**DISTRICT:** BOROUGH OF KING'S LYNN & WEST NORFOLK, NORTH NORFOLK

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

Local Planning Authority: West Norfolk District Council & North Norfolk District Council

National Grid Reference: TF 690443 to TG 095440

Area: 7,700 (ha.) 19,027 (ac.)

SITE NAME: NORTH NORFOLK COAST

Ordnance Survey Sheet 1:50,000: 132, 133 1:10,560: TF 74 SW

1:10,000: TF 64 SE, TF 74 NE, SE TF 84 NW, NE, SW, SE TF 94 NW, NE, SW, SE TG 04 NW, SW, SE

Date Notified (Under 1949	Act): 1954 – Blakeney Point, Holme Dunes,
	Cley & Salthouse Marshes
	1968 – Morston Saltmarshes, Brancaster Manor
	1969 – Stiffkey Saltmarshes
	1972 – Thornham Marshes
	1973 – Titchwell Marshes

Date Notified (Under 1981 Act): 1986 Date of Last Revision: -

## **Other Information:**

This is a composite site made up of two National Nature Reserves at Scolt Head and Holkham, and the former separate Sites of Special Scientific Interest at Holme Dunes, Thornham Marshes, Titchwell Marshes, Brancaster Manor, Stiffkey Saltmarshes, Morston Saltmarshes, Blakeney Point, Cley and Salthouse Marshes, plus several substantial additions. The area is described in the Nature Conservation Review. Scolt Head, Holkham, Blakeney Point, Cley and Salthouse Marshes are recognised as a RAMSAR wetland site and are included in the UNESCO list of Biosphere Reserves. The whole of the North Norfolk Coast SSSI has now been proposed as a RAMSAR site and also for designation as a Special Protection Area under the EEC Birds Directive. Most of the coast is managed for nature conservation by the National Trust, the Norfolk Naturalists' Trust, Norfolk Ornithologists Association, the Royal Society for the Protection of Birds and the Nature Conservancy Council. It has also been designated as a Heritage Coast by the Countryside Commission and is part of the Norfolk Coast Area of Outstanding Natural Beauty.

## **Reasons for Notification:**

The North Norfolk marshland Coast extends for some 40kms between Hunstanton and Weybourne. The area consists primarily of intertidal sands and muds, saltmarshes, shingle banks and sand dunes. There are extensive areas of brackish lagoons, reedbeds and grazing marshes. The coast is of great physiographic interest and the shingle spit at Blakeney Point and the offshore shingle bank at Scolt Head Island are of special importance. The whole coast has been intensively studied and is well documented.

A wide range of coastal plant communities is represented and many rare or local species occur. The whole coast is of great ornithological interest with nationally and internationally important breeding colonies of several species. The geographical position of the North Norfolk Coast and its range of habitats make it especially valuable for migratory birds and wintering waterfowl, particularly brent and pink-footed geese. The area, much of which

### **COUNTY:** NORFOLK

remains in its natural state, now constitutes one of the largest expanses of undeveloped coastal habitat of its type in Europe.

# Intertidal Sands and Muds

Extensive intertidal areas are present along the entire coast. Intertidal flats mostly consist of sand or mud and shingle and are unvegetated. Some mudbanks have seasonal growths Eel Grass *Zostera marina* and green algae (mostly *Enteromorpha* sp. and *Vaucheria* sp.) which provide valuable feeding grounds for wintering ducks and geese. The mudflats also have locally abundant concentrations of invertebrates of importance as wildfowl and wader food sources.

## Saltmarsh

The saltmarshes are the finest coastal marshes in Britain and among the best in Europe. They have accreted in sheltered positions either behind sand bars such as on Scolt Head or on sheltered parts of the coast as at Stiffkey. Differences in marsh height reflect differences in age. The saltmarsh flora is exceptionally diverse and includes a number of uncommon species.

