

Date of notification: 1 February 1991

COUNTY: Norfolk

SITE NAME: BURE BROADS AND MARSHES

DISTRICT: Broadland and 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 337166

Area: 736.5 (ha) 1819.9 (ac)

Ordnance Survey Sheet 1:50,000: 134

1:10,000: TG 31 NW, NE, SE

Date Notified (Under 1949 Act): 1954 Ranworth Marshes

Date of Last Revision: 1977 Ranworth Marshes

Date Notified (Under 1981 Act): 1991

Date of Last Revision: –

Other Information:

This is a composite site made up of the Bure Marshes Nature Reserve and the former separate Site of Special Scientific Interest known as Ranworth Marshes. The majority of the site is Grade I NCR and is recognised as a wetland site of international importance under the Ramsar Convention. It is included within the Broads Environmentally Sensitive Area.

Description and Reasons for Notification:

This nationally and internationally important wetland complex is situated on fenland peats in the floodplain of the River Bure between Wroxham and South Walsham. It forms an excellent example of unreclaimed marshland supporting a wide range of plant communities which are typical of Broadland. A notable feature is the extensive area of alder carr woodland which is better developed here than in the other Broadland valleys and the site now forms probably the finest example of swamp alder carr in Britain. Open areas of fen vegetation are still regularly cut for reed, sedge, marsh hay and species rich fen communities have developed which include many rare plants. Nutrient enrichment of the open waters irrigated by the River Bure has caused the virtual elimination of the former diverse assemblages of water plants but recent restoration experiments at Cockshoot Broad and on fen dykes have encouraged water plants to return. There is considerable invertebrate and bird interest; several uncommon relict fen species have been recorded and there is a population of the rare Swallowtail butterfly. The large areas of undisturbed carr and fen attract many breeding birds including several rare marshland species.

Carr

Swamp alder carr occurs on unstable muds and peat through which there are vertical fluctuations in the water-level. Alder *Alnus glutinosa* is dominant in these waterlogged situations with some Ash *Fraxinus excelsior*, Pedunculate Oak *Quercus robur* and Birch *Betula pubescens* on somewhat drier soils. A wide variety of shrub species are present including Alder Buckthorn *Frangula alnus*, Buckthorn *Rhamnus catharticus*, Guelder Rose *Viburnum opulus*, Dogwood *Cornus sanguinea*, Red Currant *Ribes rubrum* and Common Sallow *Salix cinerea*. Straggling lianas of Hop *Humulus lupulus* are characteristic of these Broadland carrs. The ground flora is diverse with Greater Tussock Sedge *Carex paniculata*, Lesser Pond Sedge *Carex acutiformis*, Yellow Flag *Iris pseudacorus*, Meadowsweet *Filipendula ulmaria*, Stinging Nettle *Urtica dioica*, Royal Fern *Osmunda regalis* and the uncommon Marsh Fern *Thelypteris thelypteroides*.

Fen

The open fen communities are dominated by Reed *Phragmites australis*, Saw Sedge *Cladium mariscus* or Purple Small-reed *Calamagrostis canescens*. Some areas are regularly mown or cut to control the invasion of scrub and produce a commercial crop of reed and sedge. The richest areas are the long established sedge-beds and notable species include Lesser Tussock Sedge *Carex appropinquata*, Marsh Pea *Lathyrus palustris*, Cowbane *Cicuta virosa*, Milk Parsley *Peucedanum palustre*, Greater Water-parsnip *Sium latifolium* and Marsh Helleborine *Epipactis palustris*. A large population of the nationally rare Crested Buckler-fern *Dryopteris cristata* occurs in an acidic community characterised by Birch and Bog Mosses *Sphagnum* spp.

Mixed scrub is invading those areas of open fen that are no longer cut. Alder is the primary coloniser with Alder Buckthorn, Common Sallow and locally Bog Myrtle *Myrica gale*. A number of regularly mown paths have been cut through the open fen and they have a distinctive flora that includes Ragged Robin *Lychnis flos-cuculi*, Yellow Rattle *Rhinanthus minor*, Southern Marsh Orchid *Dactylorhiza praetermissa* and Creeping Jenny *Lysimachia nummularia*.

Open Water

The principal open waters are Hoveton Great Broad, Decoy Broad, Ranworth Broad and Cockshoot Broad. The three former are directly connected to the enriched river water and there has been a dramatic decline of the water-plants in all these broads over the last 30 years. The waters now contain small populations of Yellow Waterlily *Nuphar lutea* and White Water-lily *Nymphaea alba* with Rigid Hornwort *Ceratophyllum demersum* and Curled Pondweed *Potamogeton crispus* appearing some years. Cockshoot Broad has been isolated from the river and the nutrient rich sediments have been removed. Aquatic plants have recolonised the clear waters due to the lower nutrient status. Those drainage dykes within the fen that do not receive a direct input of river water also contain clear water. A rich assemblage of water-plants is present and includes Frogbit *Hydrocharis morsus-ranae*, Water Violet *Hottonia palustris*, Fen Pondweed *Potamogeton coloratus*, Spiked Water-milfoil *Myriophyllum spicatum*, Whorled Water-milfoil *M. verticillatum* and the uncommon Water Soldier *Stratiotes aloides*.

Fauna

The invertebrate fauna of the marshes is very rich and includes a wide range of relict fen species. Periodic flooding maintains conditions suitable for a number of Britain's rarest aquatic insects. Among these are the water beetles *Agabus striolatus* and *Hydroporus scalesianus*. The long established reed-dominated communities support populations of some of this country's rarest moths, for example, Reed Leopard *Phragmataecia castaneae*, Flame Wainscot *Senta flammea* and Fenn's Wainscot *Photodes brevilinea*, all have larvae phytophagous on reed and the latter was first described from Ranworth. The nationally rare spider *Clubiona juvenis* also occurs in these reed-bed areas. A high diversity of invertebrates utilise the regularly mown sedgebeds, including many nationally rare species. Examples include the Swallowtail Butterfly *Papilio machaon britannicus* a race unique to Britain, whose larvae feed on Milk Parsley, the micro-moth *Aderis lorquiniana*, the fly *Tetanocera freyi* and the spider *Centromerus incultus*.