

COUNTY: ESSEX

SITE NAME: BENFLEET & SOUTHEND MARSHES

DISTRICT: CASTLE POINT/SOUTHEND-ON-SEA

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended. Part of the site is a National Nature Reserve (NNR) declared under Section 19 of the National Parks and Access to the Countryside Act 1949.

Local Planning Authority: Castle Point District Council, Southend-on-Sea Borough Council

National Grid Reference: TQ 854847

Area: 2099.69 (ha.) 5188.4 (ac.)

Ordnance Survey Sheet 1:500,000: 178

1:10,000: TQ 78 NE, SE
88 NE, NW, SE, SW
98 SW

Date Notified (Under 1949 Act): 1955

Date of Last Revision: 1966

Date Notified (Under 1981 Act): 1987

Date of Last Revision: –

Other Information:

The site encompasses the SSSI formerly known as Benfleet & Hadleigh Marshes. Leigh NNR is managed on behalf of the NCC by the Essex Naturalists' Trust, whilst much of the Downs is an Essex County Council Country Park. The NNR is listed as a site of national importance in 'A Nature Conservation Review' (Ratcliffe, 1977).

Description and Reasons for Notification:

Benfleet and Southend Marshes comprise an extensive series of salt marshes, mud-flats, scrub and grassland which support a diverse flora and fauna. The south-facing slopes of the downs, composed of London Clay capped by sand, represent the line of former river cliffs with several re-entrant valleys. At their foot lies reclaimed marshland, with its associated dyke system, based on alluvium. Outside the sea walls there are extensive salt marshes and mud-flats, on which wintering wildfowl and waders reach both nationally and internationally important numbers. Nationally uncommon plants occur in all of the habitats and parts of the area are of outstanding importance for scarce invertebrates.

The grassland of the downs is dominated by a mixture of red fescue *Festuca rubra*, cock's-foot *Dactylis glomerata*, false oat-grass *Arrhenatherum elatius* and bent-grasses *Agrostis* spp. which is typical of neutral to acidic conditions. Scrub species include hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, rose *Rosa* sp[p]. and bramble *Rubus* sp[p]. The uncommon bithynian vetch *Vicia bithynica* occurs here, together with hartwort *Tordylium maximum*, at its only British station, hairy vetchling *Lathyrus hirsutus* and slender tare *Vicia tenuissima*. Deptford pink *Dianthus armeria* was also recorded from these slopes until recent years.

The reclaimed marsh is grazed by cattle and horses. It is dominated by grasses such as meadow foxtail *Alopecurus pratensis* and perennial rye-grass *Lolium perenne*, and sea clover *Trifolium squamosum*, strawberry clover *T. fragiferum* and hairy buttercup *Ranunculus sardous* are also present.

The ponds and dykes exhibit a transition between fresh and brackish water and support a wide range of plant and animal species. The dykes are dominated by sea club-rush *Scirpus maritimus*, sweet-grasses *Glyceria* spp., duckweeds *Lemna* spp., mare's-tail *Hippuris vulgaris* and hornworts *Ceratophyllum demersum* and the uncommon *C. submersum*. Other uncommon species include beaked tasselweed *Ruppia maritima* and

brackish water-crowfoot *Ranunculus baudotii*. The great crested newt and scarce emerald damselfly *Lestes dryas* are also present.

This combination of scrub, grassland and open water with vegetated margins provides a habitat for many scarce and notable insects, such as the white-letter hairstreak *Strymonidia w-album* and marbled white *Melanargia galathea* butterflies, the latter occurring in Essex only along the Thames. Other local species include the picture-winged fly *Myopites bloti*, great green bush-cricket *Tettigonia viridissima* and rose plume-moth *Cnaemidophorus rhododactyla*. Ant hills are frequent in the grazing marsh. Additional interest is provided by the diverse breeding bird community, including yellow wagtails.

The sea wall is dominated by sea couch *Elymus pungens*; uncommon species also present include sea barley *Hordeum marinum*, slender hare's-ear *Bupleurum tenuissimum* and seaside red goosefoot *Chenopodium botryoides*. The salt marsh has a high marsh flora of sea purslane *Halimione portulacoides* and common sea-lavender *Limonium vulgare*, together with sea arrow-grass *Triglochin maritima*, common saltmarsh-grass *Puccinellia maritima*, sea aster *Aster tripolium* and the scarce lax-flowered sea-lavender *Limonium humile*. The lower areas and creek edges are noted for their diversity of glassworts *Salicornia* spp., including perennial glasswort *S. perennis*. Golden samphire *Inula crithmoides* occurs on the highest parts of the marsh, beneath the sea walls, whilst small cord-grass *Spartina maritima* is found on the lowest areas.

The mud-flats are colonised by eel-grasses *Zostera marina* and *Z. noltii* which, together with dense patches of *Enteromorpha* and the rich invertebrate fauna within the mud, provide food for thousands of birds which overwinter on this shoreline. Three species (dark-bellied brent goose, grey plover and knot) occur in internationally important numbers whilst three species, (dunlin, redshank and ringed plover), are present at nationally important levels. They feed along the entire length of the flats, including Chapman Sands; the major high tide roosts are found on the salt marsh at Two Tree Island and Canvey Point. A survey of Southend Flat during the winter of 1985--86 suggests that, in addition to nationally important populations of the species already mentioned, this area alone supports nationally important numbers of bar-tailed godwit and oyster-catcher, whilst redshank reach levels of international importance.