## ALKALINE FENS IN POLAND AS A TARGET OF NATURA 2000 MANAGEMENT PLANNING & IMPACT ASSESSMENT

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#### **MANAGEMENT PLANNINING**

'Plans of conservation measures' (simplified form of management plans) were prepared for more than 400 Natura 2000 sites in Poland in the years 2011-2014. Circa 50 of them contain 7230 alkaline fens habitat as well.

Logframe of Polish Natura 2000 management planning assumes that Natura 2000 site objective is to achieve Local Favourable Conservation Status of each species and habitat if possible. LFCS is defined by the threshold of various habitat features. The plan should identify threats, establish short-term objectives, and prescript the conservation measures to achieve them.

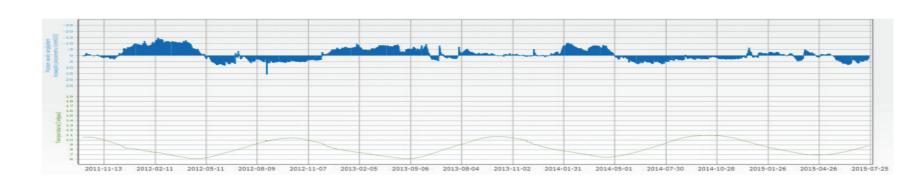
On the basis of 38 plans review, it may be concluded that:

- In numerous sites with 7230 habitat, important differences were found between existing knowledge in sites Standard Data Forms and the actual state. Despite some national surveys, the knowledge about habitat resources even in Natura 2000 sites is still not complete;
- Mapping of the habitat needs field effort and generally is not possible 'on the basis of existing materials'. If more knowledge was necessary, it was not obtained during the planning process but was planned as a future conservation measure,
- Due to insufficient amount of knowledge about habitat in the site, in many plans no real conservation measures but only future deepening of knowledge were planned.

If habitat management was planned, it was mainly limited to vegetation management, usually using the single standard agri-environmental scheme designed nationally to alkaline fens habitat but in fact not appropriate in all situations.

#### Problem: water conditions?

Only in two from 38 reviewed plans the water conditions were recognized by at least a 1-year water level recording and by measuring at least the basic parameters of water. In most of the plans, the planned monitoring was limited only to vegetation monitoring, with water level monitoring only by single observation once every few years and with no water chemistry monitoring. Contrary to common knowledge accenting water conditions are crucial for fens sustainability, they are commonly not recognized nor planned to be recognized in site management plans.

