COUNTY: CHESHIRE SITE NAME: HATCH MERE

DISTRICT: Vale Royal

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

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

National Grid Reference: SJ 553722 Area: 13.27 (ha.) 32.8 (ac.)

Ordnance Survey Sheet 1:50,000: 117 1:10,000: SJ 57 SE, SW

Date Notified (Under 1949 Act): 1951 Date of Last Revision: 1979

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’.

Hatch Mere is an example of a mere with moderate fertility and well developed floating and emergent vegetation. It is an unusual mere because of the surrounding vegetation which consists largely of acidic heath and bog communities.

White water-lily *Nuphar lutea* is the dominant floating macrophyte with star-worts *Callitriche obtusangula* and *C. platycarpa*. Emergent stands of common reed *Phragmites australis* almost encircle the mere. These grade into fen with a good range of typical species, such as bittersweet *Solanum dulcamara*, yellow flag *Iris pseudacorus* water mint *Mentha aquatica* and gipsy-wort *Lycopus europaeus*.

The fen grades into a well developed fen carr dominated by sallow *Salix cinerea* and alder *Alnus glutinosa* with a field layer of tall fen plants including valerian *Valeriana officinalis*,

common skull-cap *Scutellaria galericulata*, panicled sedge *Carex paniculata* and tufted sedge *Carex elata*. This last species has a restricted distribution in Cheshire.

On drier ground birch *Betula pubescens* becomes dominant and a dense thicket of bog myrtle *Myrica gale* has grown up. This species is rare in Cheshire and is only known to grow so profusely on one other site.

Within this area there are acidic pockets where bog mosses *Sphagnum* spp. often become dominant, forming a carpet below the herb layer. Purple moor-grass *Molinia caerulea*, cross-leaved heath *Erica tetralix* and cotton-grass *Eriophorum angustifolium* are common here.

The site is important for lepidoptera and a comprehensive list has been compiled which includes a number of species found nowhere else in Cheshire. A nationally rare caddis-fly *Potomophylax rotundipennis* has been recorded from this site.