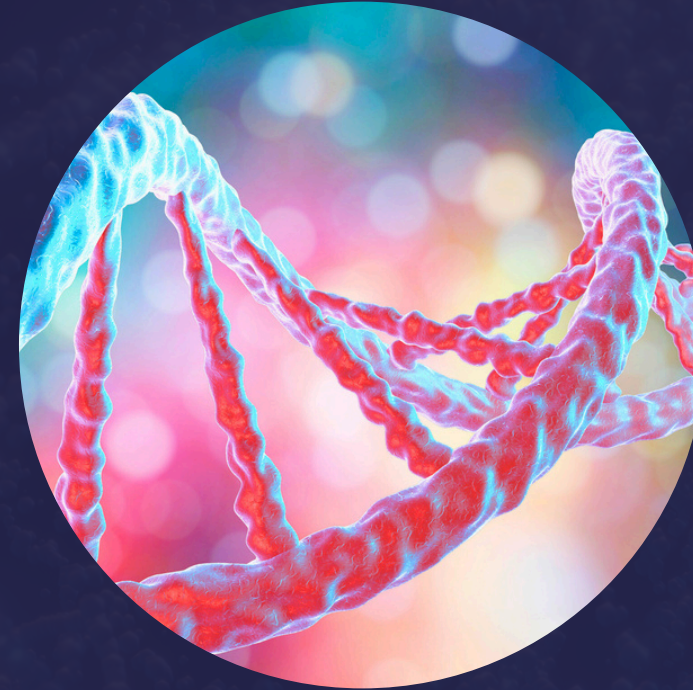
ON THE PROGRAMME FOR THIS NEWSLETTER



ERFP General Assembly 2024
August 29th/31st
Firenze, Italy



The Italian system
of Animal Breeding



FAO Report



Reports from the
Working Groups
and Task Forces



End of a strategic
mandate



Ad Hoc Action
Northern European Native
Horse Network meeting
17th october



Upcoming Events
in 2025

ERFP GENERAL ASSEMBLY 2024

The ERFP General Assembly 2024 took place from August 29 to 31, 2024, at the University of Florence, bringing together experts from across Europe to focus on animal genetic resources.

This event highlighted achievements in preserving traditional breeds and promoting sustainable livestock practices. Key moments included:

- Insightful presentations on genetic conservation and successful breeding programs, including Italy's innovative initiatives.
- Updates from the ERFP secretariat and Working Groups, FAO, EAAP WG on AnGR, and other countries' actions related to Animal Genetic Resources.
- A field excursion with demonstrations of the iconic Maremmana "butteri", the Italian cowboys and a visit of the nucleus farm of the Comisana and the local Massese sheep breeds, offering participants a hands-on experience of conservation efforts in action.

The assembly fostered meaningful exchanges and reinforced the ERFP network and its collaborations with stakeholders such as EFFAB, Nordgen or Save Foundation.



OVERVIEW OF ANIMAL GENETIC RESOURCES CONSERVATION IN ITALY

Italy's Animal Genetic Resources Conservation Program (AnGR) demonstrated a long-standing commitment to the preservation of farm animal biodiversity. Led by the Ministry of Agriculture and supported by EU frameworks, this initiative focused on the protection of local and traditional breeds, vital for genetic diversity and sustainable agriculture.

KEY ACHIEVEMENTS INCLUDED:

1

Comprehensive genetic and phenotypic characterization of breeds at risk.

2

Innovative projects improving animal welfare, reproductive efficiency, and resistance to diseases.

3

The development of a national open database, fostering collaboration and accessibility of genetic data.

By combining scientific rigor and public awareness, this program not only safeguards Italy's agricultural heritage but also sets an example for sustainable livestock management in Europe.

FAO REPORT TO THE ERFp GENERAL ASSEMBLY ON INFORMATION AND DOCUMENTATION

The presentation of the FAO report to the ERFp General Assembly underscored significant progress, ongoing challenges, and future opportunities in the management of animal genetic resources.

