

Date notified: 3rd July 1986

COUNTY: Norfolk

SITE NAME: UPTON BROAD AND MARSHES

DISTRICT: Broadland

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 390137                      Area: 194.0 (ha) 479.3 (ac)

Ordnance Survey Sheet 1:50,000: 134                      1:10,000: TG 31 SE, TG 41 SW

Date Notified (Under 1949 Act): 1959                      Date of Last Revision: 1980

Date Notified (Under 1981 Act): 1986                      Date of Last Revision: –

Other Information:

Whole site is NCR Grade 1. Part is owned and managed as a nature reserve by Norfolk Naturalists' Trust.

#### **Reasons for Notification:**

This site which lies in the middle Bure Valley forms an outstanding example of unreclaimed wetland and grazing marsh. Because of its isolated position and freedom from direct riverine influences the complementary habitats of open water, fen, carr woodland and marsh dyke represent a unique example of a condition that was once common before the effects of nutrient enrichment, recreational over-use and agricultural improvement became widespread in Broadland. The Broad is now one of only four broads that retain clear water and abundant water plants, while the surrounding fens, carr woodlands and marsh dykes support an exceptional variety of plants and animals, including many rare species.

The clear waters of Upton Broad, derived from springs bearing groundwater from the adjacent uplands, are base-rich, slightly brackish and with relatively low levels of available nutrients, support a range of water-plants including an abundance of the nationally rare Holly-leaved Naiad *Najas marina* which is better developed here than any other site in the country. Stoneworts *Chara* spp. are present with small quantities of Fennel-leaved Pondweed *Potamogeton pectinatus*, White and Yellow Water Lilies *Nymphaea alba* and *Nuphar lutea* and the nationally scarce Grass-wrack Pondweed *P. compressus*. Little Broad, an arm of the main water body, supports an abundance of Flat-stalked Pondweed *P. friesii*.

The invertebrate fauna of the Broad is rich in species and includes eighteen species of freshwater snail including *Viviparus contectus* and *Valvata macrostoma* which are both of restricted distribution.

Surrounding the Broad is swamp vegetation which is unusual for the prominence of Saw Sedge *Cladium mariscus*, in having both species of Reedmace *Typha latifolia* and *T. angustifolia* and large amounts of Bulrush *Schoenoplectus lacustris*. Reed *Phragmites australis* is plentiful throughout the swamp and the Greater Tussock Sedge *Carex paniculata* has developed locally.

Sedge-rich and mixed herbaceous fen vegetation has developed on the peat soils, with Saw Sedge dominant or co-dominant with Reed or Bog-rush *Schoenus nigricans*. Past peat cutting has created variations in the depth and thus wetness of the peat which is reflected in the species composition of the vegetation. In depressions, species such as greater Spearwort *Ranunculus lingua*, the nationally scarce Milk Parsley *Peucedanum palustre*,

Cowbane *Cicuta virosa* and Marsh Fern *Thelypteris thelypteroides* occur with the Sedges *Carex appropinquata*, *C. lasiocarpa*, and *C. elata*. Paths and glades through the fen which have been regularly mown for many years have also developed a rich flora with many low-growing species such as the locally rare Bog Pimpernel *Anagallis tenella*, Lesser Butterfly Orchid *Platanthera bifolia*, Grass of Parnassus *Parnassia palustris*, Marsh Lousewort *Pedicularis palustris*, Marsh Helleborine *Epipactis palustris* and the Sedges *Carex flacca*, *C. diandra*, *C. lepidocarpa* and *C. pulicaris*. A moss carpet is present in places on flushed, nutrient-poor peats and the vegetation is characterised by both *Sphagnum* and pleurocarpous mosses. Shallow pools within this community contain Stoneworts, the nationally scarce Fen Pondweed *Potamogeton coloratus* and the locally rare Bladderwort *Utricularia minor*. Round-leaved Wintergreen *Pyrola rotundifolia* is another nationally scarce species which grows locally on ride and glade edges.

Mixed scrub has invaded many former areas of open fen and includes Bog Myrtle *Myrica gale*, Creeping Willow *Salix repens*, Guelder Rose *Viburnum opulus*, Buckthorn *Rhamnus catharticus* and Alder Buckthorn *Frangula alnus*. Alder carr occurs in long established areas of woodland on permanently waterlogged soils. Alder *Alnus glutinosa* and Sallow *Salix cinerea* are dominant over a ground flora characterised by Yellow Iris *Iris pseudacorus*, Lesser Pond Sedge *Carex acutiformis*, Greater Tussock Sedge, Gipsywort *Lycopus europaeus*, Marsh Fern and, locally, Bog moss *Sphagnum* spp. A drier, more mature fen woodland occurs on the margins of the site. Pedunculate Oak *Quercus robur* and Ash *Fraxinus excelsior* are abundant and the ground flora includes Herb Robert *Geranium robertianum*, Primrose *Primula vulgaris*, Ground Ivy *Glechoma hederacea* and the lianes Honeysuckle *Lonicera periclymenum* and Wild Hop *Humulus lupulus*.

A large area of permanent grazing marsh lies adjacent to the broad and fen. The grassland is generally improved but a network of drainage dykes contain clear-waters and one of the richest aquatic communities now remaining in Broadland. The dykes are generally dominated by the rare Water Soldier *Stratiotes aloides* but other abundant water-plants include Frogbit *Hydrocharis morsus-ranae*, Canadian Pondweed *Elodea canadensis*, Stoneworts, Broad-leaved Pondweed *Potamogeton natans* and the nationally scarce Grass-wrack Pondweed. Other notable species include Opposite-leaved Pondweed *Groenlandia densa*, Greater Water-parsnip *Sium latifolium*, Flowering Rush *Butomus umbellatus*, River Water Dropwort *Oenanthe fluviatilis*, and Fen Pondweed.

The fens and dykes support an outstanding assemblage of dragonflies and damselflies *Odonata*, with the nationally rare Norfolk Aeshna *Aeshna isosceles* present in great abundance. The Swallowtail *Papilio machaon*, another rare Broadland speciality also breeds on the site. Grass snakes are unusually common, while Marsh Harriers, and in the winter months, Hen Harriers frequently hunt over the area.