

PRIORITY HABITAT FACTSHEET



Southwold (Alistair Hamilton), Long-snouted seahorse (Kim Maidment), Bottlenose dolphin (Natural England/Allan Drewitt).

Marine Habitats

Suffolk's marine habitats include seagrass beds, sheltered muddy gravels, subtidal sands and gravels, and mud habitats in deep water.

This factsheet explores Suffolk's Marine Conservation Zones, Special Areas of Conservation (SAC) with marine components, and Special Protection Areas (SPAs) with marine components.

Marine Conservation Zones

Marine Conservation Zones (MCZs) are marine protected areas in territorial and offshore waters. They protect a range of nationally important marine habitats and species in the UK.

Orford Inshore (MCZ)

Located 14km offshore it is extremely important as a nursery and spawning ground for many fish species, including dover and lemon sole, sprat and sandeels. Harbour porpoises, skates, rays, small spotted catsharks and several crustacean species are found here as well as foraging seabirds.



IMPORTANT ASSOCIATED SPECIES

Mammals

Minke Whale *Balaenoptera acutorostrata*
Common Dolphin *Delphinus delphis*
White beaked Dolphin *Lagenorhynchus albirostris*
Common Seal *Phoca vitulina*
Harbour Porpoise *Phocoena phocoena*
Striped Dolphin *Stenella coeruleoalba*
Bottlenose Dolphin *Tursiops truncatus*

Fish

Allis Shad *Alosa alosa*
Twaite Shad *Alosa fallax*
European Eel *Anguilla anguilla*
Lesser Sandeel *Ammodytes marinus*
Herring *Clupea harengus*
Common Skate *Dipturus batis*
Cod *Gadus morhua*
Tope Shark *Galeorhinus galeus*
Long-snouted Seahorse *Hippocampus guttulatus*

Short-snouted Seahorse *Hippocampus hippocampus*
Atlantic Halibut *Hippoglossus hippoglossus*
River Lamprey *Lampetra fluviatilis*
Sea Monkfish *Lophius piscatorius*
Whiting *Merlangius merlangus*
European Hake *Merluccius merluccius*
Ling *Molva molva*
Smelt *Osmerus eperlanus*
Native Oyster *Ostrea edulis*
Sea Lamprey *Petromyzon marinus*
Plaice *Pleuronectes platessa*
Undulate Ray *Raja undulata*
White or Bottlenosed Skate *Rostroraja alba*
Atlantic Salmon *Salmo salar*
Brown or Sea Trout *Salmo trutta*
Mackerel *Scomber scombrus*
Sole *Solea solea*
Spiny Dogfish *Squalus acanthias*
Horse Mackerel *Trachurus trachurus*



Images: Top – Common dolphin (Natural England/Rebecca Walker). Bottom, left to right – Short-snouted seahorse (Hans Hillwaert), Carex extensa (Gertjan van Noord), European eel (Bernard Dupont), Common seal (Nick Goodrun).

SACs with marine components

SACs with 'marine components' protect Annex I habitats and/or Annex II species associated with the marine environment. Marine component habitats range from coastal, intertidal habitats such as coastal lagoons and mudflats and sandflats, to subtidal and deep-sea habitats such as reefs.

Management measures may be required in order to restore or maintain the conservation status of the protected features of SACs.

The Marine Management Organisation and Marine Scotland (in Scottish waters) are the lead authorities regarding the implementation of, and compliance with, any measures implemented for the management of fishing activity.

Southern North Sea SAC

A key year round habitat for harbour porpoise.

Alde, Ore and Butley Estuaries SAC

The Alde, Ore and Butley Estuaries SAC includes three rivers; the Alde, Butley, and Ore, as well as Havergate Island. The site is located on the coast between Aldeburgh and Bawdsey. The River Alde runs south along the inner side of the Orfordness shingle spit and subsequently becomes the River Ore. The Butley River flows into it shortly after Havergate Island.

This estuary is bar-built, meaning it is a partially drowned river valley with a sediment bar across the mouth. It is the only estuary with a shingle bar in the UK. Historically the River Alde entered the sea at Orford, since then the shingle bar has been pushing the mouth of the estuary steadily south-westwards.

The overlapping Alde-Ore Estuary Special Protection Area (SPA) holds nationally and internationally important populations of breeding and overwintering birds. This is due to the availability of good roosting habitats and the variety of invertebrates, such as *Macoma balthica* and *Manayunkia aestuarina* spread throughout the estuary. It also contains twenty-five saltmarsh communities which include nationally important species such as small cord grass (*Spartina maritima*), which is declining in extent, and a population of the scarce Long-bracted Sedge (*Carex extensa*) in Suffolk.

Orfordness - Shingle Street SAC

The Orford Ness - Shingle Street SAC is located on the coast between Aldeburgh and Bawdsey. The reasons for designation were the three qualifying features; coastal lagoons, stony banks and annual vegetation of drift lines. The tidal surge in 2013 resulted in a breach, which altered the site significantly.

