

Date Notified: 20 February 1987

File ref: NY 10/7

County: Cumbria **Site Name:** West Water

District: Copeland

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

Local Planning Authority: Lake District Special Planning Board

National Grid Reference: NY 163060 **Area:** 297.5 (ha) 735.1 (ac)

Ordnance Survey Sheet 1:50,000: 89 **1:10,000:** NY 10 NW, SW, SE, NE

Date Notified (Under 1949 Act): 1975 **Date of Last Revision:** –

Date Notified (Under 1981 Act): 1987 **Date of Last Revision:** 1987

Other Information:

1. The site is listed in 'A Nature Conservation Review' edited by D. A. Ratcliffe, 1977, and published by CUP.
2. The site lies within the Lake District National Park.
3. The site has been modified by deletions during this revision.
4. The site was previously known as Wasdale SSSI.
5. Part of the site is now scheduled as Greendale Mires SSSI.
6. Wasdale Screes, formerly part of this site is now to be scheduled separately.

Description and Reasons for Notification:

West Water is situated some 22 km south-east of Whitehaven near the south-west boundary of the National Park. It lies at an altitude of 61 m on igneous rocks of the Borrowdale Volcanic Series, at the bottom of a valley catchment which includes the south and west slopes of Pillar, Great Gable, Scafell, and to the immediate south-east the classic geomorphological feature of Wasdale Screes which extend beneath the surface of the lake.

The principal importance of the site is as a prime example of a nutrient-poor (oligotrophic), unproductive lake, characteristic of the high rainfall and base poor upland areas of Britain. Associated habitats include stony shorelines, single species swamp, unimproved acid and acidic marshy grasslands and scrub communities.

The lake itself is the largest (290 ha) and least productive example of its type in England, and is also the deepest with a maximum depth of 78.6 m.

Lying within a catchment with the lowest percentage of cultivated land of any in the Lake District, comprising largely unmodified upland grassland and acid rock, the lake water is extremely low in dissolved minerals and is very clear. Its low nutrient status in turn restricts the diversity and numbers of plants and animals seen, and hence the low overall productivity of the lake system. The lake has a naturally impoverished flora and fauna which is restricted to a few highly characteristic groups.

The shoreline of Wast Water is generally stony with a sparse flora, which on the north-western shore comprises acid grassland with scattered gorse, bracken and occasional oak, rowan and hawthorn. In stark contrast the south-eastern shore is virtually devoid of vegetation, and is predominantly composed of talus at the base of the scree slopes.

In the shallow margins an aquatic flora typical of oligotrophic lakes is found and includes bulbous rush, intermediate water-starwort *Callitriche hamulata*, stoneworts *Nitella* species and alternate water-milfoil *Myriophyllum alterniflorum*, along with shorewood *Littorella uniflora*, quillwort *Isoetes lacustris*, and the uncommon small water-pepper *Polygonum minus*. Fringed by a stand of reed canary-grass and purple moor-grass, Boat House Pool lies by the outflow of Wast Water and supports two locally uncommon species; water lobelia *Lobelia dortmanna* and awlwort *Subularia aquatica*. At the head of the lake in association with shingle spits is an area of wet marshy grassland, scattered ash and gorse scrub. The grassland is dominated by purple moor-grass with sharp-flowered rush, marsh thistle, green-ribbed sedge and tormentil.

The fauna of the lake is also typical of the oligotrophic conditions with a sparse invertebrate fauna and only a few fish species recorded. These include eel, minnow, salmon, 3-spined stickleback and the nationally rare char *Salvelinus alpinus*, which here at Wast Water is locally abundant.