COUNTY: CHESHIRE SITE NAME: FLAXMERE MOSS

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 556723 Area: 6.55 (ha.) 16.2 (ac.)

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

Date Notified (Under 1949 Act): 1965 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'.

Flaxmere Moss is a small peatland site which has been formed by the gradual infilling of a lake basin with bog vegetation. No open water now persists although some peat cuttings near the centre of the site have become water-filled. The middle of the site is unconsolidated and a schwingmoor remains although it has been modified by peat cutting and drainage. The bog vegetation grades into wet heath and birch *Betula pendula* and oak *Quercus robur* woodland.

The wetter areas of the site are dominated by bog mosses *Sphagnum* spp. and cotton grass *Eriphorum angustifolium*. In drier parts hare's-tail cotton-grass *Eriophorum vaginatum*, purple moor-grass *Molinia caerulea*, cross-leaved heath *Erica tetralix*, cranberry *Vaccinium oxycoccos*, sundew *Drosera rotundifolia*, marsh cinquefoil *Pontentilla palustris* and the nationally rare bog rosemary*Andromeda polifolia* occur. The mire vegetation grades into dry heath dominated by heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus*.

The entomological interest of the site is high. Among the larger moths and butterflies are eight species which have a limited distribution in Cheshire. The smaller moths and butterflies are known as microlepidoptera. Over 250 species of microlepidoptera have been recorded and five are found nowhere else in the county.

This is the most important site in the county for the study of the history of the Cheshire flora from the pollen record preserved in the peat. This pollen record extends back to the Late-Glacial Period and provides the most complete record for the appearance and disappearance of Rannoch rush *Scheuchzeria palustris* of any British site.