The most extensive of these features are the stony banks particularly at the southern end of the spit. They consist of shingle and form ridges supporting a variety of vegetation. The Orford Ness shingle spit is important as it supports one of the largest natural expanses in the UK of shingle vegetation affected by salt spray.

Shingle deposits close to the highest tide line host the annual vegetation of drift lines. Occurring at both the sheltered western side of the spit and the eastern exposed coast, this rare fringing habitat is colonised by plant species tolerant to saltwater and periodic disruption.

The site's lagoons are some of the best examples in the UK. A European priority feature, the waters of these lagoons range from fresh to highly saline and support a range of plant species typical of lagoons. Algal species within the lagoons provide habitat for an abundance of lagoon invertebrates. These in turn support important bird communities, such as avocet (*Recurvirostra avosetta*) and spoonbill (*Platalea leucorodia*). Another notable species is the rare starlet sea-anemone.



Minke whale (Mettia Valente)

SPAs with marine components

Special Protection Areas (SPAs) are areas which protect vulnerable bird species in the UK. Work to set up 'SPAs with marine components' is ongoing. While there are already SPAs in inshore waters, only a few stretch into offshore waters beyond the territorial sea limit.



Outer Thames Estuary SPA

The Outer Thames Estuary MPA lies along the east coast of England in the southern North Sea and extends northward from the Thames Estuary to the sea area off Great Yarmouth on the East Norfolk Coast. This SPA crosses the 12 nautical mile boundary and therefore statutory advice is provided jointly with Natural England.

Minsmere-Walberswick SPA

Minsmere-Walberswick SPA is located between Southwold and Sizewell. The boundaries follow those of the Minsmere-Walberswick Heath and Marshes SSSI. It includes both marine areas and land which is not subject to tidal influence.

The site is a mosaic of habitats including freshwater and coastal grazing marsh, coastal reedbeds, saltmarsh, lowland heathland, woodland, intertidal mud and mixed sediment. During severe winter weather it is of even greater importance as wildfowl and waders arrive, attracted by relatively mild climate compared with continental areas and the abundant food resources available.

Alde-Ore Estuary SPA

The Alde-Ore Estuary SPA is located between Aldeburgh and Bawdsey. The site includes Havergate Island and Orford Ness, as well as the estuaries of the rivers Alde, Butley and Ore.

The Alde-Ore Estuary SPA is composed of Atlantic salt meadows *Glauco-Puccinellietalia maritima*, intertidal mudflats, shingle, coastal lagoons and estuarine fish communities.

Important feeding habitats within the site include the extensive intertidal mudflats located in the Upper Alde Estuary and along the estuary from Snape to North Weir Point. The lagoons located within the site provide additional feeding grounds and, as the tide advances up the estuary and the birds move inland, the saltmarsh becomes an important foraging area. As well as feeding habitat the site also provides good nesting habitat.

Deben Estuary SPA

The Deben Estuary SPA is a relatively sheltered and narrow estuary that extends for approximately 18km. It starts near Woodbridge and reaches the sea just north of Felixstowe, where shifting gravel and sandbanks shield the mouth of the estuary. The SPA hosts tidal areas, as well as areas beyond the influence of the tide.

Mudflats flank the length of the estuary and support diverse invertebrate communities as well as several patches of eel grass, *Zostera spp.* Some areas of sandflats occur where erosion of exposed red crag has occurred. Saltmarsh lies beyond the mudflats, hosting the most diverse saltmarsh community in Suffolk with important populations of overwintering waterbirds and waders.

Stour and Orwell Estuaries SPA

The Stour and Orwell Estuaries SPA straddle the Suffolk-Essex border. The Estuaries are adjacent but combine near the mouth as they join the North Sea. Both are tidal, shallow and relatively sheltered, although the Orwell Estuary is narrower and more linear compared to the wider Stour Estuary.

Invertebrate-rich intertidal mudflats flank both estuaries. The Stour Estuary in particular has extensive mudflats due to the wider channel, with large areas found within the five main bays. The mudflats of the Orwell Estuary are more linear in nature. Diverse communities of saltmarsh fringe the edges of both estuaries. Several freshwater pools and grazing marshes fall within the SPA boundary, such as Trimley and Shotley Marshes.

The hinterlands include areas of arable agricultural land, as well as the urban area of Ipswich and the major ports of Harwich and Felixstowe.

It supports important numbers of overwintering waterbirds, which also use the mudflats extensively for feeding. The saltmarsh and grazing marsh provide important roosting sites, whilst some birds feed and roost on the surrounding arable land.

