Expert input sheet

Conservation and management of Pannonian Grassland in Hungary

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Habitat(s):
1530 - Pannonic salt steppes and salt marshes; 6110 - Rupicolous calcareous or basophilic grasslands of the Alyssio-Sedion albi; 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites); 6240 - Sub-Pannonian steppic grasslands; 6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels; 6440 - Alluvial meadows of river valleys of the Cnidion dubii; 6510 - Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis); 6520 - Mountain hay meadows

Biogeographical region:
Pannonia

Member state:
Hungary

Region(s) (if applicable):
Heves, Borsod-Abauj-Zemplén & Nógrád county.

Issues and pressures
Nearly all Pannonic grassland habitats are belonging to human activities. The traditional land use of this open habitats declined and abandonment and not suitable management caused habitat loss, fragmentation and / or degradation. The land tenure are very variable in the case of grasslands: state properties (esp. lowland national parks) are rather significant, while the private sector is also remarkable. In hilly forested areas the hayfields are owned by forestry enterprises, whose main involvement is not deal with grasslands. The pressure from the invasive alien species (esp. Robinia pseudoacacia, Amorpha fruticosa, Solidago spp., Acer negundo, Fraxinus pennsylvanica, etc.) are high, which make the management more complicated.

Conservation requirements
Adaptive management is needed, though the above listed habitat types need different management schemes. Preservation (without active land management) is only relevant to some rocky habitats (subtypes of 6110) in small extent. If propagules are available some habitats easily be reconstructed (e.g. 6210, 6440), if the invasive species’ pressure is low. Habitat localities with great extent are also utilisable economically (e.g. 6210, 6440, 6510).

Conservation management
Habits with greater extents are under economic utilisation (e.g. hayfields, alluvial meadows) where the EU farm subsidies have the main facilitating factor in management. Thus some legal restrictions have
been announced for grasslands in Hungary these are not sufficient for the management of different grassland types. The site-level management schemes are needed. The achievement of Natura 2000 management plants should help to facilitate this process (but these are not legally binding tools).

**Species specific management:**

No

(asterisk [*] indicate priority species)

**Plants:**
318 Pulsatilla grandis
140 Thlaspi jankae
112 Echium maculatum
249 Himantoglossum spec.
24 Ferula sadleriana*
62 Onosma tornensis*
214 Dracocephalum austriacum*
142 Adenophora lilifolia
208 Iris aphylla ssp. hungarica
207 Gladiolus palustris

**Animals:**
307 Stenobothrus eurasius
300 Isophya costata
269 Lycaena dispar
272 Phengaris teleius
260 Eriogaster catax

**Barriers and bottlenecks**

Beside the lack of management skills the main barrier is usually the inappropriate agricultural policy. Patchy grassland stands are economically not interesting for the land-owners (esp. the forest clearings). The Pannonian vegetation is very mosaic-like, patchy forest-steppe habitats are very remarkable, which usually need difficult management. The succession and degradation is so quick, that the prevention of the process of habitat loss is very difficult. These stands are not belonging to the agricultural land so the the EU farm subsidies are not available. On the other hand the situation of greater extent sites of meadows and pastures are better, mostly the intensification is the main issue.

**Solutions and opportunities**

In cases of small, very threatened and mosaic-like localities land acquisition by the state should be a solution. The nature conservation bodies with cooperation of NGOs, local stakeholders should ensure the management of these sites. But it is recommended only for cases with small vulnerable habitats which need special management skills (e.g. hand mowing, in situ conservation, etc.).

In greater extent habitats e.g. meadows and pastures "fine-tuning" of measures are needed. It should be involved in the framework of management planning, which also a good tool to reach the different
stakeholders and local people. If they understand the nature conservation's goals the first step will be done in the way to eliminate the conflicts.

Cross cutting issues
The increase in Natura 2000 sites in Hungary has become a hotbed of numerous conflicts (21% of Hungary is protected and/or Natura 2000 site). Changes in rural areas, such as depopulation and land abandonment, but also intensification and loss of biodiversity, usually proceed very slowly yet are often irreversible. These non-forested habitats are typical signposts of this trends. The Green Infrastructure investments should be done in Natura 2000 sites.

Lessons learned / best practice
Many grassland reconstruction projects were carried out in the framework of the Environment and Energy Operational Programmes in Hungary from 2006. This is a rather good tools for the nature conservation bodies for applying different management schemes in situ (e.g. grazing with different livestock / breed and density/, mowing techniques, prescribed fire, etc.).

Opportunities for joint action
This habitats show has many similarities in the Pannonic biogeographical region, the threats are nearly the same in the post-communist states, which should be positive to find the similar response to similar questions. For example, many transboundary sites.

References


