

Heritage Sheep Breeds in Europe

Partner countries: France, Greece, Netherlands, Slovenia, UK.

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This programme has been designed to help ensure and improve the conservation, collection, characterisation and utility of genetic resources of Heritage Sheep Breeds in livestock agriculture throughout the European member states.

Heritage Sheep Breeds

Heritage Sheep Breeds (HSBs) are defined as genetically distinct, geographically concentrated and adapted to their environments. Typically, these sheep breeds are "local" breeds, traditionally farmed for commercial use and play an important role in the culture and rural economy of the regions in which they are managed. Despite the value of these breeds and their genetic resources for both environmental and economic sustainability of local communities within the European Union, they are only beginning to be recognised as "breeds at risk".

HERITAGE SHEEP is establishing a European-wide conservation programme of HSB genetic resources for the diversification of production in livestock agriculture and for their central importance in the long-term sustainability of medium to low input farming systems.

Achievement of this aim will have considerable benefits for the European Union. These include: (1) improving the quality of the environment through reducing the negative impact of intensive agricultural practices; (2) using natural resources in a sustainable way to manufacture products for the benefit of regional communities; (3) developing strategies to enhance the profitability of local breeds as a means of supporting the growth and competitiveness of rural economies.

Many concerns were expressed by breed societies of Heritage Sheep Breeds located in the different member states.

Factors the societies felt contributed most to reducing sheep numbers included:

- Decrease in public funding
- Lack of political will to support rural communities
- Policies and legislation, including environmental schemes
- Disease
- Predators
- Urbanisation
- Poor return on product, competition from other livestock
- Ageing population of farmers
- Lack of marketing support
- Inbreeding
- Loss of skills



Conclusions

To gain insights into the important threats facing the HSBs perceived by the breed societies, each society was asked to score their responses with a value of one as least important and five as most important. These values are given in tables presented on the website.

All of the data gained in the survey are those provided by breed societies. Whilst they provide important sociological insights into the subjective perceptions of each society, the data do not necessarily provide a robust quantitative evidence base to underpin policy and priorities for future conservation programmes.

Significantly geographical isolation of Heritage Sheep Breeds was highlighted as a major threat by those societies with breeds in regions facing disease outbreaks. A key example currently concerns those breeds in regions of the EU facing that are affected by Bluetongue virus (BTV). The threat to some HSBs in Northern Europe is already realised and as the disease spreads the number of HSBs at risk will increase. As yet geographical isolation has not been highlighted as a major consideration in prioritising conservation activities. The GENRES study and other national initiatives are providing an evidence-base to recommend that endemism does pose an endangerment risk to farm animal genetic resources.

The GENRES project has also collected new information on existing *ex situ* resources available for conservation strategies and is developing new cooperations with breed societies to coordinate animals for future collections of semen during the project.

In addition, the GENRES Project is exploring opportunities for *in situ* conservation strategies and is using best practice case studies on breeds that are benefiting from positive marketing initiatives and management programmes to help underpin their future commercial success and economic sustainability.

Data from the GENRES project are highlighting the urgent need for standardisation across sheep breed societies both nationally and internationally in terms of gathering, collating and maintaining quantitative data about parameters such as breed numbers and population sizes. Standardisation of methodology is essential to ensure that policy making in the member states and European Union is based on accurate information.

The breeds studied in the GENRES project

France	UK	NL	Greece	Slovenia
Basco Béarnaise, Bizet, Causses du Lot, Corse, Grivette, Limousine, Manech Tête Noire, Manech Tête Rousse, Mourerous, Rava	Brecknock Hill Cheviot, Cheviot (South Country Cheviot), Clun Forest, Dalesbred, Derbyshire Gritstone, Devon Closewool, Exmoor Horn, Herdwick, Lonk, Romney, Rough Fell, Shetland, South Welsh Mountain, Southdown, Welsh Hill Speckled Face	Black Blazed, Blue Texel, Drenth Heath, Flevolander, Mergelland, North Holland, Schoonebeek, Swift, Tevel, Zeeland Milk sheep, Kempen Heath	Boutsiko (Orino), Frizarta, Kefallinias, Sfakia, Katsika	Bela Krajina Pramenka, Bovec Sheep, Istrian Pramenka, Jezersko - Solcava

A key objective of the GENRES Project was to gather information on the Heritage Sheep Breeds.

A questionnaire was developed and sent to breed societies to ask their help in collecting data under the following headings:

- **Origin and History** – information relating to the breed, its description, origin and historical development, the type and extent of records kept by breed societies, as well as current *in situ* and *ex situ* conservation activities...
- **Numbers and Trends** – estimation of number of sheep flock numbers and sizes, number of breeding females etc. % of sheep in the region associated mainly with the breed; increasing or decreasing population trends; estimation of number of breeders aged over 60...
- **Threats** – Social, Political, Disease, Climate change...
- **Values** – the importance of the breed to its region through adaptation and contribution to the local environment, adaptation to and ability to thrive in extensive farming systems, contribution to the local community, such as through social cohesion and tourism, contribution to the local economy such as through high demand for regional products...
- **Current Situation and Future Trends** – promotional activities, marketing initiatives, programmes to increase productivity, improved health plans and conservation activities...

The information gathered in the questionnaire was entered into a database and has been compiled by our Greek partners into the web site: www.heritagesheep.eu