

MKNHS Plant Group visit to Pilch Fields SSSI

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Introduction

Pilch Fields came to the notice of botanists and conservationists when a local school pupil showed some unusual plants to their biology teacher, Roy Maycock, MKNHS late president. At that time the fields formed part of a Bucks County Council smallholding based at Coombs Farm. The site was designated SSSI in 1976 and acquired by BBOWT in 1984. It is best known for displays of Cowslip and Green-winged Orchid in late April. This visit was timed to see the flora characteristic of later in the year.

The entrance field

The small field at the entrance to the reserve has recently had some ponds created to develop the biodiversity of the site. Located on a clay substrate, one of them, remarkably, was still holding water despite the dry spring and summer. In this field we were able to examine close-up Hard Rush and Tufted Hair-grass, which are also present in the other fields.

Greater Pilch Field

Immediately on entering Greater Pilch one is struck by its lined, ridge and furrow pattern of the ground, with Hard Rush dominating the furrows and a grassy turf on the ridges, where the Cowslip and Green-winged Orchids are found flowering in spring.

The presence of the ridge and furrow pattern indicates that the land was previously used for arable cropping, with up-and-down ploughing, by oxen or horses, creating the ridges. A glance at the OS map shows field boundaries in the vicinity to follow straight and parallel lines. This is typical of the boundaries created by enclosure Acts. Pilch Fields lie in the parish of Thornborough, whose enclosure Act was passed by Parliament in 1797. In this part of England, after enclosure, arable land was often converted to pasture for grazing livestock such as sheep and cattle. It is possible therefore that Pilch Fields are an early example of “rewilding” of arable land and that their biodiversity has been building up naturally for some 225 years.

Another feature of Greater Pilch is that, at least in parts, it overlies a limestone outcrop. Limestone is also evident in the nearby Coombs Quarry, source of stone for the picturesque Thornborough Bridge over the Padbury Brook. This has led to the development in the field of a calcareous grassland evidenced by species such as Dwarf Thistle and Quaking Grass. The field also contains areas of wet soil resulting from the presence of one or more springs and possibly an impermeable subsoil layer in certain places. These flushed meadow or fen areas were still wet at the time of our visit despite the unseasonable dry year, and contain typical species such as Fen Bedstraw, Ragged Robin and Marsh Valerian.

Little Pilch Field

Little Pilch Field also contains some ridge and furrow and calcareous grassland, and a larger fen area, dominated by Blunt-flowered Rush.

Site Management

As at Rammamere Heath, where ecological succession of vegetation types is held in check by sheep grazing and management, the grassland and fen of Pilch Fields is also man-made and held stable by grazing, now facilitated by periodic controlled entry of cattle from a neighbouring farm. The grazing, coupled with soil conditions, has led to development of a highly diverse and specialised flora which probably used to be quite widespread in this part of the country but which has now been practically eliminated by modern agriculture. The site is therefore a remnant, unique in the Milton Keynes/Aylesbury Vale area, and of high conservation value. However, the small size (11 hectares; 27 acres) of the site makes it vulnerable to pressures and in particular we observed the site to be threatened by encroaching scrub, particularly Hawthorn, Bramble and Creeping Thistle. It would be wonderful if the site could be enlarged – there are some examples in the Chilterns where orchid-rich sites have been extended onto neighbouring land used for arable farming until recently. BBOWT is working hard to manage Pilch Fields and needs our support to maintain this fragile site with its iconic species and attractive landscape.

Further work for the Group

Attached as an annexe is a list of species observed by the group. This is a partial list reflecting the time of year of the visit, the time available for study and our identification skills (or lack of). Certainly, more grasses, sedges and rushes were present than are listed. Perhaps in the future, with repeat visits, we could aim to produce a more complete list. Regular quantitative survey of certain species, such as orchids, could also be undertaken.

A consolidated list of plants observed during the visit can be found through the links below, accompanied by a collection of photos of selected plants, illustrating key identification points.

Thanks

To Janice Robertson and Martin Ferns for making the list of plants, and to Bob Phillips for the photographs.

Charles Kessler
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Annexes

Consolidated List of Plants Observed
Photographs of Selected Plants