

COUNTY: LANCASHIRE

SITE NAME: ROBERT HALL MOOR

DISTRICT: LANCASTER

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

Local Planning Authority: Lancaster City Council

National Grid Reference: SD 632688

Area: 18.8 (ha.) 46.5 (ac.)

Ordnance Survey Sheet 1:50,000: 97

1:10,000: SD 66 NW

Date Notified (Under 1949 Act): 1979

Date of Last Revision: –

Date Notified (Under 1981 Act): 1984

Date of Last Revision: 1984

Other Information:

1. Boundary revised by partial deletion at renotification.

Reasons for Notification:

Robert Hall Moor is an area of wet unimproved grassland, flushes and scrub situated on a drumlin (a glacial mound) rising from about 90m to a height of 107m, 4km south west of Wennington. The site is remarkable for the range of plants represented (over 150 species have been recorded), including two nationally rare communities and several species which are rare or very limited in their distribution. This assemblage of species is unique in Lancashire. Its most outstanding feature as a habitat is that it is the only extensive example of species-rich undrained and unimproved base-flushed neutral grassland known to remain in the county.

The remains of hedges and ditches mark old field boundaries within the site but there is no indication that the land, which is currently used as pasture, has ever been ploughed, re-seeded, under-drained or otherwise improved. The land is wet due to the general impermeability of the clayey soil such that water seeps out of the slopes as numerous flushes or emerges as springs lower down. It supports extensive plant communities which elsewhere are confined to small flushes or have been eliminated altogether by drainage. The water is base-enriched, creating basic influences where it emerges and neutral rather than acid conditions over much of the site.

Most of the grassland consists of a community of purple moor-grass *Molinia caerulea* with an abundance of small sedges *Carex demissa*, *echinata*, *flacca*, *hirta*, *hostiana*, *nigra*, *ovalis*, *panicea*, *pilulifera* and *pulicaris*, with creeping willow and numerous herbaceous species among which jointed rush, devil's-bit scabious, knapweed and marsh ragwort are conspicuous. More open areas, particularly the flushes, support a number of species which have a very local distribution in Lancashire including butterwort, saw-wort, bog pimpernel, bog asphodel, grass of Parnassus, marsh orchid and bird's-eye primrose which is a notably rare plant nationally. This species-rich type of *Molinia* community (as opposed to species-poor *Molinia* which is common on peat) which once no doubt was widespread, has been reduced so much by drainage that it is now considered to be a rare and endangered habitat in Britain. On top of the drumlin and also on higher ground in various places which is not influenced by emergent water there are small areas of acidic marshy grassland, rush dominated and species-poor.

At the base of the drumlin on the south side is another rare community: a small area of marsh dominated by blunt-flowered rush *Juncus subnodulosus* accompanied by characteristic marsh plants such as meadowsweet, water mint, marsh pennywort, angelica, ragged robin, marsh cinquefoil and marsh ragwort. The blunt-flowered rush community, which is associated with basic groundwater, is rare in Britain. The rush itself is rare in

Lancashire, known only at Crag Bank SSSI and a few other scattered locations, and is uncommon in the north west of England as a whole.

There is extensive scrub on the site, mainly of common gorse but also the less common western gorse *Ulex gallii*, hawthorn and rose. Uncommon species such as petty whin and dyer's greenweed have also been recorded. The gorse grades into birch scrub and woodland at the eastern end. The site is crossed by the Thirlmere aqueduct, the route of which is marked by a strip of reseeded grassland. There is a small flighting pond in the lowest part of the site, which is being colonised by pondweed spike-rush and bottle sedges.