

Action for the Solent Coast & Hamble Estuary Priority Area

Location

The Solent coast & Hamble estuary is the largest Priority Area in the borough covering approximately 910 hectares of mainly coastal habitats. It stretches along the whole of the borough's south coast and up the tidal Hamble estuary on the eastern boundary of the borough.

The area also includes important areas of inland habitat that are adjacent and continuous with the coast such as the wooded valleys leading from the Solent coast and the large woodland complex in the Upper Hamble estuary stretching to the south of Hedge End.

Description

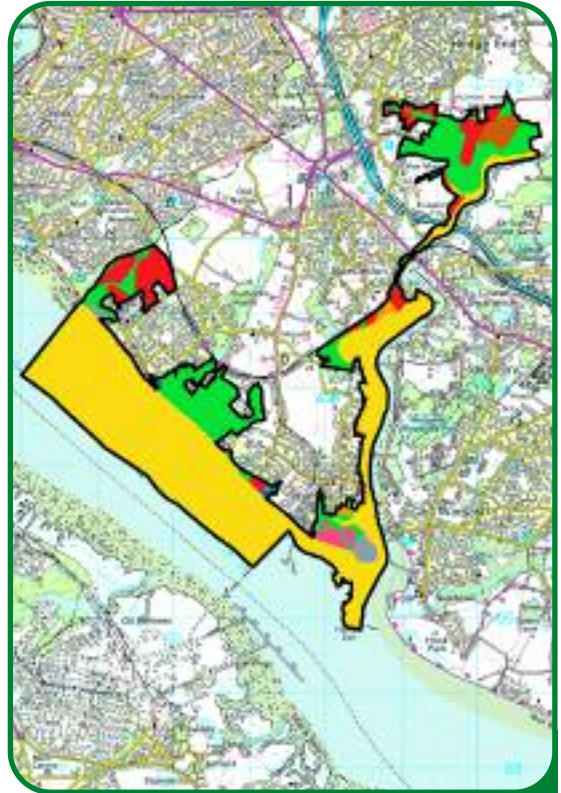
Habitats and species associated with the coast are, to different extents, influenced by the saltwater of the sea. They may be immersed in the seawater as the tide rises or be subject to sea spray in stormy weather.

The lowest lying areas of the borough's coast are always immersed in seawater and are truly marine environments, beyond the influence of the tides. Typical species found both within and on the surface of the submerged sediment are burrowing worms, shrimps, crabs and fish. Shallow sandy sediments are important nursery areas for fish and feeding grounds for sea birds.

Towards the land, where the tides begin to expose sediment that has been deposited by the sea, mudflats are found. The mud is rich in organic material which supports a huge biomass of specially adapted invertebrates that can tolerate some degree of drying as the sea retreats. This rich food supply is exploited by internationally



Quick facts
 Total area: 910 ha
 (equivalent to Eastleigh town)
 Designations: cSAC – 15%
 SPA – 18%
 SSSI – 26%
 SINC – 8%



MY LOCAL AREA


important numbers of waders and wildfowl; birds that are equipped to feed in shallow water and wet sediment with a whole host of beak shapes adapted for extracting the burrowing invertebrates.

Mudflats

Mudflats are a hugely productive habitat in which burrowing and grazing invertebrates such as worms, crustaceans and molluscs abound. It has been calculated that in any one square metre of mudflat up to 80,000 individuals of a burrowing snail (Laver Spire Snail) can be commonly found. Birds in great numbers feed on this rich food source and as a whole the Solent is the fourth most important over wintering site for coastal birds in Britain. It regularly supports over 150,000 individual birds including important populations of Brent geese (7,500), Teal (4,400), Ringed Plover (550) and Black-tailed godwit (1,125).

Landward of mudflats, saltmarshes form in mud exposed for a greater length of time to the air and therefore able to be colonised by plants. In Eastleigh Borough, saltmarsh is found along the shore of the tidal Hamble River with the largest expanses at Hacketts, Lincegrove and Mercury Marshes.

