

COUNTY: SHROPSHIRE

SITE NAME: BROWN MOSS

DISTRICT: North Shropshire

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

Local Planning Authority: SHROPSHIRE COUNTY COUNCIL, North Shropshire District Council

National Grid Reference: SJ 562395                      Area: 31.32 (ha.) 77.4 (ac.)

Ordnance Survey Sheet 1:50,000: 126                      1:10,000: SJ 53 NE

Date Notified (Under 1949 Act): 1953                      Date of Last Revision: 1963

Date Notified (Under 1981 Act): 1984                      Date of Last Revision: –

Other Information:

Reasons for Notification:

The Meres & 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'.

Brown Moss differs from the other North Shropshire Mosses in consisting of a series of pools set in an area of heathland and woodland, rather than an expanse of peat. It has been suggested that the site may once have been peat covered, and that peat removal in the past has led to the present condition of the site.

This site is of special importance for the marsh, swamp and fen communities associated with the pools which occupy hollows in the sand and gravel substrate. The pools fluctuate considerably, and apparently independently, in level and also vary in their water chemistry. Marginal vegetation includes tall communities dominated by great reedmace *Typha latifolia*, soft rush *Juncus effusus*, bur-reed *Sparganium erectum*, bottle sedge *Carex rostrata* and bladder sedge *C. vesicaria*. There are also extensive areas of shorter grassland and marsh at the margins of some of the pools, with common spike-rush *Eleocharis palustris* and

creeping bent *Agrostis stolonifera* among the dominant species. Uncommon species which occur in the shallow water, fen and marsh communities include orange foxtail *Alopecurus aequalis*, lesser water-plantain *Baldellia ranunculoides*, floating water-plantain *Luronium natans*, floating scirpus *Eleogiton fluitans*, small bur-reed *Sparganium minimum*, marsh St. John's wort *Hypericum elodes* and the rare liverwort *Riccia canaliculata*.

One hollow is occupied by a small quaking bog dominated by *Sphagnum recurvum* and soft rush *Juncus effusus*, and supporting characteristic bog species such as sundew *Drosera rotundifolia*.

Between the pools and marshes are areas of heathland and acid grassland, with extensive tracts of birch and oak woodland. These add considerably to the value of the site and provide additional habitats for birds and insects.