

File ref: SE 70

County: Lincolnshire

Site Name: Hatfield Chase Ditches

District: North Lincolnshire

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

Local Planning Authority: North Lincolnshire District Council

National Grid Reference: SE 748070 **Area:** 44.96 (ha)

Ordnance Survey Sheet 1:50,000: 112 **1:10,000:** SE 70 NW, SE 70 NE, SE 70 SW,
SE 70 SE

Date Notified (Under 1981) Act: 17 September 1999

Other Information:

This is a new site.

Description and Reasons for Notification:

Hatfield Chase is a large area of former marsh and wetland at the head of the Humber Estuary between Doncaster and Scunthorpe. The land has been extensively drained for agriculture, and is now split by a complex network of ditches. These ditches retain elements of the former marshland and now make up the majority of nature conservation interest in an intensively farmed arable landscape and a major element in the Humberhead Levels natural area. The drains are cut through a mixture of alluvial silts and sands, and in some areas peat soils derived from the former fens and mires. Some of the water feeding the system is acidic water from remaining raised mire areas.

The site comprises three main ditch sections, the North Idle Drain, North Level Engine Drain and South Engine Drain, with some of their feeder ditches. These ditches hold water throughout the year and have a range of water depths. The ditches contain a rich assemblage of aquatic and emergent plants, typical of nutrient rich systems. The aquatic species are dominated by pondweeds, such as broad-leaved pondweed *Potamogeton natans*, fennel-pondweed *Potamogeton pectinatus*, and common duckweed *Lemna minor*. Less common species include ivy-leaved duckweed *Lemna trisulca* and various-leaved pondweed *Potamogeton gramineus*. Intermediate water-starwort *Callitriche hamulata* and floating club-rush *Eleogiton fluitans* are found in some parts of the system, being more typical of acidic water.

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Hatfield Chase Ditches (cont...)

The emergent zone is very limited in some of the ditches, due to their steep banks, but stretches of the bank are dominated by tall reed species, such as common reed *Phragmites australis*, reed canary-grass *Phalaris arundinacea* and branched bur-reed *Sparganium erectum*.

Other areas are dominated by sedges, mainly greater pond sedge *Carex riparia* and tufted sedge *C. elata*, but also including false fox sedge *C. otrubae* and lesser pond sedge *C. acutiformis*.

The banks of the ditches are very variable in vegetation, being dominated by common grasses and herbs, but include patches of common meadow-rue *Thalictrum flavum*, purple loosestrife *Lythrum salicaria* and meadowsweet *Filipendula ulmaria*. Other parts are dominated by scrub and there are some areas of heath vegetation dominated by gorse *Ulex europaeus* or broom *Cytisus scoparius*.

Some invertebrate studies have been carried out, the most interesting records being an assemblage of four reed beetles, including *Donacia clavipes* which is associated with common reed, and *D. simplex*, both of which are nationally scarce.

The ditches also support a population of water vole *Arvicola terrestris*.