



European Regional Focal Point for Animal Genetic Resources




WORKING GROUP EX SITU CONSERVATION. REPORT OF ACTIVITIES 2021-2022.

3rd September 2022.


Fernando Tejerina Ampudia, PhD. Chair of the WG Ex Situ Conservation.



GOBIERNO DE ESPAÑA




MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN




AGENDA 2030

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1. Development of the EUGENA network.
2. Task Force on documentation software for genebanks (2022-2023).
3. Ad hoc action Strengthening national capacities towards the development of a national Gene Bank strategy.
4. *Collaboration with Ad Hoc Action GenRes Bridge Project – European Strategy on Animal Genetic Resources.*
5. Ad hoc action use of the IMAGE self-diagnostic tool to support the development of a quality management system in European animal gene banks.
6. Annual meeting of the WG Ex Situ conservation, 1st to 3rd June (Paris, France).
7. Others.


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1. DEVELOPMENT OF EUGENA.

New country on board: Hungary (July 2022, data on samples not uploaded). 

New genebanks:

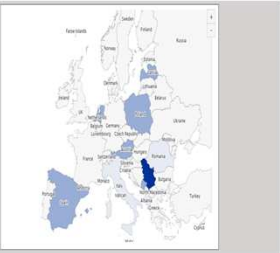
- Małopolskie Centrum Biotechniki Krasnem (Poland).
- Institute of Molecular Genetics and Genetic Engineering, University of Belgrade (Serbia).
- National Centre for Biodiversity and Gene Conservation (Hungary).

