

COUNTY: Norfolk

SITE NAME: LUDHAM-POTTER HEIGHAM MARSHES

DISTRICT: North Norfolk

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

Local Planning Authority: Broads Authority

National Grid Reference: TG 410178 Area: 99.0 (ha) 244.629 (ac)

Ordnance Survey Sheet 1:50,000: 134 1:10,000:

Date Notified (Under 1949 Act): 1981 Date of Last Revision: –

Date Notified (Under 1981 Act): 1990 Date of Last Revision: –

Other Information:

Part of the site is a National Nature Reserve and a Grade 1 NCR site.

Description and Reasons for Notification:

The grass marshes on the north side of the River Thurne between Ludham and Potter Heigham are both a nationally important wetland site and one of the richest areas of traditionally managed grazing marsh and dykes now remaining in Broadland. These marshes lie on fen peats and alluvial clays and are summer-grazed by cattle. The nature conservation importance of the marshlands is concentrated principally on the aquatic flora and fauna of the dykes. These support a wide range of water plants, including several uncommon species, in the acidic or neutral, relatively nutrient-poor waters. There is a great diversity of aquatic invertebrates including a rich assemblage of dragonflies. Most of the grassland has been semi-improved but small areas of an unusual acidic heath and grassland community occur on the peats. Areas of tussocky grassland and open water provide suitable nesting habitat for several ducks and waders.

Aquatic flora

The flora of the dykes has developed in response to variations in water quality, water depth and management techniques. A distinct community grows in the base-poor, slightly acidic, low nutrient waters along the upland margin. The principal species of water-plant are Bog Pondweed *Potamogeton polygonifolius*, Greater Bladderwort *Utricularia vulgaris*, Bulbous Rush *Juncus bulbosus* var. *fluitans*, Floating Scirpus *Eleogiton fluitans*, and the rare Floating Water-plantain *Luronium natans*. The emergent and bank-edge vegetation is rather sparse but includes Common Cottongrass *Eriophorum angustifolium*, Lesser Spearwort *Ranunculus flammula*, Marsh Pennywort *Hydrocotyle vulgaris* and Common Spikerush *Eleocharis palustris*. The majority of the dykes contain neutral waters of moderate base status with medium levels of nutrients. The diverse vegetation includes Whorled Water-milfoil *Myriophyllum verticillatum*, Frogbit *Hydrocharis morsus-ranae*, Water Violet *Hottonia palustris*, Floating Pondweed *Potamogeton natans* and a great abundance of the rare Water Soldier *Stratiotes aloides*. The emergent vegetation is similarly diverse with Flowering Rush *Butomus umbellatus*, Water Dropwort *Oenanthe fistulosa*, Bottle Sedge *Carex rostrata* and Water Plantain *Alisma plantago-aquatica*.

A discrete community occurs where there is seepage of brackish nutrient-enriched waters from the River Thurne into dykes near the river bank. Fennel-like Pondweed *Potamogeton pectinatus*, Horned Pondweed *Zannichellia palustris* and Mare's tail *Hippuris vulgaris* are the dominant water-plants with emergent Grey Clubrush *Schoenoplectus tabernaemontani* and Great Reedmace *Typha latifolia*.

Terrestrial flora

An unusual wet heath and acidic grassland mosaic occupies part of the site near the upland margin. The deeper peats support a community dominated by Purple Moor-grass *Molinia caerulea*, Cross-leaved Heath *Erica tetralix* and Bog Mosses *Sphagum* spp. Other characteristic plants include Sundew *Drosera rotundifolia*, Heather *Calluna vulgaris*, Common Cotton-grass, Mat-grass *Nordus stricta* and Tawny Sedge *Carex hostiana*. This grades into a type of fen grassland where conditions are drier and less acidic. Here the community is dominated by Soft Rush *Juncus effusus* and Sweet Vernal Grass *Anthoxanthum odoratum* with Common Spotted Orchid *Dactylorhiza fuchsii*, Bog Pimpernel *Anagallis tenella*, Meadow Thistle *Cirsium dissectum*, Marsh Lousewort *Pedicularis sylvatica* and Marsh Cinquefoil *Potentilla palustris*.

Fauna

Aquatic invertebrates are well represented with a diverse coleoptera and Mollusca fauna. The site is particularly rich in dragonflies and includes the rare Norfolk Aeshna *Aeshna isosceles*, scarce Libellula *Libellula fulva* and Hairy Dragonfly *Brachytron pratense*. Forty species of moth have been recorded including the scarce Brown-veined Wainscot *Archanara dissoluta*.

Those marshes that retain a tussocky grassland structure provide suitable nest sites for small numbers of Redshank, Lapwing, Oystercatcher, Snipe and Yellow Wagtail. The marginal vegetation and open water of the dykes also support nesting Garganey, Shoveler, Tufted Duck, Reed Bunting and Sedge Warbler.