

Site name: Orwell Estuary

County: Suffolk

District: Ipswich, Suffolk Coastal and Babergh

Status: Site of Special Scientific Interest (SSSI) notified under section 28C of the Wildlife and Countryside Act 1981 as inserted by Schedule 9 to the Countryside & Rights of Way Act 2000.

Local Planning Authority: Ipswich Borough Council, Suffolk Coastal District Council and Babergh District Council

National Grid Reference: TM228379

Area: 1336.59 (ha)

Ordnance Survey Sheet: 1:50,000: 169

1:10,000: TM 13 NE, TM 14 SE,
TM 23 NW, TM 23 SW, TM 22

Date Notified: 9 April 2003

Reasons for Notification:

The Orwell Estuary is of national importance for breeding avocet *Recurvirostra avosetta*, its breeding bird assemblage of open waters and their margins, nine species of wintering waterfowl (including black-tailed godwit *Limosa limosa islandica*), an assemblage of vascular plants, and intertidal mud habitats.

General description:

The Orwell is a long and relatively narrow estuary with extensive mudflats and some saltmarsh.

Extensive mudflats border the channel and support large patches of eelgrass *Zostera marina*, and dwarf eelgrass *Z. noltii* as well as large numbers of invertebrates that are important for feeding waders. Where it occurs, the saltmarsh tends to be sandy and fairly calcareous with a wide range of communities. Glasswort *Salicornia spp.* and small cord-grass *Spartina maritima* are the principal colonisers of the mud, and sea aster *Aster tripolium* is abundant on the lower marsh. The central areas of marsh are dominated by common saltmarsh-grass *Puccinellia maritima*, sea purslane *Atriplex portulacoides*, and common sea-lavender *Limonium vulgare*. Other species include sea arrowgrass *Triglochin maritimum*, annual sea-blite *Suaeda maritima*, sea-milkwort *Glaux maritima*, greater sea-spurrey *Spergularia media*, and sea plantain *Plantago maritima*. There are small areas of vegetated shingle on the foreshore of the lower reaches, but most of the saltmarsh is fringed by sea couch *Elytrigia atherica* or by common reed *Phragmites australis* and sea club-rush *Bolboschoenus maritimus* further upstream.

The freshwater grazing marshes which adjoin the estuary at Shotley, and the wet grassland and standing water of Trimley marshes, each form an integral part of the ornithological interest of the site. Shotley marshes are especially important for feeding dark-bellied brent geese *Branta bernicla bernicla*, wigeon *Anas penelope* and snipe *Gallinago gallinago*, and for breeding redshank *Tringa totanus* and lapwing

Vanellus vanellus. Trimley marshes have become an important refuge for wintering and passage birds, as well as a key breeding site.

Breeding birds

The Orwell Estuary supports a nationally important breeding number of avocet. It also supports a nationally important assemblage of breeding birds characteristic of open waters and their margins comprising little grebe *Tachybaptus ruficollis*, great crested grebe *Podiceps cristatus*, mute swan *Cygnus olor*, shelduck *Tadorna tadorna*, gadwall *Anas strepera*, garganey *Anas querquedula*, shoveler *Anas clypeata*, pochard *Aythya ferina*, tufted duck *Aythya fuligula*, avocet, ringed plover *Charadrius hiaticula*, redshank, and reed bunting *Emberiza schoeniclus*. The breeding bird assemblage is concentrated in three main areas: Trimley Marshes, Shotley Marshes, and Looipit Lake.

Non-breeding birds

The estuary regularly supports an important assemblage of more than 20,000 non-breeding waterfowl. It supports considerable numbers of oystercatcher *Haematopus ostralegus*, ringed plover, knot *Calidris canutus islandica*, curlew *Numenius arquata* and turnstone *Arenaria interpres*, but is particularly important for four other species of wader. These are grey plover *Pluvialis squatarola*, dunlin *Calidris alpina alpina*, black-tailed godwit (which regularly occur in numbers of international importance) and redshank. These regularly attain nationally important numbers in winter. The intertidal mud habitats, saltmarsh and adjacent areas used as high tide roosts are important for these wading birds.

Considerable numbers of wigeon and shoveler use the site, whilst cormorant, shelduck, gadwall and pintail *Anas acuta* regularly occur in numbers of national importance. Also of national importance are the large numbers of dark-bellied brent geese. Numbers often fluctuate because of interchange with neighbouring estuaries. The intertidal mud habitats, saltmarsh, freshwater marshes and river channel are important to these birds for feeding and roosting.

Vascular plant assemblage

The site supports a nationally important vascular plant assemblage, including at least nine nationally scarce plants. They are characteristic of intertidal mud, saltmarsh, shingle and coastal grazing marsh habitats. These are eelgrass, dwarf eelgrass, slender hare's-ear *Bupleurum tenuissimum*, golden-samphire *Inula crithmoides*, lax-flowered sea-lavender *Limonium humile*, shrubby sea-blite *Suaeda vera*, small cord-grass, perennial glasswort *Sarcocornia perennis*, and divided sedge *Carex divisa*.

Intertidal mud habitats

The Orwell Estuary supports a large area of intertidal mud habitat with very rich littoral sediments, particularly sandy muds. There is a high invertebrate species richness within the sediments. The estuary also supports an example of a nationally important tide swept algae community with sponges, ascidians and red algae.

In addition to the reasons for notification, the Orwell Estuary supports an inland nesting colony of cormorants at their only site in Suffolk.