2021*

11 Countries

9 Gene Banks

961595 Samples




2022**

13 Countries

13 Gene Banks

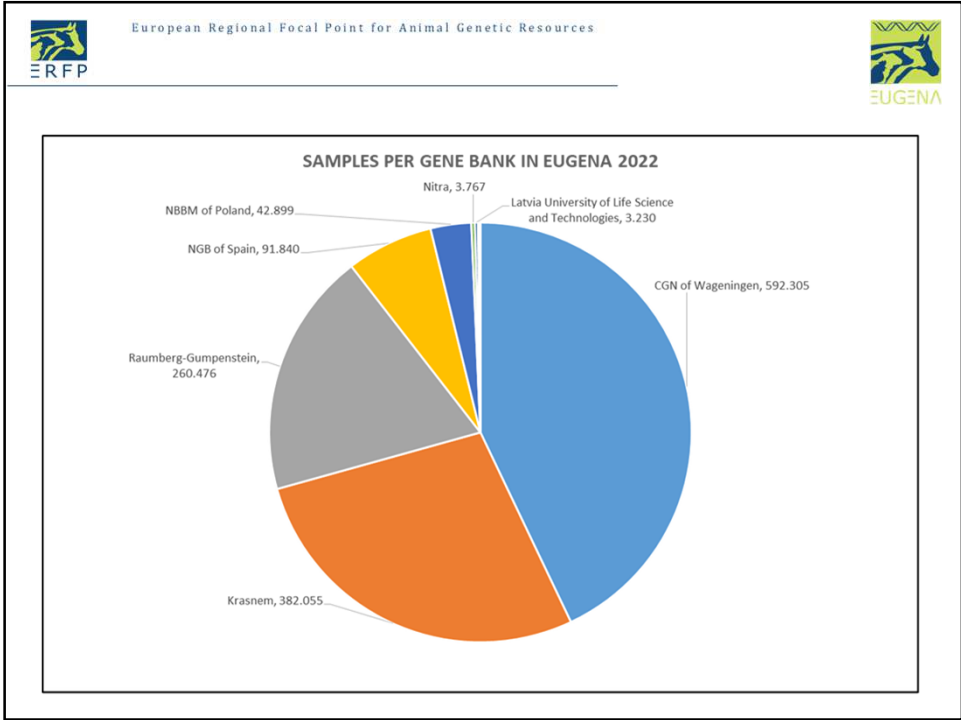
1379085 Samples



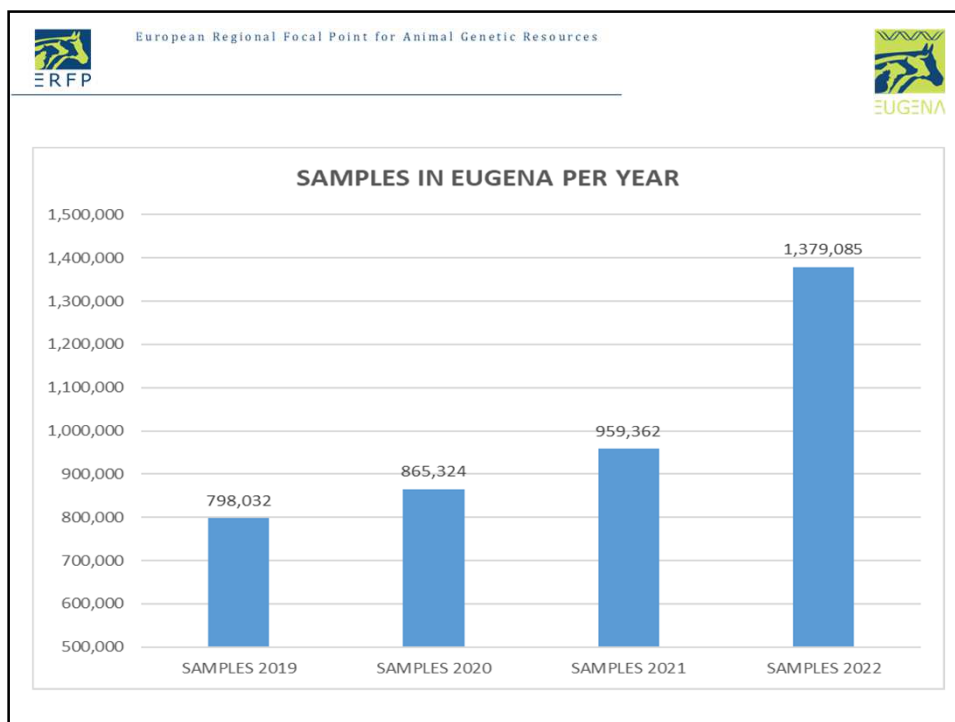
**+ 417.490 SAMPLES (New Poland and Serbia genebanks + information update).
+ 31 BREEDS****

*Data from Slovakia not uploaded. **Samples data from Hungary not uploaded.

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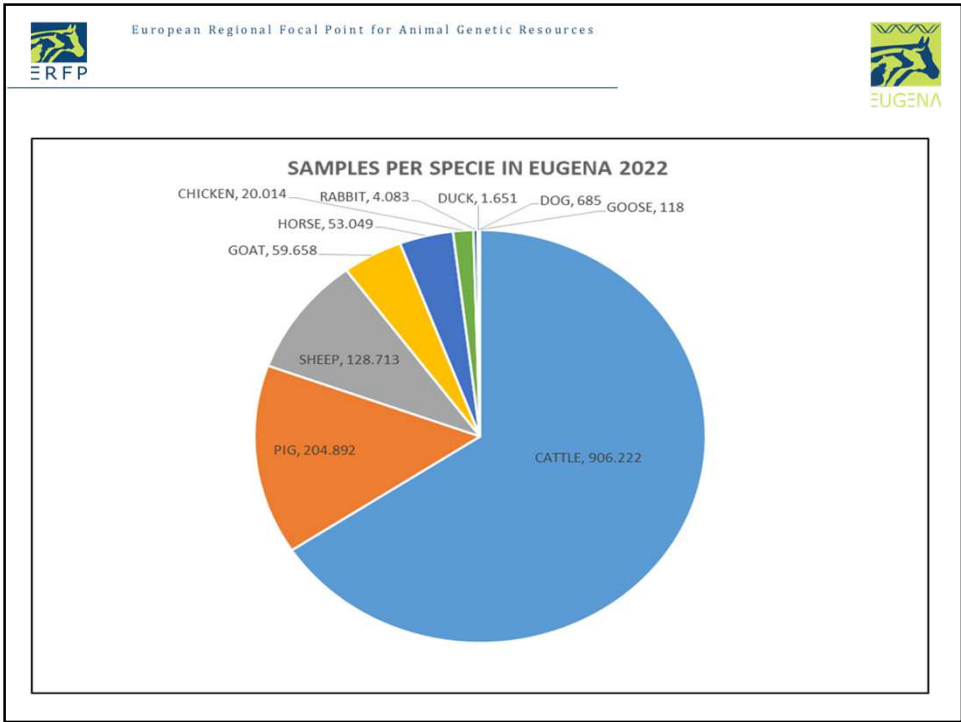
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ERFP EUGENA