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Specialised plants that can tolerate high salt levels dominate saltmarshes. All are specially adapted to deal with the desiccating conditions as freshwater is in short supply. In the lowest areas of the saltmarsh glassworts and cord-grass are found.

Glassworts

Glassworts overcome the problem of desiccation by storing freshwater within their waxy stem giving them a somewhat swollen appearance. They have also lost their leaves through evolution to cope with the dry, salty conditions as plants naturally lose most of their water through these. Glassworts instead use their green stem to photosynthesise.

As the pioneer glassworts and cord-grass gain a hold in the wet mud, they trap particles of sediment around them at high tide. Gradually the mud level rises and is dryer for longer periods and other plants such as sea aster, sea plantain, sea lavender and sea purslane invade. Many of these plants reduce their water loss by having fleshy leaves in which water is stored whilst others, such as marsh-mallow have hairy leaves that reduce evaporation from the leaf surface by producing a damp micro-climate around the leaf which slows down the rate of evaporation.

In addition to specialised flora, saltmarsh supports a diverse range of invertebrates and algae and are of particular importance as feeding, roosting and breeding grounds for birds such as redshank, oystercatcher, curlew and dunlin.

The sediment that makes up mudflats and saltmarsh is supplied through the continuous erosion of the land and transported around the coast by the movement of the sea. Naturally eroding coastal cliffs are an important source of such sediment and can be found along some stretches of the borough's coast, most notably at Netley Cliff where the eroding face reaches to a height of about 5 metres. Maritime cliffs are a priority habitat within the UK BAP and are of national importance for invertebrates providing nesting sites for rare bees and wasps that burrow into the soft cliff face.

Natural coastlines are dynamic systems, constantly changing in shape and form as a result of physical processes such as erosion and its opposite, accretion. But they are becoming increasingly rare as coastal development increases. Marinas require the removal of intertidal sediment for boat access leading to the loss of mudflats and saltmarsh.

Inland too, there is pressure to protect development such as housing and farmland from flood or erosion by constructing defence structures such as sea walls or gabions. Such structures restrict natural coastal processes and this can lead to a gradual loss of intertidal habitats through lack of sediment supply and by a process known as coastal squeeze.

Coastal squeeze

There is mounting scientific evidence that relative sea-levels are rising, both as result of falling land levels in the south of England (as a result of the rebounding of Scotland after the ice cap which covered it in the last ice-age has melted) and rising sea-levels (as a result of global warming and the melting of the ice caps).

The natural response of intertidal habitats is to move inland but in places where hard structures are present they are prevented from doing so.

The result is a gradual narrowing of intertidal habitats and eventually their total loss as the sea reaches the base of the defence structures.

The Solent Coast and Hamble Estuary Priority Area also encompasses extensive areas of inland habitats including natural transitions in habitats between intertidal areas and the land proper. In many areas of coast, these natural transitions have been lost as a result of building up to the water's edge but at Upper Hamble Country Park and Badnam Copse on the edge of the River Hamble, the flanking saltmarsh grades to reedbed and then to ancient semi-natural woodland. These woodlands are some of the most ecologically diverse in central southern Britain, harbouring localised species such as the small-leaved lime and wild-service tree.

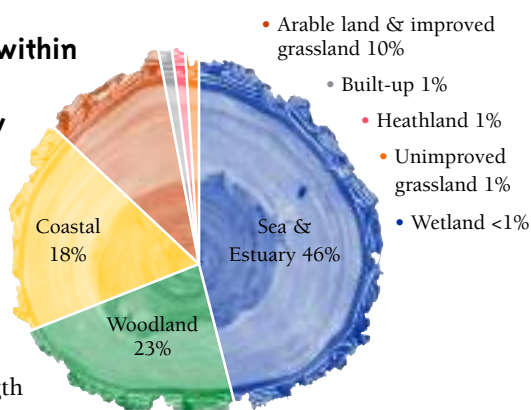
Inland, adjacent to the southern coast, areas of woodland and grassland at West Wood and Royal Victoria Country Park provide valuable additional habitats just adjacent to the sea. At West Wood, lesser-spotted woodpecker and the rare beetle *Sphiginus lobatus*, have been recorded and skylark regularly breed in the adjacent grassland. At Royal Victoria Country Park the lawns contain the nationally declining green winged orchid and suffocated clover.