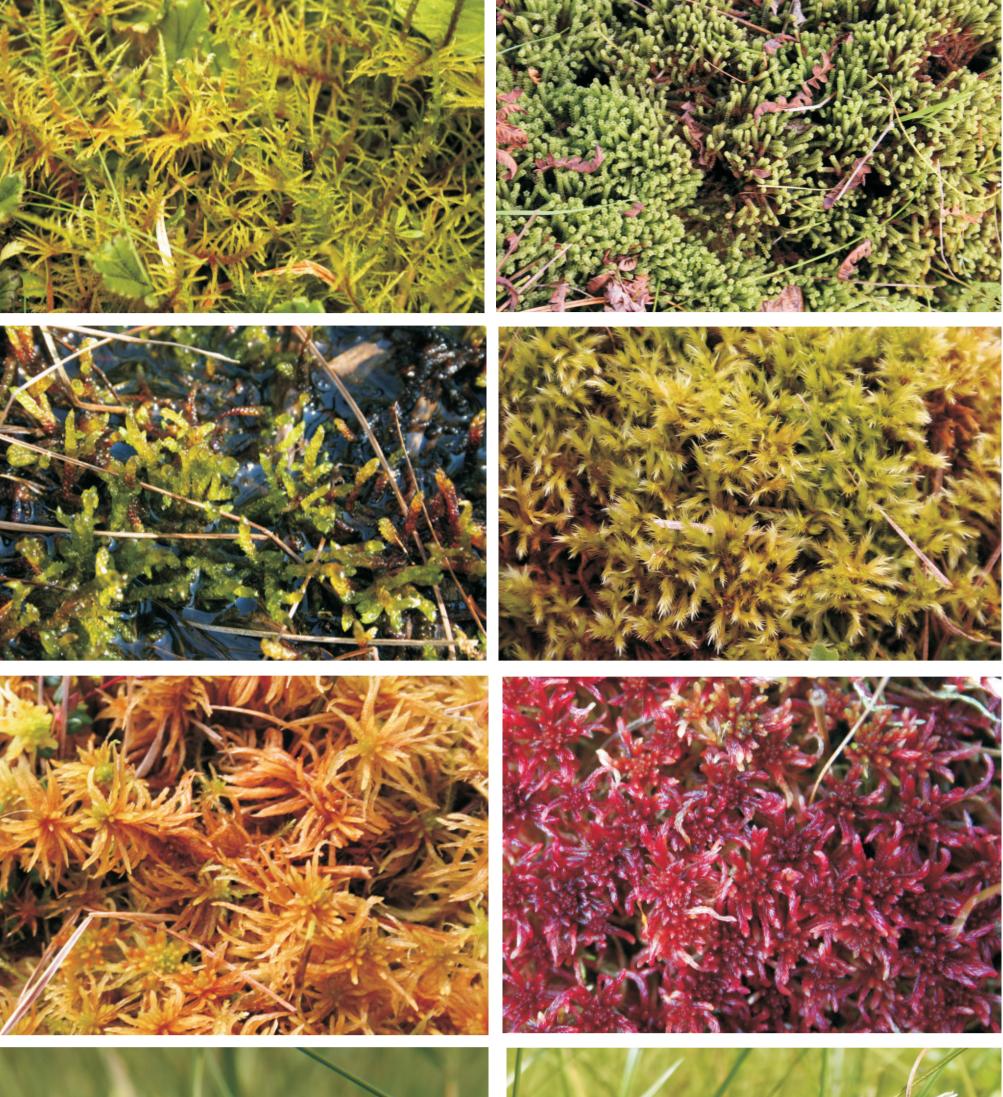


#### Problem: to mow or not to mow?

In Biebrza valley, after years of abandonment, active management of fens by mowing was introduced on huge areas. Although it prevents trees expansion, it creates some important threats for habitat biodiversity.

Standard mowing scheme does not seem to be appropriate for extensive unified implementation, despite that it is the easiest and is promoted by national agri-environmental mechanisms.













# Even a small-scale disturbance influencing

hydrology can have an extensive impact on alkaline fen habitat.



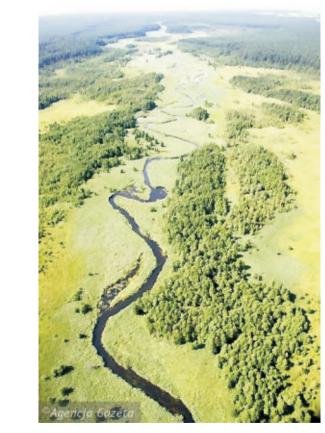
Even cleaning small ditches, usually avoiding impact assessment, may strongly influence the hydrology of an adjacent fen.

#### **ENVIRONMENTAL IMPACT ASSESSMENTS**

Alkaline fens are threatened by various investment projects. On the basis of reviewing 38 individual cases, it can be concluded that not always formal EIA & Natura 2000 Habitat Assessment procedures can prevent this threat. Main shortcomings and problems are:

- High sensitivity of alkaline fens habitat to small water retention projects. In northern Poland many topographic locations of this habitat are also the most suitable locations for building small water reservoirs. Because 'small water retention' is generally considered as positively influencing the environment, it often happens that the particular negative impact of this habitat is not identified properly, especially in simplified assessments applied for small projects.
- High sensitivity of alkaline fens habitats (typically with small habitat area) to small projects such as small damage of the area, small water abstraction or only 'maintenance' of the ditches. Such small projects systematically avoid EIA and in practice can avoid Natura 2000 Habitat Assessment as well.
- No proper recognition of the habitat. Even if mire habitat is identified for EIA, it is often not recognized properly and misclassified as other kinds of mires (as transitional bogs 7140 habitat). Sometimes no valuable habitat is identified at all, despite alkaline fen existing in the
- Taking under consideration the direct destruction of habitat only, no long-distance and maybe long-term impacts on water conditions.

As a result of above shortcomings, alkaline fens are less successfully protected by the Impact Assessment procedures than other habitats and species.

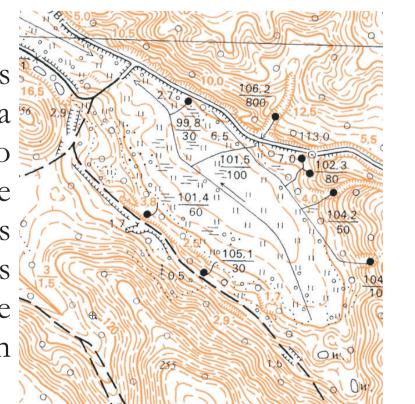


#### Rospuda case (Augustow bypass)

Bypass road of Augustow has been planned to cross Rospuda valley - probably the most well preserved natural alkalic fen complex in Poland. The most destructive variant was promoted due to misinterpretation of mire habitat type as much more common and less sensitive transitional bogs. The destruction was avoided only by correcting this mistake under the pressure of EU infringement procedure.

#### Wietrzno case

Small stream valley in the glacial landscape was planned by local Forest District to be used to build a water reservoir, as the most suitable place. No environmental constraints were identified during the content procedure. At the last moment, it was identified that one of the most valuable alkaline fens in the region exists in the valley and that it would be destructed by the reservoir. This time the destruction was avoided.



#### NATIONALLY PROTECTED SPECIES

Nationally protected species are an important 'umbrella' over the 7230 alkaline habitat in practice of EIA procedures. Especially if the habitat is often misclassified, its typical species are usually recognized. Their presence is followed by a requirement of specific derogation permit, which focuses the attention of environmental conservation authorities on the case. Fortunately, most of the typical species of alkaline fens, including the most typical moss species, are under legal protection in Poland.

### SPECIFIC FEATURES OF THE HABITAT

- 'not easy in identification and distinguishing from other habitats;
- ·high sensitivity to small, local damage (scale of negative effects overproportional compared to the scale of habitat area destruction);
- ·high sensitivity to some types of small projects that often avoid full assessment due to scale;
- ·limited possibilities of successful compensation/restoration

#### CONCLUSION

Because of the characteristic features of the alkaline fens habitat, neither typical Impact Assessment procedures, nor even protected areas management planning, at least in most common practical implementations, guarantee safety and favourable future prospects of the alkaline fens in Poland. To achieve favourable conservation status, much more attention is necessary. Some habitats, such as alkaline fens, must be regarded as requiring more care than other habitats.