Key Takeaways

Data Gaps and Updates:

While some countries have made strides in updating their population and cryoconservation data, a large proportion still lags behind. This reveals a critical need for capacity-building and improved engagement.

Technological Advancements:

The introduction of new tools, such as the population dynamics warning system and the AI-based breed recognition tool, demonstrates innovation in addressing key challenges. However, successful implementation will depend on data quality and contributions from member countries.

Global Collaboration:

The high level of participation in the Third State of the World Report reflects a strong commitment to global cooperation. However, disparities in engagement highlight the need for tailored support and guidance.

Future Prospects:

The recent 13th ITWG session presented an opportunity to deepen discussions on genetic diversity, strengthen reporting frameworks, and further refine tools like DAD-IS.



The presentation was a reminder of the shared responsibility to preserve and manage animal genetic resources for future generations. Through innovation, collaboration, and sustained efforts, we can address gaps, enhance data quality, and promote sustainable agricultural practices globally.

As we move forward, continuous interactions, active engagement, and the adoption of cutting-edge tools will be essential for achieving our goals.



REPORTS FROM THE WORKING GROUPS AND TASK FORCES

WORKING GROUP ON DOCUMENTATION AND INFORMATION

The recent General Assembly of the European Regional Focal Point for Animal Genetic Resources (ERFP) in Firenze provided valuable insights into the ongoing efforts and future priorities for managing animal genetic resources across Europe. Here are some highlights from the activities of the Working Group on Documentation and Information:

Achievements and Key Activities

1

SUPPORT FOR DATA MANAGEMENT:

Continued collaboration with the FAO and national coordinators to enhance the quality and completeness of data in DAD-IS/EFABIS.

2

WORKSHOPS FOR IMPROVEMENT:

Organized training sessions with the FAO, focusing on the preparation and data collection for the Third report on State of the world AnGR.

3

DEVELOPMENT OF TOOLS:

Tested and supported tools for geographical distribution of breeds, improving data accuracy and accessibility.

4

BREED RISK INDICATORS:

Reviewed and harmonized indicators for evaluating the risk status of transboundary breeds at the European level.

Future Directions



Enhancing Collaboration: Strengthen links with the European Union Reference Centre (EURC) for better integration of indicators into EFABIS.



Quality Reporting: Establish processes for regular updates on data quality and progress, accompanied by key metrics to track improvements.



Collaboration with WG in situ conservation: Continued focus on transboundary breeds, fostering collaboration between working groups.



Upcoming Initiatives: Prepare a second seminar in partnership with the EAAP Mediterranean Working Group, planned for 2026.

Call for Participation

The Working Group emphasizes the importance of active collaboration. Volunteers are welcome to contribute to ongoing and future initiatives, ensuring sustainable management of animal genetic resources.

For more information or to get involved, contact Eléonore Charvolin-Lemaire at eleonore.charvolin-lemaire@inrae.fr.

WORKING GROUP ON IN SITU CONSERVATION

The annual report of the ERFP working group on the in situ conservation and valorisation of animal genetic resources has shed light on key initiatives and collaborative efforts. Here are some highlights from the report:

KEY ACTIVITIES AND FINDINGS

UNDERSTANDING IN SITU CONSERVATION ACROSS COUNTRIES:

A survey was conducted to analyze how in situ conservation is implemented across member countries. The findings revealed:

- Many countries lack a formal National Strategy for Animal Genetic Resources (AnGR), although some conservation activities are embedded within broader policies like rural development or breeding strategies.
- Landscape management with local breeds remains a crucial aspect.

INTEGRATION OF IN SITU AND EX SITU APPROACHES:

In line with the European Strategy for Animal Genetic Resources (AnGRSE), the group explored synergies between in situ and ex situ conservation methods through joint discussions with other working groups.

FOCUS ON TRANSBOUNDARY AND LOCAL BREEDS:

Several ad hoc actions were reviewed, including:

- Identification of Simmental cattle populations in Europe.
- Development of a native horse network.
- Exploration of traditional transhumance practices in the Alps.
- Use of local breeds for landscape management and ecosystem services.