Succession is clearly shown from scarcely vegetated mud at the seaward boundary of the marsh to maritime grassland on the upper marsh. The foremarsh is characterised by colonising species such as glasswort *Salicornia spp.* and cord grass *Spartina anglica*. Sea Aster *Aster tripolium* is often dominant on the lower marsh which in turn grades into the extensive areas of midmarsh. Sea lavender *Limonium vulgare* is dominant with sea purslane *Halimione portulacoides* lining the banks of the creeks. Other species occurring in this zone include sea plantain *Plantago maritima*, sea arrow grass *Triglochin maritima*, annual seablite *Suaeda maritima* and sea wormwood *Artemisia maritima*. The upper saltmarsh is characterised by grasses such as sea couch grass *Elymus pycnanthus* and sea poa grass *Puccinellia maritima*. A shorter vegetation is often found on the upper marsh near the saltmarsh-shingle interface. It is diverse and includes two rare species; matted sea lavender *Limonium bellidifolium* and sea heath *Frankenia laevis*.

The saltmarshes, with their associated shingle structures, form a geomorphological unit of the highest importance for tracing the post-glacial evolution of the area.

# Dunes

Dune systems occur at a number of localities along the coast but are best developed at Holme and Holkham. On Scolt Head Island and at Blakeney Point sand dunes have developed on a shingle base. The stabilised, mature dunes hold a rich flora including a number of uncommon halophytic (salt tolerant) species.

The foredunes are generally comprised of wind-blown sand with scattered plants of the primary colonising species sand couch-grass *Elymus farctus* and lyme-grass *Leymus arenarius*. Ephemeral species such as sea rocket *Cakile maritima* and saltwort *Salsola kali* also occur in this zone. The yellow dunes are further consolidated by the binding rhizomes of marram grass *Anmophila arenaria* and several other species occur including sea holly *Eryngium maritimum*, sea sandwort *Honkenya peploides* and sand sedge *Carex arenaria*. The vegetation is most diverse on the stable grey dunes. Marram grass is still abundant but red fescue *Festuca rubra* is often co-dominant. The calcareous nature of the dunes is revealed by the presence of such species as spring whitlow-grass *Erophila verna agg.*, centaury *Centaurium erythraea*, bird's-foot trefoil *Lotus corniculatus*, pyramidal orchid *Anacamptis pyramidalis*, and bee orchid *Ophrys apifera*. Two rare plants, Jersey cudweed *Gnaphalium luteo-album* arid grey hair-grass *Corynephorus canescens* are associated with the grey dunes.

Corsican pine *Pinus nigra* var. *maritima*, has been planted at Holkham to stabilize the dunes, and has spread through self-seeding. Creeping ladies' tresses *Goodvera repens* and yellow bird's-nest *Monotropa hypopitys* occur locally under the mature pines. Secondary

mixed woodland and scrub have developed on the landward side of the pines which provide valuable cover for migratory passerine birds.

Dune slacks are present behind the main dune systems at Holme and Holkham. These wet areas have a characteristic flora that includes pennywort *Hydrocotyle vulgaris*, marsh helleborine *Epipactis palustris* and southern marsh orchid *Dactylorhiza praetermissa*.

#### Shingle

The North Norfolk Coast is rich in shingle structures consisting of material derived and reworked from glacial drift. Scolt Head Island is an extensive offshore barrier island with a complex sequence of shingle ridges and dunes and is of the highest national importance as a geomorphological site, and Blakeney Point is a large shingle spit; both are important educational and research sites, that have been well studied and feature extensively in the literature.

The shingle banks are colonised by a variety of specialised plants. Characteristic species include biting stonecrop *Sedum acre*, thrift *Armeria maritima*, sea campion *Silene maritima*, yellow horned-poppy *Glaucium flavum*, sea sandwort, sea beet *Beta vulgaris* ssp. *maritime* and bird's-foot-trefoil. At the saltmarsh-shingle interface, a discrete community occurs including shrubby seablite *Suaeda vera*, an uncommon species in Britain, which is often abundant here with rock sea lavender *Limonium binervosum* and sea wormwood.

