

COUNTY: CHESHIRE

SITE NAME: BLACK LAKE, DELAMERE

DISTRICT: VALE ROYAL

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

Local Planning Authority: CHESHIRE COUNTY COUNCIL, Vale Royal District Council

National Grid Reference: SJ 537709

Area: 1.75 (ha) 4.32 (ac)

Ordnance Survey Sheets 1:50,000: 117

1:10,000: SJ 57 SW

Date Notified (Under 1949 Act): 1963

Date Notified (Under 1981 Act): 1984

Date of Last Revision: –

Reasons for Notification:

This site is notified because it represents a very early stage of a *Schwingmoor* type basin fen and occurs in association with dystrophic open water. The rare white-faced darter dragonfly *Leucorrhina dubia* which is restricted to a small number of locations in the County has been recorded from the site.

General Description:

The Meres and Mosses of the north-west Midlands form a nationally important series of open water and peatland sites. These have developed in natural depressions in the glacial drift left by the ice sheets which covered the Cheshire-Shropshire plain some 15,000 years ago. The majority lie in Cheshire and north Shropshire, with a small number of outlying sites in adjacent parts of Staffordshire and Clwyd.

The origin of most of the hollows can be accounted for by glaciation but a small number have been formed at least in part by more recent subsidence resulting from the removal in solution of underlying salt deposits.

There are more than 60 open water bodies known as 'meres' or 'pools' and a smaller number of peatland sites or mires known as 'mosses'. They range in depth from about one metre to 27 metres and have areas varying between less than a hectare to 70 hectares.

Although the majority of the Meres are nutrient rich (eutrophic) the water chemistry is very variable reflecting the heterogeneous nature of the surrounding drift deposits. Associated fringing habitats such as reedswamp, fen, carr and damp pasture add to the value of the meres. The development of these habitats is associated with peat accumulation which in some cases has led to the complete infilling of the basin. During this process the nutrient status of the peat surface changes and typically becomes nutrient poor (oligotrophic) and acidic thus allowing species such as the bog mosses *Sphagnum* spp. to colonise it. The resulting peat bogs are the mosses. In a few cases colonisation of the water surface by floating vegetation has resulted in the formation of a quaking bog known as a 'schwingmoor'.

Black Lake has been selected to represent a very early stage of *schwingmoor* development.

The site consists of a small pool and bog vegetation lying in a natural depression bounded by a bank on one side and an artificial embankment on the other. The site also encompasses surrounding land that slopes towards the pool. This forms the pool's surface water run-off catchment and comprises of an area of coniferous forestry plantation. All stages from nutrient poor open water to more-or-less consolidated *schwingmoor* with invading Scots pine *Pinus sylvestris* are represented. However, the 'building' moss species *Sphagnum papillosum* and *S. capillifolium* do not yet occur. A large colony of sundew *Drosera*

rotundifolia has colonised the surface of the *Sphagnum* lawn. White sedge *Carex curta* which is rare in Cheshire, occurs.

The rare white-faced darter dragonfly *Leucorrhina dubia* occurs at the site.

Other Information:

The pool comprises part of the Meres and Mosses Ramsar site.