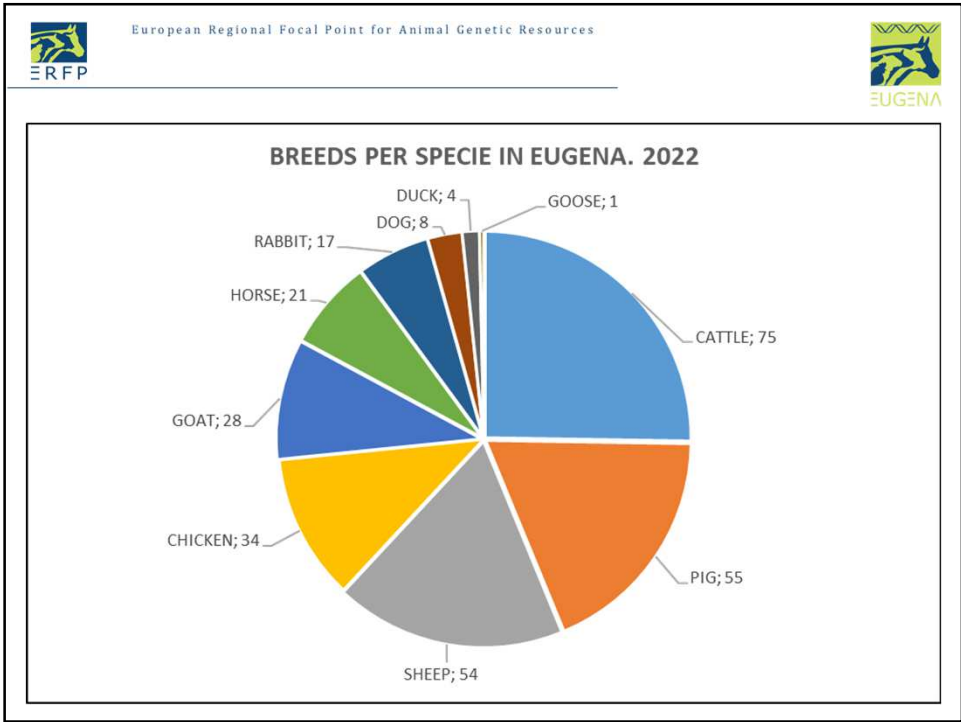
MATERIAL TYPE	SAMPLES 2020	SAMPLES 2021	SAMPLES 2022
Blood	1,397	1,673	3,291
DNA	0	24	1,109
Embryos	590	844	967
Hair	48	218	218
Somatic Cells	0	0	328
Semen	863,289	956,603	1,373,172
Total	865,324	959,362	1,379,085

MATERIAL TYPE	MALE DONOR	FEMALE DONOR
Blood	590	2,013
DNA	157	952
Embryos	64	138
Hair	165	45
Somatic Cells	0	6
Semen	11,863	0
Maximum	12,839	3,154

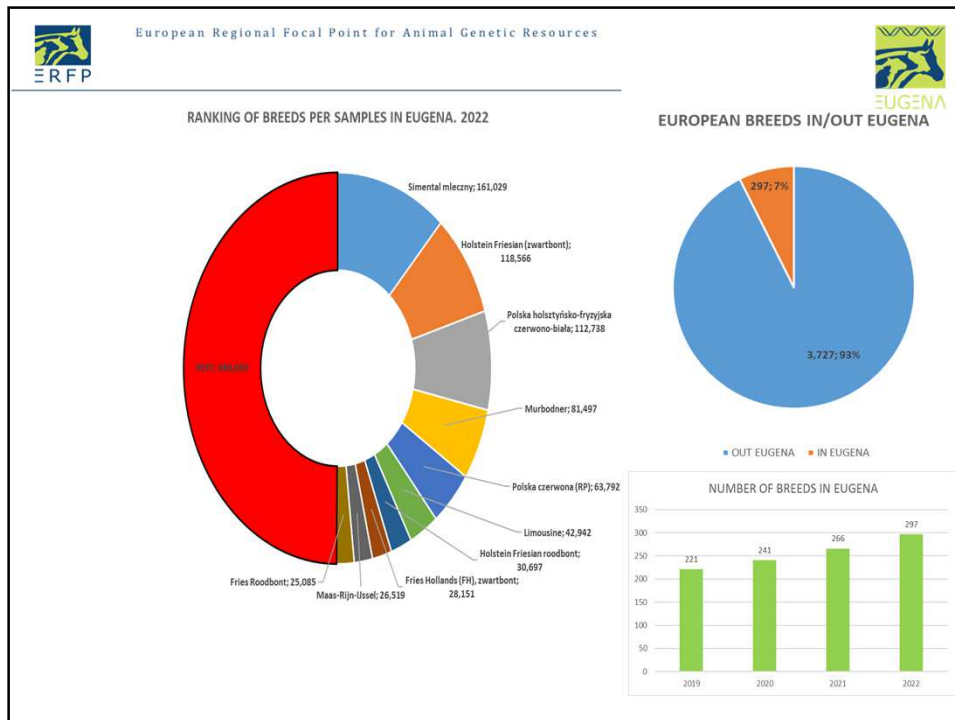
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NEW EUGENA ToR. MAIN CHANGES.

