

Lye Valley Biological Heritage Summary

The north and south section of the Lye Valley Fen SSSI are now within the bounds of Oxford City not far from Headington. The SSSI comprises the two remaining sections of a once much larger tract of peaty wetland known in previous centuries as Hockley-in-ye-hole, Hogley bog, Ogley Bog, Headington bog, Bogs under Bullingdon Green and most recently Bullingdon Bog. It is a **calcareous (alkaline) valley-head spring-fen** that has retained a botanically diverse short fen flora. There remains only just over a metre of peat, the whole site having been extensively cut-over for fuel in earlier centuries (the north fen was known as 'the poor' meaning the poor of the parish could gather fuel there). Botanically, the two small North and South sections (total area 2.5 Ha) contain portions with the nationally rare **M13** Black Bog-rush (*Schoenus nigricans*)-Blunt-flowered Rush (*Juncus subnodulosus*) mire community with some parts closer to **M22** Blunt-flowered Rush-Marsh Thistle community and some areas of species-poor Common-reed or Lesser Pond-sedge dominated communities. These communities are the reason for SSSI designation in 1972.

The Oxfordshire group of calcareous species-rich fens is the largest remaining set of such habitats outside East Anglia and North Wales and contains elements of the flora and fauna which are intermediate between those areas. There are 13 fens designated SSSI in Oxon, with the Cothill complex of fens being also designated SAC.

Due to urban development enclosing the Lye Valley site on two sides and lack of management after common land status and its associated grazing disappeared, the area of wetland between these two fragments has scrubbed up to wet woodland and some of the springs have dried up. Whilst past peat cutting has removed most of its vegetational history, it was probably important in perpetuating the bryophyte-rich, early seral stages that may have been lost in more undisturbed sites. It thus retains some very scarce bryophytes and is the **only site** for some in Vice County 23.

The Lye Valley fen SSSI units known as North Fen and South Fen are now separated by some 600m of former fen which is now wet woodland forming a corridor to the Boundary Brook and which is designated a Local Wildlife Site. The North Fen is part of a larger section of the brook corridor owned by Oxford City Council and managed as a Local Nature Reserve. The South Fen is in private ownership (a number of separate owners, each of whom owns a thin strip).

Botanical Recording History

The whole site has a long history of botanical recording since the 1600s by botanists from nearby Oxford University Botany department (only a short walk away, on the site of the current Botanic Garden) and is thus regularly mentioned in the early manuscripts and Floras of the County e.g. by Morison (1699) Sibthorp (1794) and Druce (1886, 1927). Many specimens from the site collected in the 18th and 19th century are held in the current Oxford University Plant Sciences Department Herbarium. As most of these still species survive on the site, it is thus important in a historical botanical context. It is responsible for a good few first County records. For instance, the first county record for butterwort, *Pinguicula vulgaris* was here by Parkinson in 1640 ('in a common about a mile from Oxford neere a village called Herington (Headington)'). Whilst Butterwort has not yet recurred, all the following are still growing on site. First County record for flea sedge, *Carex pulicaris* was by Merrett from this site in 1667 (as 'Hockley of the Hole') for Bottle Sedge, *Carex rostrata*, was by Bobart from this site (as 'Hockley') in 1699 and for Parsley Water-dropwort, *Oenanthe pimpinelloides*, by Dillenius was in 1746 (as 'Hockley in ye Hole').

Even earlier, before the first University botanists, the Belgian botanist Matthias de L'Obel visited Oxford in 1569 and saw grass of Parnassus, *Parnassia palustris* in 'Angliae ad Oxoniam' (England, around Oxford) – The resulting record in his book of 1570-1571 is the first published national British record of this species. Of all the sites 'around Oxford' that he could have observed with grass of Parnassus, the Lye Valley is the best candidate and the **only one where grass of Parnassus still survives today.**

As regards bryophytes, the Oxford herbarium has a H. Boswell specimen recorded as '*Hypnum sendtneri/falcatum*' in 1859 from the site (as 'turf bogs under Bullingdon Green'). His specimen is actually *Scorpidium cossonii*. There is a Boswell specimen of what is now called *Palustriella falcata* from the site (Bullingdon Bog) collected in 1861. Remarkably, both scarce mosses still survive at the site today, despite fears drainage would eliminate them more than 100 years ago. The site is well known and visited by more recent botanists such as H. Bowen and the authors of the current Flora of Oxfordshire, J Killick, R Perry and S. Woodell.