# 7230 Alkaline fens

Management of Natura 2000 habitats. Summary

*Cottongrass and Davall's sedge are dominant plants on calcareous fens. Photo: Viera Šefferová Stanová*

Alkaline fens are mires occupied by peat- or tufa-producing small sedge and brown moss communities developed on soils permanently waterlogged with calcareous water supply, and with minimal water level fluctuation. They are generally species-rich both in terms of mosses and flowering plant species. Alkaline fens have been selectively drained in the past and have become very rare in most of EU countries and have a high conservation priority.

Formerly, hydrological systems that provided natural fens with a large supply of base-rich groundwater were able to stabilize nutrient poor fen vegetation for many centuries, without any management by man. However, during the past few centuries, almost all fens have been slightly drained and changed into low-productive meadows and pastures that cannot be maintained without management.

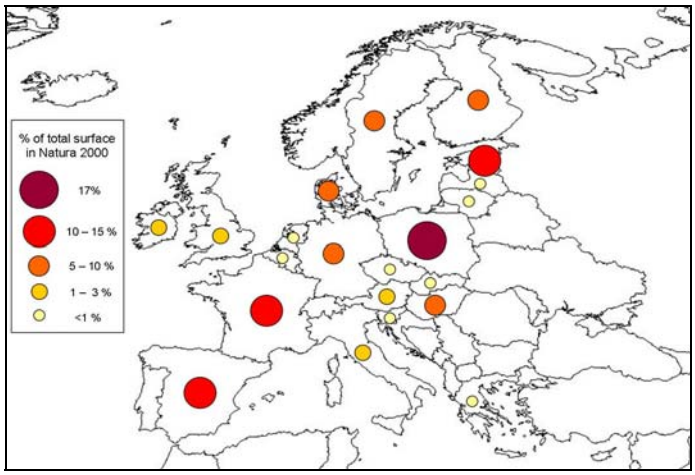
A significant proportion of fens are managed by conservation mowing - purely for habitat management. Mowing is carried out by hand mowing on a small scale and with light machinery adapted to the sensitive environment of fens, such as small and light mowers, pedestrian-driven mowing machines, or with specially adapted of tyres (low pressure, twinned wheels). Cut biomass is then gathered and removed from the site. As a minimal management, mowing every second year or also with longer intervals of 3-5 years is judged to be sufficient.

Moderate grazing on fens can be recommended as an alternative conservation strategy to mowing. But optimal grazing conditions have to be developed to minimize the unwanted effects of foraging and trampling. Reduction in species richness and changes in species composition and species traits may occur.

The grazing intensity has to be determined carefully. Managers in France recommend an average pressure of between 0.2 and 0.8 Cattle Unit/ha. In Scotland, fens should be accessible to stock during the driest months of the summer. They should be grazed for at least two weeks each year.

In northwest Europe public pressure increases for the restoration of fens, which were heavily damaged by drainage and agricultural pollution. Large projects for the restoration of fens are appearing mainly in northern Germany, the Netherlands and Switzerland.

Without appropriate management, natural succession will lead to scrub and woodland forming. Cutting scrub by hand is one solution, and this practice is still utilised. For some sites, this is the only workable option, but it is extremely labour intensive and so only suitable for small areas. Low ground pressure excavators, cutting machines and portable incinerators have all been developed and are enabling large areas of scrub to be restored to fen.




*Percentage distribution of the total surface of Alkaline fens in Natura 2000*

The complete text of the document is available at:
http://ec.europa.eu/environment/nature/natura2000/management/best_practice_en.htm

*Management of Natura 2000 habitats is a project launched by the European Commission in January 2007 aimed at defining best practices for management of habitat types included in Annex I of the Habitat Directive (92/43/EEC) that need active recurring management. Twenty six habitat types that are representative of different bio-geographical regions have been considered.*