

COUNTY: GREATER LONDON AND ESSEX SITE NAME: INNER THAMES
MARSHES

DISTRICT: HAVERING; THURROCK

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

Local Planning Authority: Havering Borough Council, Thurrock District Council

National Grid Reference: TQ 531800 Area: Total – 479.3 (ha.) (1184.4 ac.);
Greater London – 352.2 (ha.) (870.5 ac.)

Ordnance Survey Sheet 1:500,000: 177 1:10,000: TQ 57 NW, TQ 57 NW &
TQ 58 SW

Date Notified (Under 1949 Act): 1986 Date of Last Revision: 1989

Other Information:

Revised to include an additional part of the Wennington Marshes and an extended
account on the reasons for notification.

Reasons for Notification:

The Inner Thames Marshes form the largest remaining expanse of wetland bordering
the upper reaches of the Thames Estuary. The site is of particular note for its diverse
ornithological interest and especially for the variety of breeding birds and the numbers
of wintering wildfowl, waders, finches and birds of prey, with wintering teal
populations reaching levels of international importance. The Marshes also support a
wide range of wetland plants and insects with a restricted distribution in the London
area, including some that are nationally rare* or scarce*.

The site comprises a major relic of low-lying grazing marsh with a variety of grassland
communities dissected by a network of fresh to brackish water drains. These Marshes
are divided into two main blocks by an extensive series of bunded lagoons used for the
disposal of silt dredgings. The discharge of silt and river water into the lagoons
produces a changing complex of dry or flooded mud flats and developing saltmarsh.
These lagoon habitats are complemented by more restricted areas of naturally derived
saltmarsh and intertidal mud along the Thames foreshore.

The grazing marshes are dominated by the more common grasses of neutral soils, and
are of interest on account of their structural characteristics. An open, short, tussocky
grassland structure has been created on the eastern Wennington and Aveley Marshes
where traditional management by sheep and cattle grazing is continued. This contrasts
with the tall ungrazed grasslands on the Western Rainham Marshes. The grasslands,
particularly those on the Wennington and Aveley Marshes, are also important for the
large extent and abundance of divided sedge *Carex divisa*. This nationally scarce plant
is a characteristic species of the Thames estuary but its distribution along with other
species has become much decreased with a widespread and continuing loss of grazing
marsh habitat. The Aveley Marshes are additionally of note for the local abundance of
ant hills.

Where the water table is high, some marsh drains remain flooded throughout the year
while others are flooded on a seasonal basis. These drains are characterised by a limited
range of aquatic and emergent plants, several of which are rare or scarce in the London
area. These include lesser pondweed *Potamogeton pusillus*, threadleaved water-
crowfoot *Ranunculus trochophyllous* and two nationally scarce species: soft hornwort
Ceratophyllum sumbersum and brackish water-crowfoot *Ranunculus baudotii*.
Elsewhere the drains are largely dominated by common reed *Phragmites australis*. The

seasonally wet drains and shallow depressions scattered amongst the grasslands hold a different wetland flora. This includes locally scarce species such as saltmarsh rush *Juncus gerardii* and pink water-speedwell *Veronica catenata*. In places these seasonally wet areas are also important for the occurrence and abundance of the nationally scarce marsh dock *Rumex palustris* and the nationally scarce and decreasing golden dock *Rumex maritimus*. One of the drains on Rainham Marshes is more saline and supports a strong population of stiff saltmarsh-grass *Puccinellia rupestris*, a further nationally scarce plant now only known in the London area from this locality and elsewhere in the site: a few shallow depressions on the Wennington Marshes.

Surveys in recent years have revealed a diverse and important invertebrate fauna which includes Rec Data Book and nationally scarce species of dragonflies (Odonata), moths (Lepidoptera), beetles (Coleoptera) and flies (Diptera). Most of this interest is centred on the areas of grazing marsh, especially the network of drains. These support a moderately rich fauna which differs quite markedly from that found on the majority of the remaining Essex and Kent marshes along the outer part of the Thames estuary in being strongly characterised by species of freshwater conditions. Molluscs and beetles are well represented and several nationally scarce and local species occur such as water snail *Bithynia leachii* and the water beetles *Noterus crassicornis* and *Helophorus nanus*.

The invertebrate species recorded from the drains also includes specialists of brackish water conditions. Among the nationally rare species are the 'scarce' emerald damselfly *Lestes dryas* (Vulnerable**) and a meniscus midge *Dixella attica* (Rare**) as well as several other species which are nationally scarce such as the water beetles *Agabus conspersus* and *Halplus apicalis*. Overall the invertebrate community provides an unusual example in the Thames estuary of an assemblage at the freshwater end of the transition from fresh to brackish conditions.

The marsh grasslands support a further range of important invertebrate species with differences between the grazed and ungrazed areas. Insects present and which are nationally scarce include Roesel's bush cricket *Metrioptera roeselii*, the wormwood moth *Cucillia absinthii* and a hoverfly *Tropidia scita*. The invertebrates supported by the areas of saltmarsh along the Thames foreshore are less recorded but include a rare spider *Baryphyma duffeyi* (provisional RDB category 3: Rare).