A SINGLE STEEP PROCESS:

The NC or other valid competent authority in the country (in case NC has not legal competences under the national rules) nominate a host institution a genebank as EUGENA member, presenting to ERFP secretariat a **statement** (see annex 3) recognizing the host institution is developing functions as a repository for ex situ conservation and sustainable use of AnGR. A **declaration of commitment** of the host institution (see annex 4) must accompanied the nomination by the NC or other valid competent authority in the country. The enrolment of the country in EUGENA will be recognised with the first genebank nomination.


1st nomination = enrolment of country in EUGENA

Statement of nomination
+
Declaration of commitment


COUNTRY

GENEBANK

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2. TASK FORCE ON DOCUMENTATION SOFTWARE FOR GENE BANKS.


Objective (s):
(Most relevant) Collaborate in the implementation of the solution (software), establishing common requirements for the provider and support each other in the process of migration to the new software.

Members:


- Zhivko Duchevev – ERFP (TF Co-chair).
- S.J. Hiemstra – The Netherlands (TF Co - chair)
- Ina Hulsege – The Netherlands.
- Danijela Bojkovski – Slovenia.
- Tina Flisar – Slovenia.
- Manuel Leuenberger – Switzerland.
- Melissa Raemy – Switzerland.
- Delphine Duchos - France
- Sonsoles Zabala – Spain.
- Fernando Tejerina – Spain. (TF Co-Chair)



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2. TASK FORCE ON DOCUMENTATION SOFTWARE FOR GENE BANKS.

Activities in the past year and output/results:


1. Kick off meeting. 11th of February:

- Analyse the national requirements and include them in the document “basic requirements” by Zhivko Duchevev,
- Search for new software companies in each country,
- Each country analyse the three possible options for the development of a database (**complete development/purchase of a license/enrol in AnimalGrin**)


2. 2nd meeting of the Task Force. 30th March.

- Analyse the comments to the "basic requirement" document, accepting or rejecting the proposals.
- The TF members agree to include a workflow diagram in the document “basic requirements” common for all gene banks.
- The TF members agree to review the queries or reports which each gene bank demands and "user stories"
- The TF members agree that the most realistic option to develop the database is "**Purchase a product developed yet and customize it in function of our needs**".
- The TF members agree to look for user of the products by the supplier companies and know their experiences.

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2. TASK FORCE ON DOCUMENTATION SOFTWARE FOR GENE BANKS.

Activities in the past year and output/results:

3. 3rd meeting with software users. 2nd June (WG meeting):


- Christian Remier: Labcollector.
- Perrine Portier: Biolomics.

4. Document *“Genebank documentation database requirements”*


Plans and priorities for the rest of the year.

- Call for offer to the companies, (including a physical meeting with that companies) and recommend a software for TF members.
- Develop the administrative procedures in each country to contract the company manufacturer of the software recommend by the TF.
- **Customize** the software for their use in AnGR genebanks, the proposal of the TF is the ERFP fund the customization of the common elements identifies by the TF, and this core structure will be available for any other ERFP country who involve in the TF in the future and purchase the software recommended.
- Migrate the information to the new software and start the operation

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2. TASK FORCE ON DOCUMENTATION SOFTWARE FOR GENE BANKS.


BUDGET.
 The budget assigned for 2022 (7.000 €) for the cost of the organization of a physical meeting was not used and it can be maintained for the next year.
 In addition, around 15.000 € are estimated for the customization of the software to have a version available for ERFP animal genetic resources genebanks.



Companies offer a general database



TF costumize the database for a common set of requirements of GB. (Genebanks pay for the license)



The costumize database “plug and play” for genebanks will be available for all ERFP countries. (Genebanks pay for the license).

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3. AHA STRENGTHENING NATIONAL CAPACITIES TOWARDS THE DEVELOPMENT OF A NATIONAL GENE BANKS STRATEGY.

Objective:
Assess current situation, needs and barriers and define solutions and priorities to support national efforts towards the development of a national cryo-conservation strategy.

Members: 12 experts from ERFP countries.

Activities in the past year and output/results:
The leaders of the AHA analysed the country presentations with solutions delivered in the workshop celebrated 26th May, 2021, after summarized the information, have developed a first draft of **guidelines on practical recommendations for the development of genebanks of Animal Genetic Resources** (see Annex I of the AHA report).

