

**LANDSCAPE CHANGES AND THREATENING FACTORS OF NATURAL BIOTOPS OF THE LOWER RIVER TISZA AND MAROS VALLEYS**

**Deák Á. J.**

The making of the actual biotope-map of Csongrád county on 1:25,000 scale started 3 years ago. This vegetation mapping work is part of new national vegetation-mapping programmes (CORINE and MÉTA).

For presentation the flood-areas of the South-Tisza Valley and the Maros Valley were chosen, where landscape ecological aspects: connection between the soil, geomorphology, hydrogeographical condition and vegetation was also studied.

The MÉTA (Hungarian Biotop Map Database, HBMD) is organized by the Hungarian Academy's Institute of Botany and Ecology in the years 2003-2005. During this work actual data are collected on fallows, invasive species, naturalness, potential vegetation, threatening factors, and „ecoregions” (it's a new index for landscape ecological planning which summarizes the naturalness and the regeneration potential into one concept) in 35 ha hexagonal grids which result point maps.

In the surrounding of the meeting points of the rivers Körös and Tisza (at Csongrád), Tisza and Maros (at Szeged) the history of the landscape was examined since the late 18th century until today too.

1:50.000 landscape historical map-series were created using the CLC-CÉT (CORINE-based) categories. The base of this series are old maps (maps of 1st (1764-1787), 2nd (1806-1869), 3rd (1872-1887) military surveys, regulation of the riverways and maps of landlords), which show the possible vegetation types and landscape use in the late 18th, mid-19th and late 19th centuries. The actual map was created according to the present military maps, SPOT-4 images and field work. Comparing these maps it's possible to see the changes and assign the priority places where habitat reconstruction is recommended as well as what kind of landscape use is sustainable.

Maps were also created on sample areas which could be renaturalized. They show where what kind of landscape use and natural habitats are possible to be aimed. 2 sample areas (Bokros-puszta and Nagyréti at Csongrád) became part of a habitat reconstruction project, which is accepted by the Csongrádian Local Government for its Areal EU Development Programme.

The destroy of natural values was quantified and presented on maps during the last 200 years. Though Hungary has still a lot of wetlands even on European level with great biodiversity and rare species, during the last 150 years e.g. 99,2% of the swamps and flood areal meadows were lost in the outskirts of Szeged!