

Grasslands in Slovakia

- very important habitat from a biodiversity point of view
- very high species richness on grasslands in some localities
- traditional land-use preserved in some localities, but disappearing quickly
- many grasslands were damaged or destroyed during the socialism by intensive agriculture
- grasslands in remote localities became threatened because of a land abandonment, huge acceleration of land abandonment after political changes in 1989
- about 350,000 ha of grasslands lost due abandonment during last 60 years

High need for a comprehensive national information system about grassland state and distribution

Builling of a national Grassland Information System

- from 1998 national grassland inventory project started organized by NGO DAPHNE-Institute of Applied Ecology in co-operation with Dutch organisation VeenEcology
- funded by PIN-MATRA
- inventory was carried out till 2006
- later phases funded also from WB/GEF project, national sources from Slovak MoE and also from private sources
- total costs of the inventory were about 750, 000 800,000 EUR

Methodology and results of the inventory

- polygons of homogenous grassland vegetation mapped
- vascular plant composition recorded per each polygon with the information about their cover in simple 3-degree scale
- military maps in the scale 1:25,000 used with printed probable grassland areas derived from CORINE Landcover (844,000 ha pre-selected)
- more than 96% of CORINE pre-selected area mapped (more than 300,000 ha) till 2006, more than 16,000 polygons mapped and processed into GIS with nearly 1 million of species records

Agri-environmental schemes – new challenge for conservation of Slovak grasslands

- implemented since 2003 (SAPARD pilot areas) and from 2004 horizontally in the whole country
- scheme for the protection of semi-natural and natural grassland protection included according the proposal of DAPHNE-IAE
- scheme applied only on semi-natural and natural grassland mapped during the inventory DAPHNE-IAE served as a certification authority for farmers
- "intelligent" overlay of Grassland IS with LPIS per each farm – integration of grassland information into LPIS
- additional mapping farm by farm carried out in some cases – LPIS with defined semi-natural grasslands was used as a base

- grasslands classified into 4 ecological (management)
 types
- from 2007 7 types are used (Dry grasslands, mesic grasslands, mountain hay meadows, lowland wet grasslands, floodplain Cnidion grasslands, fen grasslands and high-mountain grasslands)
- 121,000 ha certified in the period 2003-2006 covering more than 660 farms from the whole country



Certification in the period 2007-13

- done by State Nature Conservancy
- agreement between Institute of Soil Protection (responsible for LPIS maintenance) and SNC about data exchange
- ISP provides updated LPIS yearly and SNC updates data about semi-natural and natural grasslands in LPIS
- the data are available also on map server of ISP

www.bodnemapv.sk

 data about semi-natural and natural grassland in LPIS are derived only from issued certificates (including older DAPHNE certificates), so no national overlay of grassland IS and LPIS has been done so far (but about 80 % of semi-natural grassland within LPIS has already been certified)

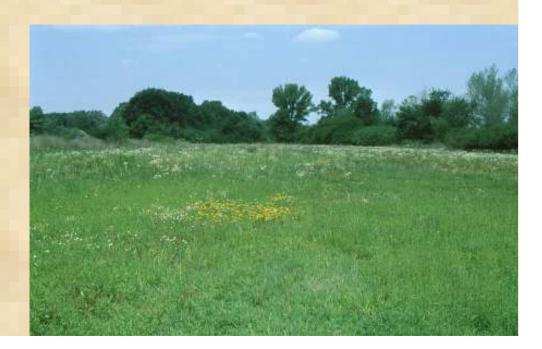
Weak points of the system

- semi-natural grasslands are included into system only if somebody asks for the certificate
- only the whole LPIS blocks may be certified, so if seminatural is only on minor part of the block, it might not be included into system
- only one management type per block can be selected problem with larger blocks



Conclusions

- the approach in Slovakia enables targeted and more effective support for management of seminatural grasslands
- management of high nature value grasslands is better targeted and paid
- system was accepted by farmers and the scheme was one of the most successful within agri-environmental programme



Challenges for the future

- incorporation of all valuable grasslands covered by GIS into the system
- regular updating of Grassland IS
- biological monitoring of the scheme implementation –
 first study done by Daphne-IAE this year, but on a very
 small sample of blocks it has showed, that practical
 application of the scheme is not ideal many cases,
 when the habitat quality is declining in spite of AES
 application, monitoring of NATURA 2000 habitats is still
 missing