Plans and priorities for the rest of the year.
Enrich the guidelines with specific examples implemented in some countries to illustrate the recommendations. Finalize the document and closing the AHA. Planning a publication (possible in GENRES journal).

Budget
The budget assigned for 2022 (**1.000 €**) was not used and it can be maintained for the next year (publication fees if needed).

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5. AD HOC ACTION USE OF THE IMAGE SELF-DIAGNOSTIC TOOL TO SUPPORT THE DEVELOPMENT OF A QUALITY MANAGEMENT SYSTEM IN EUROPEAN ANIMAL GENE BANKS

Objective:
The goal is to help standardizing the management practices in animal gene banks and to guide them towards implementation of a QMS.

Activities in the past year and output/results:
two experts in QMS have been identified who are willing to collaborate in the AHA:

- Mélanie Martignon
- Sonsoles Zabala


A call for collaboration was made to the EUGENA genebanks and other institutions which have been previously collaborated with IMAGE project. The following gene banks volunteered for the AHA:

- Spanish National Genebank.
- Genbank from Latvia.
- Serbia.
- Italy.




We need
more
genebanks

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5. AD HOC ACTION USE OF THE IMAGE SELF-DIAGNOSTIC TOOL TO SUPPORT THE DEVELOPMENT OF A QUALITY MANAGEMENT SYSTEM IN EUROPEAN ANIMAL GENE BANKS


Plans and priorities for the rest of the year.

- Get the feedback from GenResBridge partners (FR, NL, SL) and reviewed gene banks on the use of the tool, to check whether it needs some improvement
- Propose a calendar to the volunteer genebanks for two types of activities:
 - on-line meeting to discuss the tool and make a first assessment, write a report, identify priority actions and decide for the need of an on-site visit
 - on-site visit by an expert, it is expected to visit 50% of the assessed gene banks.
- Spring 2023 ex-situ WG meeting : present the state of progress of the action, discuss whether it should be extended to more gene banks and continued throughout 2023, introduce the new ISO standard for animal gene banks ISO 20387
- ERFP GA meeting 2023: present the results of the first semester of assessment and decide on the continuation and possible changes in the assessment method


Budget

The budget assigned for 2022 (5.000 €) for the cost of the physical visits was not used and it can be maintained for the next year.

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6. ANNUAL MEETING OF THE WG EX SITU CONSERVATION. 1st to 3rd June (Paris, France).

1. Report on the activities of the WG in the last year.
2. Update of the EUGENA status and inform on the novelties in the new EUGENA ToR.
3. Report on the development of Ad Hoc Action to strengthening national capacities towards the development of a national Gene Bank strategy.
4. Inform on the development of the Task Force on documentation software for genebanks.
5. Disseminate information about the role of zoos in the ex situ in vivo conservation of AnGR.
6. Discuss on and propose actions for an Action Plan to achieve the key commitments identify in the Animal Genetic Resource Strategy and, at the same time, propose ideas for the development of the future ERFP MyPOW.
7. Report on the measures for AnGR in the new European Union Rural Development Policy.
8. Disseminate information on the Nordfrost project.
9. Report on the Ad Hoc Action use of the IMAGE self-diagnostic tool to support the development of a quality management system in European animal gene banks.
10. Workplan for 2022-2023.

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7. OTHER ACTIVITIES.

- Collaborate with ERFP Secretariat in the dissemination of information and knowledge in the ERFP Webpage and Social Media.
- The Ad hoc action on specific measures for AnGR ex situ conservation in the framework of the animal health legislation **was approved by the SC**, but the start of this activity have been delayed until the European Reference Centre for Endangered Animal Breeds will be appointed, in order to develop the AHA in collaboration with that centre.

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8. PROPOSAL OF PLAN AND PRIORITIES FOR 2022-2023.

1. Development of **EUGENA**.
2. Development of a modern genebank documentation software.
2. Supporting the development of national regulation about germinal products collection intended to be kept in genebanks and the recognition of genebanks at national level (AHA-ERC)
4. End AHA strengthening national capacities towards the development of a national genebank strategy.
5. Sharing knowledge and expertise in relation with cryopreservation protocols by species.
6. Collaboration in the development of the Action Plan for the European strategy for Animal Genetic Resources and ERFP MYPOW.
7. Support the utilization of Quality Management Systems in Genebanks (AHA).
8. Spread information about ex situ conservation and EUGENA in collaboration with the Communication Strategy of the ERFP.
9. Collaboration with the Ad Hoc Action: Transboundary breeds in Europe. Promote concerted action between countries.

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