



Site Name: Lisduff Fen SAC

Site Code: 002147

Lisduff Fen is situated about 4 km south-east of Birr in Co. Offaly, near Kilcolman crossroads.

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):

[7220] Petrifying Springs*
[7230] Alkaline Fens
[1013] Geyer's Whorl Snail (<i>Vertigo geyeri</i>)

The site comprises a wet calcareous fen, with typical fen and marsh species such as Black Bog-rush (*Schoenus nigricans*), Common Reed (*Phragmites australis*), Few-flowered Spike-rush (*Eleocharis quinqueflora*) and Grass-of-parnassus (*Parnassia palustris*). Included as part of the fen system are areas of wet grassland, some birch (*Betula* sp.) and willow (*Salix* sp.) scrub, and some vegetation more akin to that of raised bog, with species such as Heather (*Calluna vulgaris*) and Bog-myrtle (*Myrica gale*). There is a small stand of Scots Pine (*Pinus sylvestris*) at the eastern margin of the site. On the western side, the fen merges into wet grassland which has been improved to varying degrees for pasture.

A fast flowing stream which flows into the fen at the south end is heavily encrusted with calcium carbonate or 'tufa' deposits. Bryophytes recorded include *Fontinalis antipyretica*, *Amblystegium riparium*, *Aneura pinguis* and *Rhynchostegium riparioides*. Higher plants in the stream include Branched Bur-reed (*Sparganium erectum*), Watercress (*Nasturtium officinale*) and Water Mint (*Mentha aquatica*). While key diagnostic bryophytes of the Cratoneurion community were not recorded, this vegetation is considered to correspond to the E.U. Habitats Directive Annex I habitat 'petrifying springs with tufa formation'.

Of major conservation and scientific significance is the presence on the site of a population of the rare snail *Vertigo geyeri*. This species occurs in northern and central Europe, its distribution extending from Ireland in the west to the European Russian states in the east. It is probably a European endemic and is considered to be a glacial relict. Its distribution is very scattered and fragmented, and most populations are fairly isolated. In particular, the Irish populations are very isolated from the main European range of the species. Throughout its entire range it is classified as being endangered, vulnerable or rare.

Vertigo geyeri is a species associated with calcareous fens, where it occurs at the base of small sedges (*Carex* spp.) and Black Bog-rush, where these are growing at the water edge. The sites are often in open, tufa-forming calcareous spring flushes with a stable water table and of mesotrophic type.

A survey in 1995 confirmed the presence of the species at Lisduff. The habitat was considered to be excellent for the species and there were no apparent threats. However, a small site such as Lisduff could easily be damaged or destroyed by drainage activities.

Overall, this is an important site owing to the presence of alkaline fen and petrifying spring, habitats listed on Annex I of the E.U. Habitats Directive. It is also of high conservation importance for the occurrence of *Vertigo geyeri*, a rare mollusc listed on Annex II of this Directive.