

County: Essex

Site name: Holland Haven Marshes

District: Tendring

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

Local Planning Authority: Tendring District Council

National grid reference: TM 211 170

Area: 208.83 ha 516.02ac

Ordnance survey sheet: 1:50,000: 169

1:10,000: TM11 NE, TM 21 NW

Date notified (Under 1949 Act):

Date of last revision:

Date notified (under 1981 Act): 1 October 1992 Date of last revision:

Other information: This is a new site. Part of the site is a Country Park, owned and managed by Tendring District Council.

#### Description and reasons for notification:

Holland Haven Marshes in an area of reclaimed estuarine saltmarsh and freshwater marsh situated between Holland-on-Sea and Frinton-on-Sea. The site is bisected by Holland Brook and its tributaries, from which an extensive ditch system radiates. The ditch network represents an outstanding example of a freshwater to brackish water transition intimated by the aquatic plant communities, which include a number of nationally and locally scarce species. The adjoining grasslands are of botanical importance in their own right as well as acting as a buffer zone to the ditch system. Further interest is provided by the aquatic and terrestrial invertebrates and the birds which frequent the area, especially in winter.

The salt-water influence is much in evidence downstream of Holland Bridge within the dykes of the coastal grazing marsh. The dominant emergent plants are Sea Club-rush *Scirpus maritimus* and Common Reed *Phragmites australis* while Parsley Water-dropwort *Oenanthe lachenalii* and Grey Club-rush *Schoenoplectus lacustris* ssp. *tabernaemontani*, both scarce in Essex, are locally frequent. Two nationally scarce plants are found in these meshohaline (moderately brackish) ditches: Brackish Water-crowfoot *Ranunculus baudotii* and Divided Sedge *Carex divisa*.

To the west of Holland Bridge the saline influence is less marked and the system is essentially freshwater or oligohaline (slightly brackish). Reed Canary-grass *Phalaris arundinacea*, Branched Bur-reed *Sparganium erectum* and Greater Reedmace *Typha latifolia* are the dominant emergent species, with Common Spike-rush *Eleocharis palustris*, Celery-leaved Buttercup *Ranunculus sceleratus*, Marsh Bedstraw *Galium palustre* and Water Pepper *Polygonum hydropiper* in the shallow water margins. Tubular Water-dropwort *Oenanthe fistulosa* and Slender Spike-rush *Eleocharis uniglumis*, both rare in Essex, are also present. Rigid Hornwort *Ceratophyllum demersum* is widespread in these ditches, while the presence of the nationally uncommon Soft Hornwort *Ceratophyllum submersum*, at one location, is indicative of a brackish influence. Other fully aquatic plants include the invasive alien Water Fern *Azolla filiculoides*, Various-leaved Water Starwort *Callitriche platycarpa*, and Fat

Duckweed *Lemna gibba* and Greater Duckweed *Lemna polyrhiza*, both of which are scarce in Essex.

The grassland through which the ditch system runs comprises coastal and freshwater grazing marsh and an area of amenity grassland on Frinton golf course. It is generally dominated by grasses such as Creeping Bent *Agrostis stolonifera*, Crested Dog's-tail *Cynosurus cristatus*, Red Fescue *Festuca rubra*, Perennial Rye-grass *Lolium perenne* and Meadow Barley *Hordeum secalinum*, with Marsh Foxtail *Alopecurus geniculatus* in seasonally flooded depressions on the grazing land. Typically maritime species are distributed throughout the coastal marshland including Sea Couch *Elymus pycnanthus*, Strawberry Clover *Trifolium fragiferum* and Spiny Rest-harrow *Ononis spinosa*. Immediately behind the sea wall, where the land is subject to salt spray, a saltmarsh vegetation has developed with Sea milkwort *Glaux maritima*, Sea Hard-grass *Parapholis strigosa*, Greater Sea-spurrey *Spergularia media*, Saltmarsh Rush *Juncus gerardii*, and two nationally uncommon species, Sea Barley *Hordeum marinum* and Borrer's Saltmarsh Grass *Puccinellia fasciculata*. Growing in tracks where seepage of sea water occurs and Reflexed Saltmarsh Grass *Puccinellia distans* and the nationally scarce Curved Hard-grass *Parapholis incurva*.

Through under-recorded, there are indications that the aquatic invertebrate fauna reflect the diversity of water conditions. A specialist brackish water species, a Red Data Book soldier fly *Stratiomys singularior*, has been recorded, and molluscs are abundant. The nationally notable Ruddy Darter dragonfly *Sympetrum sanguineum* and *Stenopelmus rufinasus*, a beetle associated with Water Fern, have also been found. Terrestrial invertebrates include a dense population of Roesel's Bush-cricket *Metrioptera roeselii*, which is also nationally notable, and a bumble bee *Bombus muscorum* which is rare in Essex. The Brown Argus butterfly *Aricia agestis* has been recorded in recent years from adjacent areas, and it is possible that this county rarity persists in small numbers on the site.

Additional interest is provided by the birds which use the area. Hen Harrier and Short-eared Owl hunt over the marshes in winter, whilst the flooded low ways attract waders and wildfowl. These may include Wigeon (typically 1000, max 6500), Teal (several hundred), Pintail (max 35), Shoveler (max 20), Pochard (max 10), Ruff (max 90) and Snipe. A count of 900 Snipe in March 1988 represents a record number of this species in Essex. Several hundred Brent Geese graze the marshes in winter, and there are regular wintering flocks of Twite (max 160) and Lapland Bunting (max 70). The concrete wall immediately adjacent to the sea wall is the major area in Essex for wintering Purple Sandpipers, with 10 to 15 birds in most years. In summer, the marsh supports a typical range of breeding birds, including Skylark, Meadow Pipit and Yellow Wagtail, with Reed Warblers in the dykes and Ringed Plover behind the sea wall. During the spring and autumn migration, Spotted Redshank, Black-tailed Godwit, Whimbrel, Green and Common Sandpipers are seen regularly on passage.