

UK Biodiversity Action Plan Priority Habitat Descriptions

Lowland Fens

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Lowland Fens

Formerly named 'fens', details of this habitat can be found in the pre-existing Habitat Action Plan (https://www.ukbap.org.uk/UKPlans.aspx?ID=18), a summary of which appears below.

The UK is thought to host a large proportion of the fen surviving in the EU. As in other parts of Europe fen vegetation has declined dramatically in the past century.

Fens are peatlands which receive water and nutrients from the soil, rock and ground water as well as from rainfall: they are minerotrophic. Two types of fen can broadly be distinguished: topogenous and soligenous. Topogenous fens are those where water movements in the peat or soil are generally vertical. They include basin fens and floodplain fen. Soligenous fens, where water movements are predominantly lateral, include mires associated with springs, rills and flushes in the uplands, valley mires, springs and flushes in the lowlands, trackways and ladder fens in blanket bogs and laggs of raised bogs.

Fens can also be described as 'poor-fens' or 'rich-fens'. Poor-fens, where the water is derived from base-poor rock such as sandstones and granites occur mainly in the uplands, or are associated with lowland heaths. They are characterised by short vegetation with a high proportion of bog mosses *Sphagnum* spp. and acid water (pH of 5 or less). Rich-fens, are fed by mineral-enriched calcareous waters (pH 5 or more) and are mainly confined to the lowlands and where there are localised occurrences of base-rich rocks such as limestone in the uplands. Fen habitats support a diversity of plant and animal communities. Some can contain up to 550 species of higher plants, a third of our native plant species; up to and occasionally more than half the UK's species of dragonflies, several thousand other insect species, as well as being an important habitat for a range of aquatic beetles.

In intensively farmed lowland areas fens occur less frequently, are smaller in size and more isolated than in other parts of the UK. There are, however, exceptions to this. The UK's largest continuous area of base-poor fen, the Insh Marshes in the floodplain of the River Spey in Scotland, covers an area of 300ha, the calcareous rich fen and swamp of Broadland covers an area of 3,000ha and Lough Erne system in Fermanagh has extensive areas of fen and swamp. In some lowland areas such as the Scottish borders and southern Northern Ireland there are concentrations of small fens of particular importance.