

HUNGARY

Biodiversity's restoration, & preservation & enhancement

Location
Malom

Programming period
2014 – 2020

Priority
P4 – Ecosystems
management

Measure
M10 – Agri-environment-
climate

Funding (EUR)
Total budget 550 000
EAFRD 293 250
National/Regional 51 750
Private 205 000

Project duration
2018 – 2023

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Using the Agri-environment-climate Measure to support the preservation of the Hungarian Coldblood horse breed.

Summary

The Hungarian Coldblood horse breed was traditionally used in agricultural works but the modernisation of agricultural tools has largely replaced it. Their breeding was carried out mainly by private farmers and their breeding objectives were often driven by the market preferences which jeopardised key traits of the breed.



The University of Kaposvár joined a rescue programme to protect the genetic lines of the breed with its own Coldblood studs. This programme aimed to identify and use representatives of the breed's foundational stallion lines for reproduction. Support under Measure 10 of the Rural Development Programme (RDP) facilitated the rearing of foals, born from carefully planned mating, to reconstruct the rare stallion lines.

Results

In the last three years, 2 350 doses of semen were collected and frozen from 18 breeding stallions from rare lineages.

Currently the University has 23 mares. Some were born from the University's own studs through planned mating and some were purchased from other breeders. Out of the 23 mares, 19 (83%) belong to the endangered stallion line.

Out of the current 52 stallions, 42 individuals (81%) belong to the rare line.

Lessons & Recommendations

- ❑ Foresight and inter-generational breeding work are especially important in horse breeding. Without them, breeders may easily alter progress of previous generations.
- ❑ Breeding work requires collaboration. In this case, collaboration was established between the university and an association responsible for breeding and breeders. Key success factors were that they respected each other's position and both were committed to conserving the breed.
- ❑ Policymakers can help those involved in preserving traditional breeds by ensuring the availability of support resources.

Context

The University of Kaposvár is located in the Southern Transdanubia region, in Somogy county. It is one of the country's most prestigious agricultural higher education institutions and has more than 50 years of experience in animal husbandry. The University currently preserves four native breeds, namely the Hungarian Spotted cattle, the domestic buffalo, the Hungarian Coldblood horse and the Hungarian native donkey. 140 to 150 animals are kept from each breed.

The breeding of the Hungarian Coldblood horse in Kaposvár started three decades ago. Initially, the main research focus was on new uses, such as for producing horse milk and horse meat. During the last decade there was a shift to preserving native animal breeds. This reshaped the breeding objectives and today it is primarily geared towards gene conservation. The University collaborates with the Hungarian Coldblood Horse Breeding Association.

The breeding of the Coldblood horse in Hungary has been carried out mainly by private farmers, however, their breeding objectives are often driven by the prevailing fashion of the market. For example, if black horses were more marketable, breeders would disregard other important traits of the breed to achieve the desired colour in order to gain higher profits.

Consequently, the stallion lines that play a vital role in preserving the Hungarian Coldblood horse breed were endangered. By the time the University took action, there were few stallions left belonging to the founding lines.

The genetic base of the breed was also further depleted by the practice of selling the best foals to neighbouring countries. This negative selection led to the loss of the best breeding animals for the Hungarian breeders.

The University of Kaposvár, together with the Hungarian Coldblood Horse Breeding Association and RDP support, made a successful effort to reconstruct the original stallion lines. In parallel, a national programme also commenced for the preservation of state-owned studs.

Objectives

The main objectives of this project were to:

- Conserve the Hungarian Coldblood horse breed.

- Protect and certify the Hungarian Coldblood state studs owned by the University of Kaposvár.
- Ensure greater involvement of all stakeholders in pedigree breeding for the Coldblood horse.



Activities

At the beginning of this project, the University started collecting stallions from the endangered lines of the breed, by purchase or lease. Out of the current 12 breeder stallions, eight individuals belong to the endangered lines.

The University carefully planned the mating of stallions that belong to rare bloodlines in order to reconstruct the breeding lines. An artificial insemination station was set up in Bőszénfa, a small village next to Kaposvár. A special facility was built to mate mares belonging to private farmers with the best matching stallions. Annually 18-20 mares are mated and, additionally, sperm is sold to farmers.

The foals are evaluated every year and based on the findings their future is decided. The animals can be used for breeding, auctioning, slaughter, etc.

The University has also an embryo laboratory which can transplant embryos from pedigree mares and stallions that belong to endangered lines.

In 2018, the University submitted the application for RDP AECM support.

In 2019, they started in-vitro biotechnology on an experimental basis.

The University is in the process of setting up their own stallion park in which they aim to collect and keep the best quality stallions. The purpose of this is to prevent the export of excellent breeding animals and to provide opportunities for private breeders to hire a stallion, or to buy sperm.

Main Results

- In the last three years, 2 350 doses of semen were collected and frozen from 18 breeding stallions.
- The University currently has 23 mares. Some of these were born from the University's own studs through planned mating and some were purchased from other breeders. Out of the 23 foals, 19 (83%) belong to endangered stallion lines.
- Out of the current 52 stallions, 42 individuals (81%) belong to rare breeding lines.
- The Coldblood horse breed is used successfully for agricultural and tourism purposes.
- Annually, 10 000-12 000 people visit the Game Management Landscape Center and become acquainted with the Coldblood horse breed, as well as with other rare domestic animal breeds.
- During the Kaposvár Animal Husbandry Show (attended by some 25 000 visitors), the presentation of the breed played a key role in the promotion of the breed.
- Every year, 50-60 university and vocational high school students do their traineeship working on the breed. They learn about the characteristics of the breed, the basics of horse training and are involved in looking after the horses.
- The University also slaughters foals which are unfit for breeding and sells horse meat through their own restaurant. Every year, 2-3 animals are processed and their meat is used to make regional specialties and dried products.

Key lessons

Foresight and intergenerational breeding work are especially important in horse breeding. If breeders only focus on momentary market benefits they risk altering what previous generations have achieved. Preserving old animal breeds requires knowledge and deep understanding of the breeds.

Breeding horses to save varieties depends on collaboration. Collaborative work was established between the University, the association for breeding the Coldblood horse and breeders. Key success factors were the respect for each other's position and their commitment to the breed.

Policymakers can help those involved in preserving old breeds by ensuring the availability of support resources.

Many elements of the implemented project could be adapted for preserving and breeding other native animal species. This may concern technical elements or programme details, the use of biotechnology, or the successful private-public partnerships. In the future, the University of Kaposvár would be glad to share its experiences with those who are interested in the work done so far, and to share the knowledge they have gathered. It is hoped that the University will have the opportunity to collaborate with other similar European programmes in the future, and thus take active action to protect Europe's native animal species.

Additional sources of information

n/a