

**DEGRADED FEN SYSTEMS IN POLAND: IN SEARCH OF SUSTAINABLE
MANAGEMENT OPTIONS**

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Fens used to cover nearly 4% of Poland's territory, being among the major ecosystems in lowland river valleys. Due to agricultural drainage and other changes on the landscape-scale c. 86% of these ecosystems have been drained in Poland and, in majority, transformed into permanent grasslands. These areas have been used with differing intensity until the early 1980s, when crisis of agriculture caused withdrawal of farmers. Some of these areas are still distinguishable for their high biodiversity, whereas others are covered by species-poor vegetation with many ruderal species. Neglected, these meadows have undergone succession towards shrub and forest communities. Recently, however, some of them are again being reclaimed for intensive agriculture. Both of these processes pose threat to the remaining natural values, leading to a decrease of biodiversity and further degradation of organic soils. Given the background of situation in drained fens in Poland, I address the question of best land-use practices on degraded fens, analysing several case areas. Possible options are (combinations of) the following approaches: allowing natural succession, rewetting, promotion of low-intensity mowing and grazing, biomass cropping for energy production. It is concluded that only by integrated management of various resources, the future use of drained fens can be sustainable, contributing to soil and water protection, biodiversity conservation, landscape values and other services.