

COUNTY: Norfolk

SITE NAME: CALTHORPE BROAD

DISTRICT: North Norfolk

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

Local Planning Authority: North Norfolk District Council

National Grid Reference: TG 412258      Area: 43.5 (ha) 107.4 (ac)

Ordnance Survey Sheet 1:50,000: 134      1:10,000: TG 42 NW

Date Notified (Under 1949 Act): 1954      Date of Last Revision: 1971

Date Notified (Under 1981 Act): 1984      Date of Last Revision: –

Other Information:

A Grade 1 NCR site. Owned by the Nature Conservancy Council.

### **Reasons for Notification:**

Calthorpe Broad is a small isolated Broad situated in the Upper Thurne catchment. The principal interest of this site is centred on the Broad itself, which unlike the majority of open waters in the region still retains a diverse and productive aquatic flora and fauna. Several locally uncommon marginal and water plants are present. Surrounding the Broad is alder-willow-birch carr, small areas of open fen and to the north, an area of unimproved grazing marsh. The Broad is an important research site and it has been used by MAFF for extensive studies on the ecology of the coypu, an introduced mammal that has become a pest in Broadland.

The Broad and surrounding dykes are isolated from the adjacent farmland and the waters are naturally base-poor and low in nutrients. The low nutrient status has ensured the retention of a rich assemblage of water plants that include Mare's-tail *Hippuris vulgaris*, Water Violet *Hottonia palustris*, Bluntleaved Pondweed *Potamogeton obtusifolius*, Spiked Water-milfoil *Myriophyllum spicatum*, Yellow and White Water-lilies *Nuphar lutea* and *Nymphaea alba*, Floating Scirpus *Eleogiton fluitans* and the nationally scarce Water Soldier *Stratiotes aloides*. The marginal and emergent vegetation is also diverse with Sweet Flag *Acorus calamus*, Yellow Flag *Iris pseudacorus*, Flowering Rush *Butomus umbellatus*, Marsh Pennywort *Hydrocotyle vulgaris* and Bogbean *Menyanthes trifoliata*. A small area of open fen on the north side of the Broad includes Marsh Cinquefoil *Potentilla palustris*, Lesser Spearwort *Ranunculus flammula* and Adder's Tongue *Ophioglossum vulgatum*.

Mixed carr woodland surrounds the Broad and is dominated by Alder *Alnus glutinosa*, Common Sallow *Salix cinerea* and Birch *Betula pubescens*. The ground flora is varied and includes species typical of Broadland carrs eg. Lesser Pond Sedge *Carex acutiformis*, Yellow Flag, Gypsywort *Lycopus europaeus*, Marsh Fern *Thelypteris thelypteroides* and species associated with more acidic conditions, eg. Royal Fern *Osmunda regalis*, Cotton-grass *Eriophorum angustifolium* and the bog moss *Sphagnum molle*.

The carr woodland grades into broad-leaved plantation which is well established with abundant secondary re-growth. Pedunculate Oak *Quercus robur* and Birch are dominant with frequent Rhododendron *Rhododendron ponticum* in the shrub layer. The ground flora includes Honeysuckle *Lonicera periclymenum* as a straggling liane, Bracken *Pteridium aquilinum* and White Climbing Fumitory *Corydalis claviculata*.

Several open areas of mixed herbaceous fen occur within the carr and these are dominated by Reed *Phragmites australis*, Lesser Reedmace *Typha angustifolium*, Purple Small-reed *Calamagrostis canescens* and Yellow Flag. Typical species present include Marsh Marigold

*Caltha palustris*, Angelica *Angelica sylvestris*, Royal Fern, Greater Spearwort *Ranunculus lingua* and the uncommon Milk Parsley *Peucedanum palustre*.

Grazing marsh consisting of acidic grassland, provides additional interest and the sward is dominated by Common Bent-grass *Agrostis capillaris*, Brown Bent-grass *A. canina* and Yorkshire Fog *Holcus lanatus*. Other species include Tormentil *Potentilla erecta*, Sheep's Sorrel *Rumex acetosella* and Hard Rush *Juncus inflexus*.