

Hampshire

Hurst Castle and Lymington River Estuary SSSI

Local Planning Authorities	:	Hampshire County Council New Forest District Council
National Grid Reference	:	SZ 340940
Ordnance Survey Sheets	:	1:50,000: 196 1:25,000: SZ 38; SZ 39
Area	:	1109.93 hectares
Date notified (1949 Act)	:	1961 Last revision: 1979
Date notified (1981 Act)	:	5/9/86 (notified) Last revision: 2/3/95 20/1/87 (confirmed) Date confirmed: 29/11/05

Other information: Much of the Site of Special Scientific Interest is owned and managed as a nature reserve by Hampshire County Council; part is leased by Hampshire Wildlife Trust as a nature reserve. This site adjoins the North Solent SSSI to its east.

Reasons for notification

This site extends along nine kilometres of the north-west Solent shore and embraces a wide range of coastal habitats of limited distribution on the south coast which are of biological and geomorphological importance. The SSSI below the seawall comprises the estuaries of three substantial streams, intertidal muds, cord-grass *Spartina anglica* marshes and high level mixed saltmarsh whilst behind the sea wall is a belt of fresh and brackish marsh including a series of fresh to saline lagoons. These lagoons support an assemblage of rare invertebrates and plants of international importance. The south-west boundary of the site is formed by a well developed shingle spit known Hurst Spit which has terminal recurved shingle ridges. The outer margins of the *Spartina* marshes, which occupy much of the intertidal area, are marked by numerous further ridges of shells and small pebbles. These together with the saltmarsh provide nesting sites for nationally important breeding populations of terns and black-headed gulls *Larus ridibundus*. The site is a very important component of The Solent estuarine system which supports internationally important over-wintering populations of wildfowl and waders. The rich invertebrate fauna includes 8 nationally rare and 13 nationally notable species.*

The *Spartina* marshes exhibit extensive die-back and are also receding through wave attack on the terminal cliffs. Towards their landward edge they grade to more mixed saltmarsh, but west of the Lymington River further gradation in community structure is terminated by sea walls. East of the river there is an interesting transition to grassland, scrub and oakwood, with freshwater flushes occurring at high water mark. The plant communities here have been strongly influenced by grazing by New Forest ponies.

The belt of brackish and fresh marsh on reclaimed tidal silt is one of the most extensive areas of this habitat on the south coast. The marshes were formerly salterns converted to grazing land with the decline of the salt industry in the early 19th century. They include saline, brackish and freshwater lagoons and ponds, saltmarsh, reed *Phragmites australis* beds, grassland dominated by creeping bent-grass *Agrostis stolonifera*, and areas of scrub. The invertebrate fauna is rich and includes large populations of the bush crickets *Conocephalus dorsalis* and *C. discolor*. The marshes are important feeding grounds for waders, ducks and dark-bellied Brent goose *Branta bernicla*.

The series of lagoons immediately inland of the Lymington - Keyhaven sea walls are internationally important for the assemblage of brackish water organisms they support. This assemblage includes a large population of the vulnerable starlet sea anemone *Nematostella vectensis* (Red Data Book 3), which is otherwise restricted to five localities in Britain and a few in North America. Other nationally

rare species include the polychaete worm *Armandia cirrhosa* (RDB) at its only known location in Britain, and the rare amphipod crustacean *Gammarus insensibilis* which is listed on Schedule 5 of the Wildlife and Countryside Act 1981. Both these species are here at the northern limits of their distributions. The nationally rare foxtail stonewort *Lamprothamnium papulosum*, otherwise known from only three sites in Britain, is also abundant. This group of species individually have very critical habitat tolerances and are thus highly vulnerable to changes in hydrological regime, salinity, and sediment disturbance.

The recurved shingle ridges of Hurst Spit are of particular botanical importance. Though partially obscured with shingle, the substrate is clay and the ridges and intervening lows support an especially rich saltmarsh community in which sea purslane *Halimione portulacoides*, glasswort *Salicornia* species, nationally scarce golden samphire *Inula crithmoides* and seablite *Suaeda maritima* are co-dominant. The golden samphire population is amongst the largest on the south coast and forms a continuous monospecific stand in some areas.

Hurst Castle to Lyminster River Estuary SSSI forms an important component of The Solent estuarine system which has been identified as an internationally important site for over-wintering wildfowl and waders, supports nationally important breeding populations of black-headed gull and of three species of tern which are listed under Annex 1 of the EU Directive on the Conservation of Wild Birds. The range of estuarine habitats and adjacent meadows provide important feeding and roosting grounds for significant numbers of waterfowl including internationally important numbers of dark-bellied brent goose and nationally important numbers of black-tailed godwit *Limosa limosa*. Other species include wigeon *Anas penelope*, teal *A. cracca*, mallard *A. platyrhynchos*, dunlin *Calidris alpina*, turnstone *Arenaria interpres*, lapwing *Vanellus vanellus*, redshank *Tringa totanus*, golden plover *Pluvialis aprricaria*, snipe *Gallinago gallinago*, and curlew *Numenius arquata*. The *Spartina* marshes and shell and shingle ridges support nationally important breeding populations of terns and black-headed gulls. Large numbers of oyster-catcher *Haematopus ostralegus* and ringed plover *Charadrius hiaticula* also nest here. Tern numbers fluctuate owing to local movements of colonies but the main Solent colony of little tern *Sterna albifrons* and sandwich tern *S. sandvicensis* sometimes breed within the SSSI together with a substantial population of common terns *S. hirundo*. Black-headed gull populations regularly represent between three to four percent of the British population. Breeding redshank and lapwing, species whose breeding habitat is rapidly declining in Britain also occur on the site.

Hurst Castle Spit is a key site for coastal geomorphology. It is the classic shingle spit upon which W V Lewis based his seminal paper outlining the relationship of beach alignment to the direction of approach of, dominant waves. Although much weakened at its proximal end by the steady retreat of cliffs at Milford and their protection by walls and groynes, Hurst Spit still remains its characteristic form. The present interest of the beach lies in its classic form. The range of estuarine features within this site are of national geomorphological importance representing a good example of an estuary with minimum modification by man.

* Nationally rare species are equivalent to those listed in the British Red Data Book which includes those considered endangered, vulnerable or rare. Nationally notable/scarce species are estimated to occur in 16-100 10 km grid squares in Britain