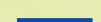

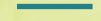
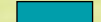


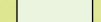


LIFE-Nature project in the Hortobágy National Park

Legend:

-  Rivers
-  Main Road
-  Canal
-  Ponds
-  Settlement
-  Project action localities
-  Territory of Hortobágy National Park

Some important data:

- Extension of the Hortobágy National Park:
82,000 hectares.
- Area directly affected by LIFE project actions:
10,000 hectares.
- Total length of backfilled canals: **500 km.**

Photos: Dr. Szilvia Gőri, István Kapocsi
Illustrations: Gyula Nagy

Contact:

Beneficiary of the LIFE-project:
Hortobágy National Park Directorate
H- 4024 Debrecen, Sumen u. 2. Hungary
Dr. Szilvia Gőri project manager
Tel.: +36 52 349-920
www.hnp.hu/~life2002

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Restoration of pannonic steppes and marshes

*LIFE-Nature project
in the Hortobágy National Park
2002-2005*

with the contribution
of the LIFE financial instrument
of the European Community



Why did the LIFE project have to be launched?

On vast areas of the Hortobágy steppes irrigation systems were constructed for high yield grasslands and rice fields in the 1950-60ies. Majority of them never had been used, but the abandoned channels and dikes altered the natural surface micro-topography of the area and caused serious damage to wildlife. Those natural processes which maintained naturally the ecological network of alkaline dry grasslands and marshes became blocked, because:

- the dikes and channels have fragmented the native grasslands and
- formed an obstacle to natural flow-path of surface waters.

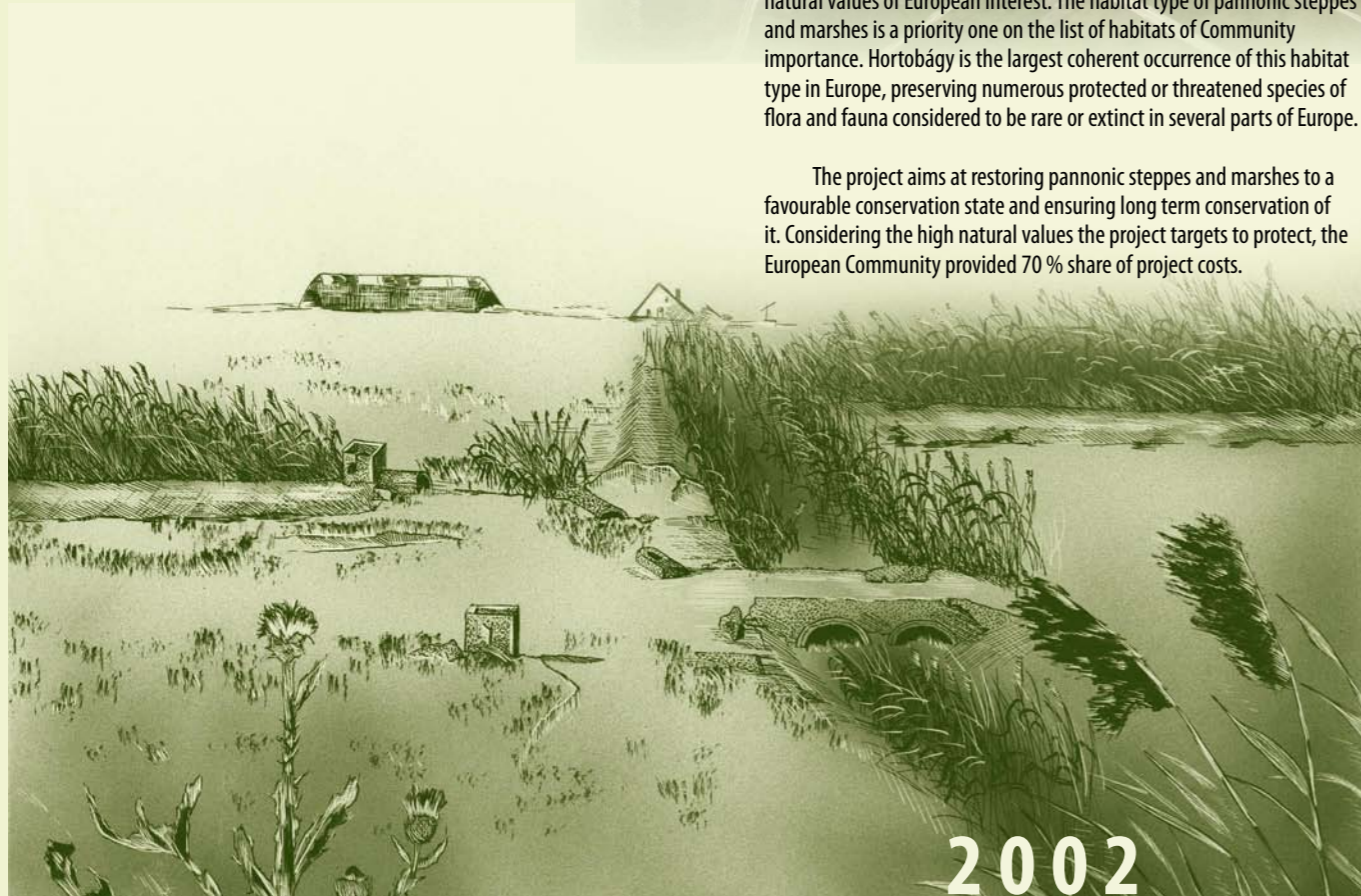
Thus the natural hydrology of wetlands suffered complete change and the seasonal and permanent marshes dried out, leading to loss of biological diversity of the area.



The aim of the LIFE project:

Natura 2000 is a European ecological network of sites hosting natural values of European interest. The habitat type of pannonic steppes and marshes is a priority one on the list of habitats of Community importance. Hortobágy is the largest coherent occurrence of this habitat type in Europe, preserving numerous protected or threatened species of flora and fauna considered to be rare or extinct in several parts of Europe.

The project aims at restoring pannonic steppes and marshes to a favourable conservation state and ensuring long term conservation of it. Considering the high natural values the project targets to protect, the European Community provided 70 % share of project costs.



Implementation of the LIFE project:

- with canal filling and embankment levelling we removed the unused dikes and canals which were blocking previously the surface water movements, and adjusted their tracks fully to the natural surface relief,
- seeding of the main native grass species (*Festuca pseudovina*) on the tracks of the eliminated major channels to aid natural re-colonisation process of the vegetation,
- water management structures were renewed and built to keep the run-off waters from precipitation in the marshes,
- monitoring.

Results of the LIFE project:

- The artificial fragmentation of grasslands is stopped, the natural connections between dry grasslands and wetlands re-developed.
- Natural processes connected to the surface micro-topography and overland-flow maintaining the habitat diversity of alkaline steppes became initiated and ensure long term conservation of it.
- Natural pattern of surface water flow of the formerly fragmented beds is re-established, the natural hydrology of marshes is restored.
- Favourable habitat conditions are provided on the long term for several species of flora and fauna of European importance, like a rare thistle species (*Cirsium brachycephalum*), Weatherfish, Bittern, Spoonbill, Common Crane, Great Bustard, Otter.

The LIFE project and land use:

The project improved the conditions for extensive grazing, which is the basic nature conservation management tool of the area involving local farmers.

