

6450 Northern Boreal alluvial meadows

Management of Natura 2000 habitats. Summary



Nordic Boreal alluvial meadow site under restoration in Svanselse Dammängar (SE081 0073), Northern Sweden. Photo: Mats O.G. Eriksson.

Northern Boreal alluvial meadows are a semi-natural habitat located along watercourses that are normally ice-covered in winter. The meadows are characterised by two main features; regular flooding in spring and the impact of mowing, whether discontinued or still ongoing. Flood sediments form the substrate for the vegetation, and silt transported by river water is the main nutrient source.

The mowing helps to maintain the alluvial meadows in an early succession stage, with a flora including low-growing species with weak competitive ability. Enhanced foraging conditions for various species of water birds due to the rich abundance and good availability of plants and invertebrates is an important by-product.

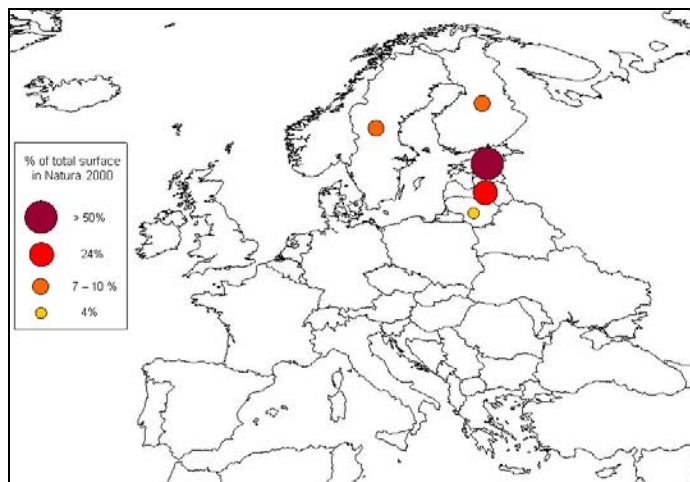
The habitat is restricted to regions in Northern Europe with pronounced seasonal differences, with a vegetative period ranging between 100 and 200 days, depending on the location. At northern sites, longer summer daylight compensates for the short vegetative period.

The use of naturally inundated meadows for hay-making was often the corner-stone of the farming economy in northern Europe in earlier days. The alluvial meadows might provide rich harvests of winter fodder year after year, without any external input of fertilisers other than the annual input of nutrients in flood water. In northern Sweden, techniques to regulate or dam the river flow in order to increase the inundated area or the length of the period of flooding were developed and became widespread from the end of the 18th century.

The use of the alluvial meadows for hay-making peaked during the second half of the 19th century. With the development of methods for cultivating sown hay crops on arable land, this kind of labour-intensive land use was gradually phased out, and very few sites were still managed in the traditional way by the 1950s.

Regular removal of the overgrowth is a prerequisite for the long-term maintenance of the grasslands' conservation status and, together with providing a flood regime which follows the natural seasonal pattern; these are the two main factors to consider in order ensuring their proper management.

Traditionally, the meadows were scythed, and this is still the preferred recommendation, although it is mostly too labour-intensive and thus too expensive unless voluntary workers are available or it can at least be combined with mechanical methods. If the site has not been mowed for some years, initial clearing may be necessary.



Percentage distribution of the total surface of Boreal alluvial meadows 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.