

**County:** Cumbria **Site Name:** Little Langdale Tarn

**District:** South Lakeland

**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 307032 **Area:** 37.2 (ha) 91.9 (ac)

**Ordnance Survey Sheet 1:50 000** 90 **1:10 000** NY 30 SW

**Date Notified (Under 1949 Act):** 1965 **Date of Last Revision:** 1975

**Date Notified (Under 1981 Act):** 1986 **Date of Last Revision:** 1986

#### **Other Information:**

1. The boundary has been modified by extension and partial deletion at this revision.
2. The site lies within the Lake District National Park.

#### **Description and Reasons for Notification:**

Little Langdale Tarn is located approximately 2 km south-west of the village of Elterwater and 5 km north of Coniston, occupying a basin at the base of the Little Langdale valley. The tarn is of glacial origin and is typical of the moderately nutrient-poor (meso-oligotrophic) tarns found in South Cumbria such as Tarn Hows SSSI and Beacon Tarn. Little Langdale tarn (7 ha) is the second largest example of this group in South Cumbria after Tarn Hows SSSI (14 ha). Despite the fact that it occurs at a lower altitude (102 m) than Tarn Hows it is more nutrient-poor due to the larger number of high fells within its catchment area and the underlying hard Borrowdale Volcanic rocks. Little Langdale has a greater diversity of undisturbed adjacent habitats than any other tarn within the group, showing a characteristic transition from open water, through single-species dominant swamp, acid-poor fen, acidic species-rich marshy grassland, hay meadow and wet woodland.

The adjacent hay meadows support good examples of the 'northern' hay meadow (sweet vernal-grass/wood crane's-bill) neutral grassland community, although in places the meadows have been partially improved agriculturally. One of the hay meadows supports an example of the flood-pasture (crested dog's-tail/marsh marigold) neutral grassland community.

A limited number of aquatic vascular plants occur in the open water and on the shallow stony shore of the tarn. These include white water lily *Nymphaea alba*, the local lesser bladderwort *Utricularia minor*, alternate-flowered water milfoil *Myriophyllum alterniflorum*, the starwort *Callitriche hamulata*, shore-weed *Littorella uniflora*, water lobelia *Lobelia dortmanna* and quillwort *Isoetes lacustris*. The stonewort *Nitella* sp. and the moss *Fontinalis antipyretica* are also locally common. A narrow fen community occurs around parts of the tarn edge, consisting mainly of common reed *Phragmites australis*, bulrush *Schoenoplectus lacustris*, tufted sedge *Carex elata*, with occasional floating bur-reed *Sparganium angustifolium* and small bur-reed *S. minimum*. Parts of this fen community grade into emergent swamp dominated by bogbean *Menyanthes trifoliata*, marsh cinquefoil *Potentilla palustris*, bottle sedge *Carex rostrata* and bog myrtle *Myrica gale*.

Extensive areas of acid marshy grassland, dominated by the tussocky purple moor-grass *Molinia caerulea* and sharp-flowered rush *Juncus acutiflorus* occur around and to the west of the tarn, adjacent to the River Brathay. Parts of this grassland are species-rich supporting wet-loving plants such as heath spotted-orchid *Dactylorhiza maculata* spp. *ericetorum*, greater bird's-foot trefoil *Lotus uliginosus*, devil's-bit scabious *Succisa pratensis*, yellow iris *Iris pseudacorus*, sneezewort *Achillea ptarmica* and marsh hawk's-beard *Crepis paludosa*. Within the grassland there are smaller boggy areas with characteristic plants such as marsh lousewort *Pedicularis palustris*, globeflower *Trollius europaeus*, skullcap *Scutellaria galericulata*, grass-of-Parnassus *Parnassia palustris*, great sundew *Drosera anglica*, white beak-sedge *Rhynchospora alba* and the sedges *Carex echinata*, *C. nigra* and *C. panicea*.

To the south and west of the tarn the purple moor-grassland gives way to a wet-meadow community dominated by grasses such as crested dog's-tail, Yorkshire fog and sweet vernal-grass. Associated herbs include marsh marigold *Caltha palustris*, meadow buttercup *Ranunculus acris*, autumn hawkbit *Leontodon autumnalis* and ragged robin *Lychnis flos-cuculi*.

Further away from the tarn the gently-sloping grassland areas are drier and to the south and west support unimproved and semi-improved hay meadow communities. Dominant grasses include common bent, red fescue, sweet vernal-grass and rough meadow-grass, with the characteristic herbs eyebright *Euphrasia officinalis*, selfheal *Prunella vulgaris*, great burnet *Sanguisorba officinalis* and red clover *Trifolium pratense*. Land to the north-east and south of the tarn grades from purple moor-grass into acidic grassland which is typically species-poor.

Scattered birch scrub *Betula pubescens* occurs to the north and south of the tarn. At the north the scrub has developed into an open woodland-carr of birch and grey willow *Salix cinerea*, with a typical ground flora consisting of purple moor-grass, marsh marigold, hemlock water-dropwort *Oenanthe crocata*, remote sedge *Carex remota*, star sedge *C. echinata* and the bog moss *Sphagnum squarrosum*. The carr merges with a small area of oak woodland *Quercus petraea* on a rocky knoll lying adjacent to the road.

The variety of habitats at this site support a rich and varied fauna, several species of which are rather local in distribution. These include breeding populations of great-crested grebe *Podiceps cristatus* and the dark green fritillary butterfly *Argynnis aglaja*.