

Site Name: Pollardstown Fen SAC

Site Code: 000396

Pollardstown Fen is situated on the northern margin of the Curragh of Kildare, approximately 3 km north-west of Newbridge. It lies in a shallow depression, running in a north-west/south-east direction. About 40 springs provide a continuous supply of water to the fen. These rise chiefly at its margins, along distinct seepage areas of mineral ground above the fen level. The continual inflow of calcium-rich water from the Curragh, and from the limestone ground to the north, creates waterlogged conditions which lead to peat formation. There are layers of calcareous marl in this peat, reflecting inundation by calcium-rich water. This peat-marl deposit reaches some 6 m at its deepest point and is underlain by clay.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

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| [7210] <i>Cladium</i> Fens* |
| [7220] Petrifying Springs* |
| [7230] Alkaline Fens |
| [1013] Geyer's Whorl Snail (<i>Vertigo geyeri</i>) |
| [1014] Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) |
| [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>) |

Pollardstown Fen is unusual in Ireland as it is an extensive area of primary and secondary fen peat, lacking scrub vegetation on its surface. The fen vegetation is generally from 0.5 - 1.5 m high and consists mainly of Great Fen-sedge (*Cladium mariscus*), Common Reed (*Phragmites australis*), Blunt-flowered Rush (*Juncus subnodulosus*) and a variety of sedges (*Carex* spp.). The vegetation is quite varied and species-rich, with numerous well-defined plant communities and several rare or scarce species. These include Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri*), Fly Orchid (*Ophrys insectifera*) and Broad-leaved Cottongrass (*Eriophorum latifolium*). Of particular interest is the occurrence of the moss, *Homalothecium nitens* - a boreal relict species which is rare in Ireland. Species and communities characteristic of more nutrient-rich conditions occur on the fen margins where the water first emerges from the ground (these correspond with 'alkaline fen'), while the central fen area is dominated by more uniform and less nutrient-demanding vegetation types. Some of the springs correspond to the habitat 'petrifying springs', and tufa mounds have been noted.

Damp pastures occur on wet mineral soils and partly-drained peats on the fen margins. These are reasonably species-rich, with particularly good displays of orchids in some areas.

The fen has ornithological importance for both breeding and wintering birds. Little Grebe, Coot, Moorhen, Teal, Mallard, Mute Swan, Water Rail, Snipe, Sedge Warbler and Reed Bunting all breed annually within the fen vegetation. Reed Warbler and Garganey, both rare breeding species in Ireland, have been recorded at Pollardstown and may have bred. In recent years two very specialised bird species associated with fens, Marsh Harrier and Savi's Warbler, have been seen at Pollardstown.

An area of reclaimed land was reflooded in 1983 and has now reverted to open water, swamp and regenerating fen. Since the reflooding of the fen and the development of the shallow lake, wintering waterfowl have been attracted in increased numbers. Maximum counts during winter 1984/85 were as follows: Little Grebe 24; Teal 161; Mallard 220; Coot 81 and Snipe 68.

Otter and Brook Lamprey (*Lampetra planeri*), two species listed in Annex II of the E.U. Habitats Directive, occur at Pollardstown.

Various groups of the invertebrate fauna have been studied and the system has been shown to support a true fen fauna. The species complexes represented are often rare in Ireland, with the sub-aquatic organisms are particularly well-represented. A number of internationally important invertebrates (mostly Order Diptera, i.e. two-winged flies) have been recorded from the site. Of particular conservation importance, however, is the occurrence of all three of the Whorl Snails (*Vertigo* spp.) that are listed on Annex II of the E.U. Habitats Directive. Pollardstown is the only known site in Ireland (or Europe) to support all three species (*Vertigo geyeri*, *V. angustior* and *V. moulinsiana*), and it therefore provides a unique opportunity to study their different habitat and hydrological requirements.

Much of the site with fen vegetation is now owned by the Office of Public Works and is a Statutory Nature Reserve.

Pollardstown fen is the largest spring-fed fen in Ireland and has a well-developed and specialised flora and fauna. Owing to the rarity of this habitat and the numbers of rare organisms found there, the site is rated of international importance.