FUTURE WORK PLAN (2024-2025)

*For more information or to get involved, contact
Holger Göderz at holger.goederz@ble.de*

Survey results utilization: the group plans to write an article based on its finding and promote it through a webinar

Policy integration: a new survey will be conducted to assess how AnGR management and conservation are reflected in national legislations.

Continued collaboration: strengthening partnerships with other working groups (e.g., Documentation and Information) and European institutions to enhance assessments of breeding programs, effective population size, and breed risk status.

WORKING GROUP EX SITU CONSERVATION

The Working Group on Ex Situ Conservation has made significant progress this year.

- The inclusion of Portugal and 11 new Spanish genebanks in the EUGENA network has brought the total to 2.4 million samples covering 94 breeds, with new species such as donkeys and pigeons added.
- Key initiatives include collaboration on the EuroFAANG project, aimed at strengthening genotype-to-phenotype research for sustainable animal production, and the development of guidelines to integrate genebanks into health regulations.
- In 2024, priorities will focus on disseminating these recommendations, integrating ex situ conservation activities into breeding programs, and enhancing management and documentation tools for genebanks.
- Collaboration between in situ and ex situ conservation efforts will also be intensified to promote a more integrated approach.

For more information or to get involved, contact Ewa Sosin at ewa.sosin@izoo.krakow.pl.



TASK FORCES GENEBANKS DOCUMENTATION

Objectives:

01

Define common requirements for genebank database software.

02

Recommend suitable database software for genebanks.

03

Provide support for implementing recommended software.

04

Analyze and develop the chosen software while encouraging more countries to join the initiative.



Activities in 2023-2024:

Hosted a videoconference in March 2024 with Task Forces members and external participants to share experiences on database implementation.

- Presented the use of Biologics software by CGN Wageningen (The Netherlands).
- Highlighted a custom-designed database used by Spain's National Genebank.

Discussed genomic data management in genebanks:

- Results from a questionnaire (10 responses).
- Examples of genomic data storage practices in Slovenia.
- Proposed collaboration on genomic data management, led by The Netherlands.

Concluded that standardizing data exchange formats across databases is not a current priority.

Plans for the Next Year:

- Continue supporting countries in adopting Biologics and other database systems.
- Explore common solutions for storing, managing, and utilizing genomic information in genebanks, in alignment with ongoing initiatives.

TASK FORCES TRANSBOUNDARY BREEDS

The Task Forces on Transboundary Breeds focuses on analyzing and managing genetic resources for breeds that span across national borders. It comprises experts from multiple countries and institutions, including members of ERFp working groups and FAO representatives.

KEY ACTIVITIES IN 2023-2024:

- Conducted 15 virtual meetings.
- Analyzed data from the EFABIS and DAD-IS databases to understand the status of transboundary breeds.
- Shared preliminary results during working group meetings and extended the research to Mediterranean countries in collaboration with the EAAP-Med Working Group.
- Began drafting an article summarizing findings, to be finalized first trimester 2025.

PLANS FOR THE NEXT YEAR:

- Publish the article on the state of European transboundary breeds in the GenRes Journal after internal review.
- Revisit in situ and ex situ case studies to build on the results of the first paper.
- Work on the relatedness of populations in collaboration with EURC as part of an Ad Hoc Action on transboundary breeds.

The Task Forces emphasizes collaborative efforts to ensure sustainable management of these important genetic resources.

END OF A STRATEGIC MANDATE !

In 2021, Montserrat Castellanos (Spain) was elected by the ERFP Assembly for a three-year term.

Although three years may seem short, much was accomplished!

One of the key tasks during her mandate was the finalization of the Animal Genetic Resources strategy for Europe, along with its action plan, and the renewal of the Multi-Year Programme of Work (MYPoW) and Terms of Reference. Another highlight of Mrs. Castellanos's dynamic leadership was the development of communication initiatives: the ERFP network is now fully equipped with a presentation video and flyer, and after a 10-year hiatus, the newsletter has returned!

