

COUNTY: SUFFOLK

SITE NAME: BARNBY BROAD AND MARSHES

DISTRICT: WAVENEY

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

Local Planning Authority: WAVENEY DISTRICT COUNCIL

National Grid Reference: TM 480910 Area: 189.62 (ha.) 468.56 (ac.)

Ordnance Survey Sheet 1:50,999: 1:10.000

Date Notified (under 1949 Act): N/A Date of last revision:

Date Notified (under 1981 Act): 16 May 1990 Date of last revision:

Other Information:

Description and Reasons for Notification:

Barnby Broad and Marshes are situated in the Waveney Valley and comprise a large and varied area of open water, carr woodland, fen, grazing marsh and dykes. Several of the communities are confined to the Broadland area of Norfolk and Suffolk where they are under increasing threat. The large area of semi-natural habitats and traditional grazing marsh make this site especially important as other areas of Broadland become fragmented. The plant communities are very rich in species and the site has an outstanding assemblage of rare and uncommon plants. The range of habitats is also attractive to nesting birds and several rare species breed in the area. There is, in addition, considerable entomological interest.

Barnby Broad is a small, shallow, man-made lake which is the result of medieval peat-cutting. Although isolated from the nutrient-rich waters in the river, the Broad contains few water-plants apart from White Water-lily (Nymphaea alba). The marginal vegetation is more diverse and is dominated by Common Reed (Phragmites australis) and the scarce Fibrous Tussock-sedge (Carex appropinquata). On the landward side of this fringe is a zone of floating, but well-consolidated, carpets of bog-moss (Sphagnum spp.). A diverse community of low-growing plants is present which includes Marsh Arrowgrass (Triglochin palustris), Marsh Fern (Thelypteris palustris), Milk-parsley (Peucedanum palustre) and Southern Marsh-orchid (Dactylorhiza praetermissa).

Mature carr woodland surrounds the Broad. Alder (Alnus glutinosa) is the dominant tree species with frequent Ash (Fraxinus excelsior) and Pedunculate Oak (Quercus robur). The shrub layer includes bushes of Grey Willow (Salix cinerea), Guelder Rose (Viburnum opulus) and Hawthorn (Crataegus monogyna). Numerous springs emerge in the carr and the variable wetness of the ground is reflected in a diverse ground flora. Nettle (Urtica dioica) and Raspberry (Rubus idaeus) are locally dominant and other species include Yellow Iris (Iris pseudacorus), Lesser Pond-sedge (Carex acutiformis), Purple Small-reed (Calamagrostis canescens), Marsh Fern and Primrose (Primula vulgaris).

Tall fen vegetation is well developed on the site. The richest areas are on fen peats and are regularly cut. Reed is dominant and other species include Milk-parsley, Marsh Sow-thistle (Sonchus palustris), Common Spotted-orchid (Dactylorhiza fuchsii), Angelica (Angelica sylvestris) and Purple Loosestrife (Lythrum salicaria). Drier, relatively species poor fen, characterized by False Oat-grass (Arrhenatherum elatius), is also present, on former grazing marsh.

A range of grassland types is present on the site. The richest areas are those that have remained unimproved and are dominated by a variety of species of rush (Juncus spp) and Purple Moor-grass (Molinia caerulea). In places the fen peats have become acidic through leaching and here bog mosses are abundant. Other plants occurring include Bog Pimpernel (Anagallis tenella), Marsh Pea (Lathyrus palustris), Meadow Thistle (Cirsium dissectum), Yellow-rattle (Rhinanthus minor) and Adder's-tongue (Ophioglossum vulgatum).

A large part of the site is improved grazing marsh. Although the fields are of no special botanical interest they are crossed by a network of species-rich, clear water dykes. An impressive number of water-plants is present and the dykes can be divided into two main types. The dykes close to the river are on alluvial clays and are dominated by the uncommon Water-soldier (Stratiotes aloides). Other species present include Stoneworts (Chara spp.), Frogbit (Hydrocharis morsus-ranae), 5 species of pondweed (Potamogeton spp.), and the uncommon Whorled Water-milfoil (Myriophyllum verticillatum). Away from the river the dykes cut through fen peats and are characterised by an abundance of Greater Bladderwort (Utricularia vulgaris agg.)

The fens and tussocky grassland provide suitable conditions for a number of breeding birds which include Tufted Duck, Barn Owl, Sparrowhawk and Snipe. There are also breeding records for several other rare species of bird.

The extensive areas of undisturbed fen and waterways are ideal hunting grounds for Otters. There is also considerable entomological interest and a local rarity, the Norfolk Aeschna Dragonfly (Aeschna isosceles), is present in a number of dykes.