

ERFP Ad hoc action
Integration of in situ and ex situ
conservation approaches

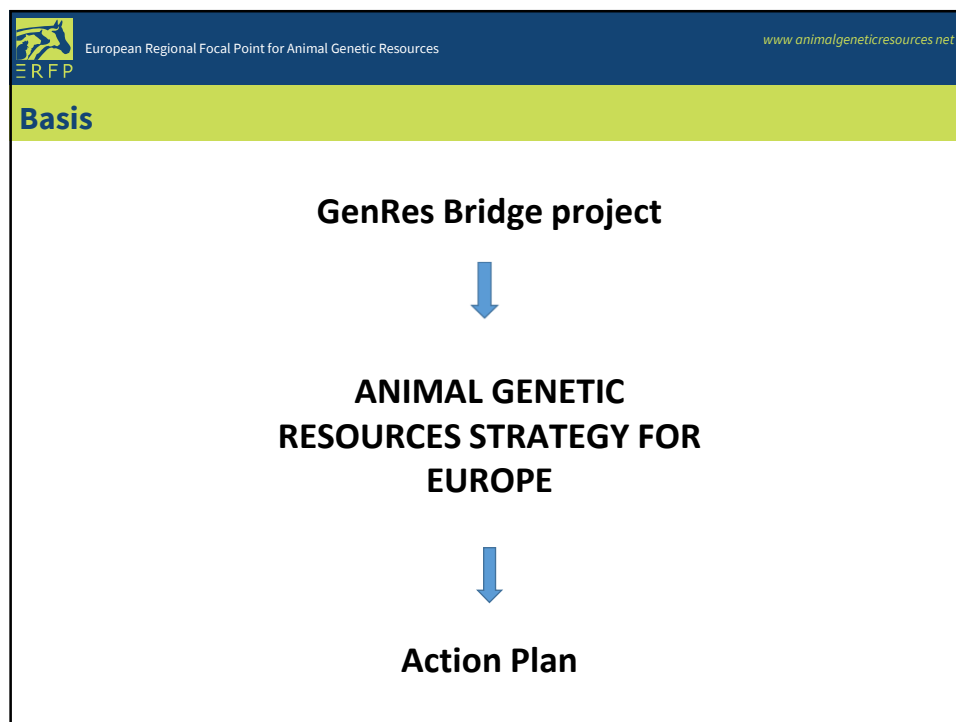
Meeting of the ERFP
Working Groups
6th/7th May 2025
Athens

ERFP
European Regional Focal Point
for Animal Genetic Resources


INSTITUT DE L'ELEVAGE **idele**

The poster features a large green circle on the left containing the meeting details. To the right, the ERFP logo (a stylized animal head in a blue square) and the text 'ERFP European Regional Focal Point for Animal Genetic Resources' are displayed. At the bottom right is the logo for the Institut de l'Élevage (idele), which includes a stylized green and red graphic and the text 'INSTITUT DE L'ELEVAGE idele'.

1



2


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Action plan

Recommendation of AnGR Strategy

Develop and implement national strategies and action plans for integrated and complementary in situ and ex situ long term conservation strategies for AnGR, engaging all relevant public and private stakeholders in the process

3


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Actions

Proposed actions

- **Identify national strategies and action plans** which include integrated and complementary in situ ex situ long term conservation strategies
(National Coordinators/ ERFP Working Groups)
- **Develop guidelines** for better integration and complementarity of ex situ and in situ conservation strategies for the conservation of endangered breeds and the genetic diversity within those breeds
(National Coordinators/ ERFP Working Groups)

4


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Actions

Proposed actions

- Design and **implement conservation and breeding programmes** with the integration of in situ and ex situ activities.
(Governments/ National Coordinators/ National actors)
- Establish **multi-stakeholder committee** to oversee the implementation of the national strategy
(Governments/ National Coordinators/ National actors)

5

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First step

Joint meeting of WG *Ex situ* conservation and WG *In situ* conservation


April 24th 2024
Nicosia, Cyprus

- Presentation of examples from different countries
- Discussion
- Identification of important items

Presentations can be found here:

<https://www.animalgeneticresources.net/index.php/event/joint-meeting-of-the-in-situ-and-ex-situ-working-groups-cyprus/>

6




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Identified issues

- Ways to raise awareness among breeders, breeder associations, and decision-makers about the necessity and importance of integrated in situ/ex situ conservation (examples)
- Need to encourage breeders to provide material to the genebank **and** to use the genebank material
- Analysis/adjustment of diversity in genebank material and diversity in live breeding population
- Targeted use of genebank material in live breeding population

7




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Identified issues


- Selection of suitable donor animals for the genebank (procedure, engaging relevant public or private stakeholders)
- How to build the institutional mechanism for acquiring material for the genebank – examples
- Legal issues in relation to the animal breeding regulation and animal health regulations
- Determining the need for ex situ measures for breeds not endangered?