Grasses such as purple moor grass and bents dominate most of the heathland at Hamble Common, although since the re-introduction of grazing heather species are increasing in area. The common supports an important population of the locally rare grayling butterfly and efforts are currently underway to encourage this species by specialised management techniques such as leaving bare areas of soil where the species can rest and sun itself and to encourage the grass on which it feeds as a caterpillar.

The coastline of the Solent is extremely well-used by people who come from throughout the UK and Europe to enjoy the world-class water sport facilities and to enjoy the scenic environment by walking, picnicking and bird watching. The Hamble estuary is a mecca for yachting; it has up to 3,500 boats moored in marinas with associated boatyards, parking and facilities along its banks. Disturbance to sensitive wildlife such as roosting birds can be a problem in some areas, especially in the winter months when birds have limited energy reserves. In addition, pollutants from boatyards such as anti-fouling paint, oil, run-off from parking areas and farmland can also impact upon the marine environment, introducing damaging levels of contaminants into the water column.

Area of habitats within the Solent Coast & Hamble Estuary Priority Area

NB: 1.5km of maritime cliff also within the priority area. Figures for length of hedgerow are unavailable.



Eastleigh Priority Species recorded within the Solent Coast & Hamble Estuary Priority Area

Recorded in last five years

- Skylark**
- Little egret**
- Turtle dove**
- Nightingale**
- Slavonian grebe**
- Common Scoter**
- Snipe**
- Spotted flycatcher**
- Black-bellied brent goose**
- Dunlin**
- Turnstone**
- Knot**
- Little egret**
- Snipe**
- Mediterranean gull**
- Yellow wagtail**
- Grey plover**
- Firecrest**
- Whinchat**
- Black-tailed godwit**
- Nightingale**
- Cetti's Warbler**
- Golden plover**
- Goosander**
- Dartford warbler**
- Grayling*
- Crescent striped moth*
- Six-belted clearwing moth*
- Broom-tip moth*
- Marbled green moth*

- Orange footman moth*
- Rosy wave moth*
- Red-tipped clearwing*
- Buttoned snout**
- Marsh mallow**
- Stiff saltmarsh-grass**
- One-flowered glasswort**

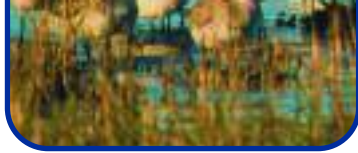
Recorded 6-10 years ago

- Reed bunting**
- Black-necked grebe**
- Linnet**
- Lesser spotted woodpecker**
- Sanderling**
- Bar-tailed godwit**
- Slavonian grebe**
- Red-breasted merganser**
- Silver-washed fritillary**
- Haematopota grandis*
(a horsefly)**
- Mocha moth*
- Suffocated clover**
- Spreading hedge-parsley**
- Curved hard-grass**
- Annual beard-grass**
- Greater broomrape**

* Priority species in Eastleigh Borough only

** Priority species in Hampshire and Eastleigh Borough





Action

Issue 1 Coastal squeeze as a result of climate change and rising sea levels

Current action

Coastal Habitat Management Plans (CHaMPs) are being prepared by English Nature and the Environment Agency for sites along the Hampshire Coast that are of European importance for nature conservation. CHaMPs have the specific aim of balancing the needs for flood defence with the needs of biodiversity through the development of a strategic approach to site management. Loss of habitat in one area as a result of coastal squeeze may be compensated by the permitted deterioration of a flood defence structure elsewhere along the coast.

