

75. Midland Meres & Mosses (Phase 1)

Geographical Coordinates:	53°04'N 2°41'W	Area:	513ha
Location:	A complex site incorporating 16 separate component wetlands in the counties of Cheshire, Shropshire and Staffordshire, west/north-west England. For more specific details, maps are available from the Ramsar Database manager.		
Date of Ramsar Designation:	9 May 1994		
Other International Designations:	No data		
National Designations:	Site of special scientific interest; National nature reserve		

Principal Features: The Meres and Mosses of the Clwyd-Shropshire-Cheshire-Staffordshire plain form an internationally important series of open water and peatland sites. "Meres" refer to pools, while "mosses" are mires or peatland sites. There are more than 60 meres and a smaller number of mosses. The meres range in depth from about one metre to 27m and vary between less than one hectare to 70ha, in area. The origin of most of the hollows can be accounted for by glaciation, which left depressions in the plain as ice sheets receded. However, a small number have been formed, at least in part, by more recent subsidence resulting from the removal in solution of underlying salt deposits.

Although the majority of the meres are naturally 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 changed and typically became nutrient poor (oligotrophic) and acidic, thus allowing species such as *Sphagnum* spp. to colonise. In a few cases colonisation of the water surface by floating vegetation has resulted in the formation of a "quaking bog" also known as a "schwingmoor". The site is also home to a number of rare species of plants associated with wetlands. The site contains the nationally scarce *Elatine hexandra*, *Eleocharis acicularis*, *Cicuta virosa*, *Thelypteris palustris* and *Carex elongata*. The site also contains an assemblage of invertebrates, including the following rare wetland species. There are three species listed for the site which are considered to be endangered in Britain, these are the caddis fly *Hagenella clathrata*, the fly *Limnophila fasciata* and the spider *Cararita limnaea*. Other listed wetland Red Data Book species are: the beetles *Lathrobium rufipenne* and *Donacia aquatica*, the flies *Prionocera pubescens* and *Gonomyia abbreviata* and the spider *Sitticus floricola*. (Criteria 2a).

Conservation Issues: Various broad activities recorded for the site include agriculture and grazing, fishing, hunting, recreation, research and conservation. This complex site has undergone partial eutrophication from human activities (although some of the mires are naturally eutrophic). Excess nutrients come from intensification of agriculture, fertilizer runoff and domestic and agricultural effluent.

Six meres in the county of Shropshire are being monitored, and it is hoped that another four meres in the Water Fringe option of the Ministry of Agriculture, Fisheries and Food's Habitat Scheme can be included to allow the surrounding fields to act as eutrophic buffers. Three of the SSSIs are within the West Midlands Mosses candidate (European Union) Special Area of Conservation. English Nature and the National Rivers Authority have engaged in recent meetings to discuss ways of addressing the problem of eutrophication.