

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name:	The Broads
Unitary Authority/County:	Norfolk, Suffolk
SAC status:	designated on 1 April 2005 <i>Anisus vorticulus</i> added: 11 February 2011
Grid reference:	TG438209
SAC EU code:	UK0013577
Area (ha):	5865.60
Component SSSI:	Alderfen Broad SSSI, Ant Broads and Marshes SSSI, Barnby Broad and Marshes SSSI, Broad Fen, Dilham SSSI, Bure Broads and Marshes SSSI, Burgh Common and Muckfleet Marshes SSSI, Calthorpe Broad SSSI, Cantley Marshes SSSI, Crostwick Marsh SSSI, Damgate Marshes, Acle SSSI, Decoy Carr, Acle SSSI, Ducan's Marsh, Claxton SSSI, Geldeston Meadows SSSI, Hall Farm Fen, Hemsby SSSI, Halvergate Marshes SSSI, Hardley Flood SSSI, Limpenhoe Meadows SSSI, Ludham to Potter Heigham Marshes SSSI, Poplar Farm Meadows, Langley SSSI, Priory Meadows, Hickling SSSI, Shallam Dyke Marshes, Thurne SSSI, Smallburgh Fen SSSI, Sprat's Water and Marshes, Carlton Colville SSSI, Stanley and Alder Carrs, Aldeby SSSI, Trinity Broads SSSI, Upper Thurne Broads and Marshes SSSI, Upton Broad and Marshes SSSI, Yare Broads and Marshes SSSI

Site description:

The Broads in East Anglia contain several examples of naturally nutrient-rich lakes. Although artificial, having been created by peat digging in medieval times, these lakes and the ditches in areas of fen and drained marshlands support relict vegetation of the original Fenland flora, and collectively this site contains one of the richest assemblages of rare and local aquatic species in the UK. The stonewort – pondweed – water-milfoil – water-lily (*Characeae* – *Potamogeton* – *Myriophyllum* – *Nuphar*) associations are well-represented, as are club-rush – common reed *Scirpo* – *Phragmitetum* associations. The dyke (ditch) systems support vegetation characterised by water-soldier *Stratiotes aloides*, whorled water-milfoil *Myriophyllum verticillatum* and broad-leaved pondweed *Potamogeton natans* as well as being a stronghold of little whirlpool ram's-horn snail *Anisus vorticulus* and Desmoulin's whorl snail *Vertigo moulinsiana* in East Anglia. The range of wetlands and associated habitats also provides suitable conditions for otters *Lutra lutra*.

The Broads is the richest area for stoneworts (charophytes) in Britain. The core of this interest is the Thurne Broads and particularly Hickling Broad, a large shallow brackish lake. Within the Broads examples of *Chara* vegetation are also found within fen pools (turf ponds) and fen and marsh ditch systems. The Broads supports a number of rare and local charophyte species, including *Chara aspera*, *C. baltica*, *C. connivens*, *C. contraria*, *C. curta*, *C. intermedia*, *C. pedunculata*, *Nitella mucronata*, *Nitellopsis obtusa*, *Tolypella glomerata* and *T. intricata*.

The complex of sites contains the largest blocks of alder *Alnus glutinosa* wood in England. Within the complex complete successional sequences occur from open water through reedswamp to alder woodland, which has developed on fen peat. There is a correspondingly wide range of flora, including uncommon species such as marsh fern *Thelypteris palustris*.

This site contains the largest example of calcareous fens in the UK. The great fen-sedge *Cladium mariscus* habitat occurs in a diverse set of conditions that maintain its species-richness, including small sedge mires, and areas where great fen-sedge occurs at the limits of its ecological range. The habitat type forms large-scale mosaics with other fen types, fen-meadows (with purple moor-grass *Molinia caerulea*), open water and woodland, and contains important associated plants such as fen orchid *Liparis loeselii*, marsh helleborine *Epipactis palustris*, lesser tussock-sedge *Carex diandra*, slender sedge *C. lasiocarpa* and fibrous tussock-sedge *C. appropinquata*. There are also areas of short sedge fen (both black bog-rush – blunt-flowered rush *Schoenus nigricans* – *Juncus subnodulosus* mire and bottle sedge – moss *Carex rostrata* – *Calliargon cuspidatum/giganteum* mire), which in places form a mosaic with common reed – milk-parsley *Phragmites australis* – *Peucedanum palustris* fen. The Broads also contain examples of transition mire, that are relatively small, having developed in re-vegetated peat-cuttings as part of the complex habitat mosaic of fen, carr and open water.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Alkaline fens. (Calcium-rich spring water-fed fens)
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). (Alder woodland on floodplains)*
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*. (Calcium-rich fen dominated by great fen sedge (saw sedge))*
- Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. (Calcium-rich nutrient-poor lakes, lochs and pools)
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*). (Purple moor-grass meadows)
- Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation. (Naturally nutrient-rich lakes or lochs which are often dominated by pondweed)
- Transition mires and quaking bogs. (Very wet mires often identified by an unstable 'quaking' surface)

Qualifying species: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Desmoulin's whorl-snail *Vertigo moulinsiana*
- Little whirlpool ram's-horn snail *Anisus vorticulus*
- Fen orchid *Liparis loeselii*
- Otter *Lutra lutra*

Annex I priority habitats are denoted by an asterisk (*).

This citation relates to a site entered in the Register of European Sites for Great Britain.
Register reference number: UK0013577
Date of registration: 11 February 2011

S G Hopkins

Signed:

On behalf of the Secretary of State for
Environment, Food and Rural Affairs