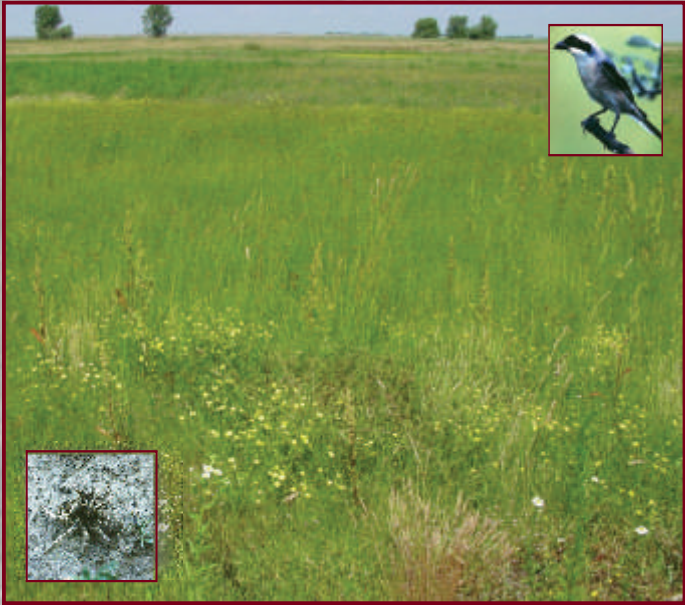


**Grassland restoration and marsh protection in Egyek-Pusztakócs**

**LIFE-Nature programme**

Hortobágy, the largest grass steppe of Europe, used to be a mosaic of open floodplains, marshes, loess and alkali grasslands and forests. The landscape was formed by floods of river Tisza, grazing and trampling by large herbivores and fire. After forests were felled and floods were controlled, the area has become a grass steppe interspersed with marshes and used mainly for livestock grazing.

In the area of the Egyek-Pusztakócs marsh system, extensive floods have disappeared, erosion intensified and soil salinity increased, which all led to an acceleration of alkalinisation after river regulations. Today the area can be characterised by extensive Pannonic salt steppes and marshes (NATURA 2000 code 1530) and remnants of Pannonic loess steppic grasslands (code: 6250) on higher grounds. Arable lands have covered a large proportion of the area for centuries.



The Egyek-Pusztakócs marshes have preserved the flora and fauna of alkali marshes that have largely been destroyed in Hungary and elsewhere in Europe. With the construction of a water-supply system to the marshes, the area has hosted the oldest (since 1976) and largest (c. 5000 ha) habitat restoration programme in Hungary, and quite possibly in Europe.

**Objectives of the LIFE-Nature programme (2004-2008)**

The programme is the second phase of the complex habitat restoration project and it aims the reconstruction of grasslands and protection of marshes already rehabilitated, including:

- the creation of ecological corridors among fragmented grasslands and establishment of buffer zones near marsh edges,
- the elimination of several threats to grasslands (e.g. goose farming, lack of grazing),
- protection and appropriate conservation management of the rehabilitated marshes,
- the establishment of nesting and feeding sites for birds of prey and waterbirds,
- the development of management plans and the biological monitoring of habitat restoration and management, and
- the enhancement of public awareness to the protection of grasslands and marshes and to the NATURA 2000 network.

**Major activities of the programme**

**1. Reconstruction of grasslands on arable lands**

- We establish grasslands using native grass species to reconstruct former loess grasslands and alkali steppes on 680 ha arable land in ecological corridors and buffer zones.

**2. Creation of wooded areas**

- We create wooded areas in areas of former forests and in edges of marshes bordering intensively used arable lands by planting native tree and bush plant species typical to steppe forests on 80 ha arable lands.

**3. Grazing and fire management on marsh edges**

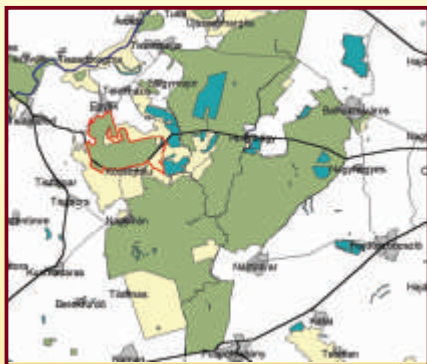
- We apply grazing by Hungarian grey cattle as conservation management in the edges of marshes consisting of homogeneous reedbeds and grazing by sheep in non-grazed or in newly restored grasslands on a total of 600 ha.
- We also conduct controlled burning as a conservation management to open up the homogeneous reedbeds in three locations on a total of 30 ha.

**4. Extensive cultivation of arable lands for wildlife**

- To enhance populations of small mammals that serve as prey for protected birds of prey and to provide feeding sites for migratory waterbirds (ducks, geese, cranes), we extensively cultivate 150 ha arable lands by seeding the preferred crops in narrow parcels and without using any chemicals.







The geographical location of the LIFE project area (marked in red) within Hortobágy National Park (area marked in green).

### What is the NATURA 2000 network?

**NATURA 2000** is a network of areas designated for the protection of habitats, animal and plant species of European importance. The system covers 21% of the surface area of Hungary and consists of **Special Protection Areas** for the protection of birds and **Special Areas of Conservation** designated for the protection of other animal and plant species and habitats.

Further information on the NATURA 2000 network can be found at <http://ec.europa.eu/environment/nature/>

The **LIFE-Nature programme** is the financial system supporting conservation actions within the NATURA 2000 network. For further information, please see <http://ec.europa.eu/environment/life/index.htm>

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## Grassland restoration and marsh protection in Egyek-Pusztakócs



### LIFE-Nature programme, Hortobágy National Park

With the support of the European Union, for the protection of NATURA 2000 habitats



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