Proposed action

Continue to support and input into the work of relevant fora to devise and implement strategies to maintain the extent of coastal habitats in the face of projected sea-level rise including identifying and safeguarding land that may be required for coastal realignment. * (PARTNERSHIP)

Issue 2 Disruption of natural coastal processes

Current action

Recommended strategies for coastal defence works along individual stretches of the Solent Coast have been prepared under the auspices of the Solent Shoreline Management Plan prepared by a consortium of coastal defence authorities in the Solent. Each stretch of coast has a recommended strategy for defence.

Proposed action

Employ sympathetic engineering solutions to areas where some protection is essential but where habitats may be detrimentally affected otherwise.* (EBC/EA)

Continue to support and input into the work of relevant fora to devise and implement strategies to restore and create coastal habitats through for example, flood defence and coastal defence programmes.* (PARTNERSHIP)

Raise public awareness of the ecological and economic value of maintaining unrestricted coastal processes.* (EN/EBC/HCC/SF/SCOPAC)

Issue 3 Water quality and pollution

Current action

The Environment Agency monitors the water quality of rivers and streams and responds to individual incidents of pollution as they occur. It works with water users to advise them of measures that can be taken to minimise pollution incidents as a result of management practices.

Proposed action

Include conditions with planning permissions that address bunding of oil/chemical tanks if the EA recommends this.* (EBC)

Establish and support projects to promote best practice in the use and disposal of harmful marine anti-fouling agents alongside their gradual phasing-out.**(EA)

Ensure new development has minimal impacts on water resources by implementing Sustainable Urban Drainage Systems and by designing urban drainage schemes in accordance with best practice to intercept contaminants.* (EBC/EA)

Issue 4 Changing land use and management

Current action

Much of the Solent coast and Hamble estuary Priority Area is designated as a site of European importance. Legislation requires that any new proposals for development must be assessed for their likely significant impact on the conservation interest of the site. If research indicates a significant adverse effect is likely, the development will not be allowed.

Proposed action

Include policies in the Local Plan that restrict new development on the tidal foreshore of the river and estuary where these would lead to increased flood risk, pollution risk, loss or damage to river habitats, landscape or river corridor open space or reduced access to the river.* (EBC)

ACTION TIMESCALE

* within next 3 years

** within next 5 years

*** within next 10 years

KEY TO ORGANISATIONS

EA

Environment Agency

EBC

Eastleigh Borough Council

EN

English Nature

HCC

Hampshire County Council

SCOPAC

Standing

Committee On

Problems

Associated with the

Coastline

SF

Solent Forum

Agree and implement operating contracts with owners of water control structures along the River Hamble that optimise nature conservation interests.***(EA)

Issue 5 **Recreation**

Current action

All authorities with powers to regulate activities that occur within the internationally designated Solent European Marine Site are currently compiling a management plan to ensure that the conservation interest of the European site is safeguarded over the long-term.

Proposed action

Contribute data and knowledge on the impacts of recreational demands on the areas biodiversity to relevant bodies and work with them to develop and implement actions to address issues identified including devising bylaws where necessary to control harmful activities.** (HCC/EBC)

Issue 6 **Inappropriate or lack of management**

Current action

One of the main aims of public bodies such as Eastleigh Borough Council and Hampshire County Council is to protect and enhance the natural environment for the health, enjoyment and prosperity of the public. Large sites within the priority area that are of importance to nature conservation are owned and managed by public bodies to assist in safeguarding the environment.

Proposed action

Review or compile management plans for all publicly owned nature conservation sites within the PBA specifically ensuring they have regard to the requirements of priority species they already or potentially could support.*** (EBC/HCC)

Relevant Hampshire species or habitat action plans for Solent Coast and Hamble Estuary Priority Area are:

- Otter
- Pipestrelle bat
- Seed-eating farmland birds
- Birds of wet grassland
- Ancient semi-natural woodland
- Maritime cliffs
- Saltmarsh
- Coastal grazing marsh
- Mudflats and eelgrass beds
- Wood pasture and parkland
- Hedgerows
- Unimproved neutral grassland
- Arable land

BAR-TAILED GODWIT