#### **Brackish Lagoons and Reedbeds**

Natural brackish lagoons are present at Holme and in the Cley-Salthouse area. In addition, artificial lagoons have been created at Titchwell and Cley. The shallow water, and an abundant invertebrate fauna in the mud, make these coastal lagoons important feeding sites for wintering and passage waders and waterfowl.

Extensive reedbeds have developed at Cley, Brancaster and Titchwell; here Reed *Phragmites australis* is dominant with mud rush *Juncus gerardii*, brackish water-crowfoot *Ranunculus baudotii*, sea club-rush *Scirpus maritimus* and great reed-mace *Typha latifolia*. Many of the reedbeds are managed to provide the conditions favoured by rare breeding birds.

## Maritime Pasture and Grazing Marsh

Maritime pasture is present on the Cley and Salthouse Marshes, where several plants characteristic of damp grazed areas occur including marsh fox-tail *Alopecurus geniculatus*, annual beard-grass *Polypogon monspeliensis*, jointed rush *Juncus articulatus* and silverweed *Potentilla anserina*.

Extensive areas of permanent grazing marsh derived from reclaimed saltmarsh are present in several places along the coast. The dominant grass species in the sward are creeping bent *Agrostis stolonifera*, common fox-tail *Alopecurus pratensis* and perennial rye-grass *Lolium perenne*. The wet, rough grassland is suitable breeding habitat for several species of wader and is a valuable feeding area for wintering wildfowl.

A number of relict saltmarsh creeks on the marshes have developed into brackish reedbeds of considerable ornithological importance. The grazing marsh at Holkham was reclaimed in the 17th and 18th centuries. A network of clear water dykes is present with a variety of marginal plants including reed, lesser spearwort *Ranunculus flammula*, water mint *Mentha aquatica* and gipsy-wort *Lycopus europaeus*. Amongst several interesting species of water plant recorded are the uncommon soft hornwort *Ceratophyllum submersum* and blunt-leaved pondweed *Potamogeton obtusifolius*. A fringe of dry grassland is present above the saltmarsh at Holkham and is annually mown and occasionally grazed.

#### Vertebrate Fauna

The breeding bird communities of the North Norfolk Coast are of national and international importance. Most noteworthy are breeding colonies totalling up to 4,500 pairs of sandwich

terns *Sterna sandvicensis* which represent about 1/12th of the world population. The largest colony of little terns *Sterna albifrons* in Western Europe is located on Blakeney Point. On the North Norfolk Coast as a whole, there are up to 400 pairs of little terns which constitute over 20% of the British population. Bird species with breeding populations of national importance include up to 1,000 pairs of common terns *Sterna hirundo*, 27 pairs (in 1982) of avocets *Recurvirostra avosetta* and up to 100 pairs of bearded tits *Panurus biarmicus*. Bitterns *Botaurus stellaris* and marsh harriers *Circus aeruginosus* are regular breeders in small numbers and garganey *Anas querquedula* and black-tailed godwit *Limosa limosa* breed on occasions.

Migratory birds, notably waders and passerines, are often present in great abundance in the spring and autumn. Wintering birds include large numbers of brent geese *Branta bernicla* and smaller numbers of pink-footed geese *Anser brachyrhynchus* and white-fronted geese *Anser albifrons*. Ducks and waders are also present in great abundance on the marshes and intertidal areas. The shingle banks and foreshore provide suitable habitats for wintering passerines such as twite *Acanthis flavirostris*, snow buntings *Plectrophenax nivalis* and shore larks *Eremophila alpestris*.

The natterjack toad *Bufo calamita*, a rare amphibian in Britain, breeds in shallow pools in the dune slacks at two sites on the coast.

Red squirrels *Sciurus vulgaris* occurred in the dune pine woods until 1981 at Holkham. Otters *Lutra lutra* breed and hunt within the whole site.