

COUNTY: HAMPSHIRE

SITE NAME: Hythe To Calshot
Marshes SSSI

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

Local Planning Authority: Hampshire County Council
New Forest District Council

National Grid Reference: SU408107-SU486018

Ordnance Survey Sheet: 1:50 000 196 1:10 000 SU40NW NE SE SU41SW

Hectares/Acres: 683.10/1687.94

Date Notified (Under 1949 Act): 1979

Date of Last Revision:

Date Notified (Under 1981 Act): 1984

Date of Last Revision: 30 July 1993

Date Confirmed: 22 April 1994

Other Information: The SSSI includes Calshot Marshes Local Nature Reserve (49ha), owned and managed by Hampshire County Council. Hythe Marsh is owned by the New Forest District Council and managed as a nature reserve by the Hampshire and Isle of Wight Naturalists' Trust.

Reasons for Notification:

The Hythe to Calshot Marshes Site of Special Scientific Interest embraces the most extensive remaining areas of saltmarsh and mudflats in Southampton Water. Southampton Water supports nationally important numbers of migratory and over-wintering waders and wildfowl. It regularly supports more than 1% of the national winter populations of wigeon, teal, ringed plover, grey plover, black-tailed godwit, redshank and dunlin and is thus considered to be of national significance to each of these species in accordance with accepted criteria. It also regularly holds more than 1% of the world population of the dark-bellied brent goose and is thus considered internationally significant for that species. The numbers of some other species, notably the great crested grebe, gadwall and shoveler, often approach or achieve nationally important population levels. Total numbers of all waterfowl regularly exceed 10,000 in winter and sometimes approach twice that number. The SSSI provides a large proportion of the feeding grounds and many of the roosting sites for these birds and its protection is thus critical to the function of Southampton Water as a nationally and internationally important intertidal wetland. The occurrence of these populations of birds reflect the high densities of benthic invertebrates inhabiting the mudflats on which they mainly feed. The benthic and shallow water fauna is rich in species and locally the muds also support extensive areas of green algae, mainly *Enteromorpha* species and *Ulva lactuca*, on which brent geese and some other wildfowl feed.

The upper shore levels within the SSSI comprise saltmarshes, which grade from monospecific cord-grass *Spartina anglica* swards upshore to mixed marsh in which the dominant species are generally sea purslane *Halimione portulacoides*, saltmarsh grass *Puccinellia maritima* and *Spartina*. The marshes near Hythe are the location in which

hybrids between the indigenous cord-grass *Spartina maritima* and the introduced north American species *S. alterniflora* were found in the 1860s. The transplanted to other estuaries as an aid to reclamation.

A further, fertile form, *S. anglica* appears to have arisen from a doubling of the chromosomes in the hybrid form and it was this plant which then spread widely around the north European coastline to form widespread and extensive *Spartina* marshes on midshore mudflats. The SSSI retains a wide range of genetic material including *S. maritima*, *S. alterniflora*, *S. x townsendii*, *S. anglica* and back-crosses, an assemblage of plants which is probably unique to the SSSI and which is of great scientific importance.

The *Spartina* marshes are now in a recessive phase and exhibit die-back within the monospecific swards, whilst there is extensive erosion of the terminal cliffs. In places, however, the outer margins of the marshes are masked by shell and shingle banks which support an interesting strandline flora and are important high water roosting sites for the waders which feed in the intertidal zone. At the uppermost marsh levels, the sea purslane-saltmarsh grass-*Spartina* plant community is replaced locally by sea club rush *Scirpus maritimus* and common reed *Phragmites australis* with fringing oaks, sallows and gorse just above high water mark of spring tides. The graduation from oak fringe downshore to open mudflat via saltmarsh is characteristic of the central south coast but appears to be of local occurrence elsewhere.