The ERFP Assembly and Secretariat extend their sincere thanks to Montse for all her hard work and the good times shared together. We hope to continue collaborating beyond the annual assembly.

The new elected chair is Danijela Bojkovski (Slovenia) who is well known by the ERFP community since she was hosting the ERFP secretariat from 2015 till 2018 and the former chair of the in situ Working Group.



ERFP ad-hoc action



**NORTHERN
EUROPEAN NATIVE
HORSE NETWORK
MEETING**

PRESERVING NATIVE HORSE BREEDS IN THE BALTIC AND NORTHERN EUROPE

The heritage of the indigenous horse breeds of the Baltic Sea region and northern Europe bears witness to centuries of equestrian tradition, cultural pride and agricultural history. These small but vital populations, representing 51 unique breeds, are at the heart of a collaborative effort to ensure their preservation and promotion.

Indigenous horse breeds have a special place because they embody resilience, adaptability and beauty. From the Lithuanian Žemaitukai to the Norwegian Nordland/Lyngen horse, these breeds are deeply rooted in local cultures. However, small populations, falling birth rates and genetic bottlenecks pose major challenges to their survival.

Efforts in the Baltic States and Northern Europe aim to safeguard these national treasures through breeding programmes that promote genetic diversity while preserving breed purity. International collaboration is essential, as it fosters the exchange of knowledge, best practice and strategic resources.

Native breeds vary in size, function and use:

- Large breeds: For heavy work and transport.
- Medium breeds: For leisure and multi-purpose work.
- Small breeds: Agile and versatile horses for riding and light work.

This diversity highlights the ecological and economic value of indigenous horses, not only as working companions, but also as assets for tourism, sport and local heritage.

Maintaining genetic diversity while preserving purity remains a key debate in conservation strategies. Closed studbooks guarantee purity, but limited cross-breeding could introduce beneficial genetic characteristics. Promoting these breeds as national symbols can increase public interest and secure their future.

To protect this priceless heritage, the way forward requires ongoing genetic monitoring, clear breed classification and sustainable promotion strategies. These efforts ensure that indigenous horse breeds remain living symbols of history, culture and biodiversity for generations to come.





LITHUANIAN HERITAGE - ŽEMAITUKAI: BRIDGING TRADITION AND MODERN USE

HISTORICAL BACKGROUND

The Žemaitukai breed dates back to the 6th and 7th centuries and has historically been used for a variety of purposes, including transport, carting and riding.

The breed has faced major challenges, including near extinction during the First World War, the Second World War and the economic transitions of the 1990s.

POPULATION RECOVERY

Over time, efforts to preserve and grow the population have progressed, with an increase in the number of horses, breeding mares and foals.

PRESERVATION AND COLLABORATION

The Žemaitukai Horse Breeders' Association, established in 1997, focuses on the preservation of genetic diversity, raising awareness, education and promotion of the breed.

Collaboration between breeders, researchers and institutions has played a key role in the breed's survival and adaptation.

MODERN USES

The breed is now used in sports such as show jumping and endurance riding, driving, tourism and therapeutic applications.

These modern roles create opportunities for integrating the breed into contemporary society.

PROSPECTIVE APPLICATIONS OF COLD-BLOODED HORSES IN AGRICULTURE, TOURISM, THERAPY, AND BEYOND

The importance and multiple applications of Polish cold-blooded horse breeds, in particular the Sokólski and Sztumski types.

Historically, these horses were essential for agricultural work, military purposes and urban transport in early 20th century Poland. However, their population declined after the Second World War due to the mechanisation of agriculture.

In response to environmental and biodiversity conservation movements since the 1990s, Poland introduced genetic resource conservation programmes for these breeds in 2008, ensuring the preservation of their unique characteristics.

Main applications for cold-blooded horses:

- **Agriculture and forestry:** Ideal for tasks such as ploughing and skidding timber, particularly in difficult terrain.
- **Tourism and leisure:** They are used for carriage rides, folklore events and festivals.
- **Environmental maintenance:** Support for environmentally-friendly farming practices.
- **Therapy (hippotherapy):** Their calm, gentle nature means they can be used for therapeutic purposes.
- **Food production:** Mare's milk (used for soaps) and meat are notable products.
- **Transport:** For goods and people, in both rural and urban areas.

