

Site Name: Barnahallia Lough SAC

Site Code: 002118

This small site is situated about 7 km north-west of Clifden, Co. Galway, and within 2 km of the Atlantic coast. It comprises a small lake, Barnahallia Lough, situated in a depression at the bottom of the steep slope of Barnahallia Hill, immediately to the east, which rises to 106 m. It is surrounded by blanket bog, heath, acid grassland vegetation and exposed rock. The lake is fed by a small stream in the south-west corner. A second stream exits to the west. The bed of the lake is gravelly in places.

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):

[3130] Oligotrophic to Mesotrophic Standing Waters [1833] Slender Naiad (*Najas flexilis*)

The lake is a good example of an oligotrophic system. The aquatic plant flora is well developed, with characteristic species such as Shoreweed (*Littorella uniflora*), Water Lobelia (*Lobelia dortmanna*), Alternate Water-milfoil (*Myriophyllum alterniflorum*), Bulbous Rush (*Juncus bulbosus*), Pipewort (*Eriocaulon aquaticum*), White Water-lily (*Nymphaea alba*) and the pondweeds *Potamogeton natans* and *P. graminius* occurring.

On the western side, the lake merges gradually into reedswamp, fen and blanket bog. The main swamp species are Common Reed (*Phragmites australis*) and Great Fen-sedge (*Cladium mariscus*). Black Bog-rush (*Schoenus nigricans*) and Purple Moorgrass (*Molinia caerulea*) occur, as well as a little Jointed Rush (*Juncus articulatus*). The bog area has a good diversity of bog mosses (*Sphagnum* spp.). There are some welldeveloped hummocks with Heather (*Calluna vulgaris*). Other bog species present include Common Cottongrass (*Eriophorum angustifolium*), Carnation Sedge (*Carex panicea*) and Deergrass (*Scirpus cespitosus*).

Of particular note is the presence of Slender Naiad (*Najas flexilis*) in the lough. This rare aquatic plant is legally protected under the Flora (Protection) Order, 2015 and is also listed on Annex II of the E.U. Habitats Directive.

A recent survey of the lake indicated that the water quality is good. However, owing to its small size, the lake would be sensitive to nutrient enrichment derived from agricultural activities.

This lake, although small, is a good example of an oligotrophic system in a coastal location. The presence of Slender Naiad, at one of its most westerly Irish stations, greatly adds to the interest of the site.