

File ref:

County: Lincolnshire **Site name:** Baston and Thurlby Fens

District: South Kesteven

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

Local Planning Authority: South Kesteven District Council

National Grid Reference: TF 130167 **Area:** 56.74 (ha) 140.2 (ac)
TF 124166

Ordnance Survey Sheet 1: 50 000: 130 **1: 10 000** TF 11 NW

Date Notified (Under 1949 Act): 1968 **Date of Last Revision:**

Date Notified (Under 1981 Act): 1984 **Date of Last Revision:** 28.10.1999

Other Information:

Baston Fen is owned and managed as a Wildlife Trust reserve. The boundary was changed in 1984 to exclude a ploughed field and is now extended to include a further Wildlife Trust reserve (Thurlby Fen Slipe) and sections of the River Glen and the Counter Drain.

Spined loach *Cobitis taenia* is listed on Annex II of the Council Directive (92/43/EEC) on the Conservation of Natural Habitats and of Wild Flora and Fauna.

Reasons for Notification:

This is the only permanent grassland in Lincolnshire used as a washland. Flooded borrow pits and associated marsh support a variety of wetland plant communities and an outstanding assemblage of dragonflies and damselflies. The Counter Drain contains an exceptionally rich aquatic flora and represents an important stronghold of the spined loach *Cobitis taenia* within the Welland catchment.

Description:

Situated along the banks of the River Glen, Baston and Thurlby Fens form long strips of permanent pasture subject to regular winter flooding, interspersed with a series of old flooded borrow-pits with associated swamp and fen plant communities. The fen vegetation is dominated by reed sweet-grass *Glyceria maxima*, common reed *Phragmites australis*, reedmace *Typha latifolia* and greater pond-sedge *Carex riparia* and there are a variety of marsh plants including yellow iris *Iris pseudacorus*, horsetails *Equisetum spp.*, greater spearwort *Ranunculus lingua*, greater tussock-sedge *Carex paniculata*, greater water-parsnip *Sium latifolium* and several species of orchid. The open water of the borrow pits supports good populations of the water

Baston and Thurlby Fens (cont...)

violet *Hottonia palustris*, greater bladderwort *Utricularia vulgaris* and the scarce fen pondweed *Potamogeton coloratus*. On osier bed is also included within the site and a rough grazing meadow dominated by a variety of rush and sedge.

An exceptionally rich flora has developed within the Counter Drain, a slow-moving eutrophic watercourse over a fine mineral substrate, lying adjacent to Baston Fen. The drain forms an important refuge for a diverse community of aquatic and emergent plants including yellow water-lily *Nuphar lutea*, needle spike-rush *Eleocharis acicularis*, arrowhead *Sagittaria sagittaria*, frogbit *Hydrocharis morsus-ranae*, fan-leaved water-crowfoot *Ranunculus circinatus* and spiked water-milfoil *Myriophyllum spicatum*. Of particular note is the unusually rich assemblage of pondweeds within the drain which includes perfoliate pondweed *Potamogeton perfoliatus*, flat-stalked pondweed *P. friesii* and the nationally uncommon hairlike pondweed *P. trichoides* and grass-wrack pondweed *P. compressus*.

The river, drains and borrow pits of the fens are rich in freshwater invertebrates, mostly notably supporting an exceptionally rich dragonfly and damselfly fauna. Nationally notable species which regularly breed on the site include the hairy dragonfly *Brachytron pratense*, ruddy darter *Sympetrum sanguineum* and the variable damselfly *Coenagrion pulchellum*. An impressive variety of Mollusca have been recorded, including one nationally rare aquatic snail, and a range of water beetles including two nationally rare species typical of relict fenland.

Amongst the variety of fish which have been recorded from the site is the spine loach *Cobitis taenia*, significant populations of which occur in the Counter Drain and, to a lesser extent, in the River Glen. This site represents a key stronghold for this species within the Welland catchment. The natural British distribution of this fish is restricted to the sandy substrates of water courses within just five catchments of eastern England.

Additional interest is provided by the breeding bird community and the over-wintering populations of wildfowl which utilise the site.