SPAs with 'marine components' protect bird species listed in the Birds Directive (2009/147/EC) as Annex I or as regularly occurring migratory species, that are dependent on the marine environment for all or part of their life-cycle, where these species are found in association with intertidal or subtidal habitats within the site. Sixty bird species are currently protected in UK SPAs with marine components. There are currently 123 SPAs with marine components in UK waters, protecting internationally important estuaries, stretches of coastline and areas of open sea. SPAs with marine components are displayed on the MPA mapper and a list of these sites, their qualifying bird species and site boundaries are available on JNCC's Resource Hub.

IMPORTANT ASSOCIATED SPECIES

Birds

Avocet *Recurvirostra avosetta*

Bittern *Botaurus stellaris*

Black-tailed Godwit *Limosa limosa islandica*

Common Tern *Sterna hirundo*

Cormorant *Phalacrocorax carbo*

Curlew *Numenius arquata*

Dark-bellied Brent Goose *Branta bernicla bernicla*

Dunlin *Calidris alpina alpina*

Fulmar *Fulmarus glacialis*

Gadwall *Anas strepera*

Gannet *Morus Bassanus*

Great-crested Grebe *Podiceps cristatus*

Greater white-fronted Goose *Anser albifrons*

Goldeneye *Bucephala clangula*

Golden Plover *Pluvialis apricaria*

Grey Plover *Pluvialis squatarola*

Hen Harrier *Circus cyaneus*

Kittiwake *Rissa tridactyla*

Knot *Calidris canutus islandica*

Lapwing *Vanellus vanellus*

Lesser Black-backed Gull *Larus fuscus*

Little Tern *Sternula albifrons*

Marsh Harrier *Circus aeruginosus*

Nightjar *Caprimulgus europaeus*

Oystercatcher *Haematopus ostralegus*

Pintail *Anas acuta*

Redshank *Tringa totanus*

Red-throated Diver *Gavia stellata*

Ringed Plover *Charadrius hiaticula*

Ruff *Philomachus pugnax*

Sandwich Tern *Sterna sandvicensis*

Shelduck *Tadorna tadorna*

Short-eared Owl *Asio flammeus*

Shoveler *Anas clypeata*

Spoonbill *Platalea leucorodia*

Teal *Anas crecca*

Turnstone *Arenaria interpres*

Wigeon *Anas penelope*



Images: Left to right – Common tern (Stephen Reeve), Avocets (Edwyn Anderton), Red-throated diver (Chris Baines), Bittern (Neil Rolph), Goldeneye (Natural England/Allan Drewitt).



Threats to marine habitats

- Not enough protected areas – Marine Protected Areas need to create wildlife corridors rather than isolated reserves.
- Fishing – some of our fish stocks are recovering but there are still significant issues with discard.
- Lack of planning – fishing, oil rigs, wind farms and gravel extraction all reduce the quality of marine habitats.
- Severe pollution – sewage, farming chemicals, plastic litter washed out to sea, abandoned fishing nets and noise pollution from new developments.



WHERE TO FIND FURTHER INFORMATION

Inshore Fisheries And Conservation Authority • <https://www.eastern-ifca.gov.uk/conservation/marine-protected-areas/>
JNCC Marine Habitat Descriptions (pdf)

- <https://data.jncc.gov.uk/data/c9721550-e422-4181-805d-2a0b58afa9d7/UKBAP-BAPHabitats-37-MudHabitatsDeepWater.pdf>
- <https://data.jncc.gov.uk/data/6e4e3ed1-117d-423c-a57d-785c8855f28c/UKBAP-BAPHabitats-49-SeagrassBeds.pdf>
- <https://data.jncc.gov.uk/data/6e4e3ed1-117d-423c-a57d-785c8855f28c/UKBAP-BAPHabitats-52-ShelteredMuddyGravels.pdf>
- <https://data.jncc.gov.uk/data/c9721550-e422-4181-805d-2a0b58afa9d7/UKBAP-BAPHabitats-54-SubtidalSandsGravels.pdf>

JNCC MPA Mapper • <https://jncc.gov.uk/mpa-mapper/>

MAGIC website – interactive mapping information including designations • <https://magic.defra.gov.uk/>

Making Space for Nature, a Review of England's Wildlife Sites and Ecological Network 16 Sep 2010.

Chaired by Professor Sir John Lawton CBE FRS. Defra website (pdf) • <https://webarchive.nationalarchives.gov.uk/ukgwa/20130402151656/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

Marine Management Organisation • <https://www.gov.uk/government/organisations/marine-management-organisation>

Marine Plans • <https://www.gov.uk/government/publications/east-inshore-and-east-offshore-marine-plans>

Natural Environment White Paper June 2011 – *The Natural Choice: securing the value of nature* (pdf)

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

Suffolk Coast and heaths • <https://www.suffolkcoastandheaths.org/managing/projects/estuaries-coast/>

Suffolk Wildlife Trust Habitats Explorer • <https://www.suffolkwildlifetrust.org/habitats/marine>

Wildlife Trusts – *The Way Back to Living Seas*

- https://www.wildlifetrusts.org/sites/default/files/2018-03/the_wildlife_trusts_marine_strategy.pdf

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