8



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Ad hoc action?

9



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Organizational structure

ERFP Ad hoc action

Integration of in situ and ex situ conservation approaches

Coordinators


Ewa Sosin (Poland), Fernando Tejerina Ampudia (Spain),
Holger Göderz (Germany)

Budget

8.150 €

Proposal approved by the Steering Committee in December 2024

10



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Expected outcomes

Expected outcomes

- Guidelines for integrated in situ/ex situ approaches
- paper submission to Genetic Resources Journal

11



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Timetable

Time frame and planned activities of this Ad hoc action

| | |
|-----------------------|---|
| February 2025 | Determination of participants |
| March/April 2025 | Online kick off meeting; distribution of tasks |
| April - December 2025 | Collection and analysis of information <ul style="list-style-type: none">Already existing national strategies and action plansExamples of integrated approaches in European countries |
| October/November 2025 | Physical meeting <ul style="list-style-type: none">Analysis of collected informationWay forward and distribution of tasks for creation of guidelines and paper for Genetic Resources Journal |
| January – May 2026 | Preparation of guidelines and paper |

12



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13



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Organizational structure

Members

Delphine Duclos (France)
Zhivko Duchevev (Bulgaria)
Jana Peippo (Finland)
Mira Schoon (The Netherlands/EURC-EAB)
Srdjan Stojanovic (Serbia)
Christian Reimer (Germany)
Nina Svartedal (Norway)

14



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15



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First steps

Online kick off meeting

28th April 2025

- Introduction of the group
- Discussion about work plan/input and expected outcomes
- Planning of next steps

16



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17



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Next steps

Collection and analysis of information

- Already existing national strategies and action plans
 - Are there already programmes concerning the integration in situ/ex situ?
 - Strengths/successes?
 - Weaknesses/hurdles?
- Examples of integrated approaches in European countries
- Identification of differences between EU and Non-EU countries
(Do EU Regulations/National Regulations simplify or complicate matters?)

18



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19



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Next steps

Physical meeting

Planned for December 2025 in Balice, Poland

- Back to back with workshop with the Polish breed societies
- 1 day workshop
- 1 day internal meeting of the project group

20



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Cooperation with EURC-EAB

Close cooperation with European Union Reference Centre for Endangered Animal Breeds (EURC-EAB)

- Desired by both sides
- Topic is also included in the workplan 2025-2027 of EURC-EAB
- Mira Schoon and Holger Göderz as direct contact persons

21



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Cooperation with EURC-EAB

No worries!!

Inclusion of EURC-EAB does **not** mean exclusion of Non-EU-countries!

We want to work together, use synergies and benefit from each other!

22






EUROPEAN UNION
REFERENCE CENTRE FOR
ENDANGERED
ANIMAL BREEDS

In situ – ex situ integration to support endangered animal breeds

Challenges concerning in-situ and ex-situ integration

- Overview of challenges
 - Assessment why there is limited use of genebank material
 - Legal frameworks, EU Breeding legislation
 - Suggestions and advice to European Commission
 - Technical limitations in cryopreservation

Goal: Set up guidelines for optimal integration of in-situ & ex-situ in breeding programmes for endangered animal breeds



23



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ENDANGERED
ANIMAL BREEDS

In situ – ex situ integration to support endangered animal breeds

- Methods and software to select potential genebank candidates
 - Optimal contribution in terms of added genetic diversity
 - Cost-effective ex-situ snapshots of a population in each generation
- Use of genebank material in *in-situ* breeding programmes
 - Reintroduction of (lost) genetic diversity using ex-situ collections
 - Methods and simulation tools to evaluate breeding programmes and identify (lost) genetic diversity (necessity to use genebank resources)
 - Guidelines for breeding programmes for sustainable recovery of lost genetic variation using genebank resources (without reintroduction of known genetic defects)



24



In situ – ex situ integration to support endangered animal breeds

Technical and legal

- Overview of cryopreservation protocols and legislation
- Overview of protocols and legislation in relation to the use of genebank resources
- Suggestions and advice on legal framework to integrate the use of stored material in in-situ breeding programmes

Goal: Set up guidelines for optimal integration of in-situ & ex-situ in breeding programmes for endangered animal breeds