Importance for conservation:

Horses in conservation programmes are genetic reserves, hence the need for sustainable practices.

The promotion of horse-based activities meets modern environmental and societal needs and provides economic development opportunities, particularly for young people in rural areas.

NATIVE HORSE BREEDS IN ESTONIA - THEIR CURRENT STATE AND CHALLENGES

MAIN HORSE BREEDS IN ESTONIA

- **Estonian Native Horse:** An important native breed with a population of 2,979 in 2024.
- **Tori horse:** includes various sub-types such as the TA (universal type) and the Old-Tori. Population: 1,042.
- **Estonian heavy draught:** Known for its strength; population: 361.
- **Other breeds** present in Estonia are the Estonian sport horse (2,392), the Trakehner (352), the Arabian (141) and the Akhal-Teke (53).

CONSERVATION AND ORGANISATION

- Some breeds, such as the Estonian Native Horse, are classified as endangered but are maintained.
- Various breeding organisations oversee these breeds, including the Estonian Horse Breeders Society, the Estonian Native Horse Breeders Society and others.

CURRENT DEMOGRAPHICS

Estonia has around 14,177 horses registered in the national database.

USES OF HORSES IN ESTONIA

- **Forest management:** Horses use is encouraged to adopt sustainable forestry practices, particularly in protected areas.
- **Law enforcement:** Horse patrols have been used for border control since 2020, reaching areas inaccessible to vehicles.
- **Leisure and sport:** Horses are an integral part of leisure, sport and tourism.

The Tori stud farm, established in 1856, celebrated its 168th anniversary in 2024, highlighting its historical and cultural significance.



LINEAR SCORING OF THE PERFORMANCE IN LATVIAN HEAVY WARBLOOD HORSE BREED

- Latvian Warmblood breeds, the Latvian Warmblood (LWB) and the Latvian Heavy Warmblood (LHWB), used for sport and other purposes such as driving, tourism and farm work.
Preservation: Efforts began in 2004 for the LHWB, focusing on performance and type characteristics.
- Linear scoring is a standardised way of evaluating conformation, type and performance characteristics. It allows individual horses and their progeny to be compared, facilitating breeding decisions and performance improvement.
- Young horses are tested on long reins from 24 months for basic commands.
Driving tests begin between 3 and 5 years of age and assess the horse's ability to stop, turn and make transitions in a harness.
- The study compared characteristics such as type (heavy/light), gait mechanics and response to aids in 74 horses.
The main results highlighted the variability of characteristics such as elasticity, impulsion and courage, enabling breeding strategies to be developed.



Performance traits evaluated

1

Gaits

- **Walk:** Assessed on stride length, rhythm, activity, suppleness, and hind limb activity.
- **Trot:** Includes stride length, rhythm, suppleness, lightness, and body direction.
- **Canter:** Evaluated for balance, thrust, and elasticity.

2

Jumping Ability

Focus on traits like elasticity, take-off power, fore and hind leg technique, courage, and coordination.

3

Reaction to Aids

Includes impulsion, cooperativeness, and the horse's response to commands.

UPCOMING EVENTS IN 2025





**CGRFA - COMMISSION
ON GENETIC RESOURCES
FOR FOOD AND
AGRICULTURE - FAO**

24 March

**WORKING GROUP -
ATHENS**

6 & 7 May

**GENERAL ASSEMBLY -
AUSTRIA**

23 August



CONTACT AND PARTICIPATION

If you are actively engaged in AnGR, we encourage you to follow our activities, provide feedback and reach out to join efforts. Ask your National Coordinator! Your participation in task forces or Ad Hoc actions might be crucial for advancing the objectives of each Working Group and the whole organization.

Stay connected with us through our social media channels and our website www.animalgeneticresources.net to keep abreast of our latest initiatives and opportunities for collaboration!

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