

Policy 3 Diversity of Habitats

The richness of the Harbour's natural habitats will continue to be conserved, restored and enhanced so wildlife can thrive and ecological systems remain healthy and valued. Aside from natural processes, there will be no net area loss of habitats in Chichester Harbour. With regards to any relevant new developments, the statutory obligation for biodiversity net gains will be implemented.

The unique mixture of habitats in Chichester Harbour make it an important local, national, and international resource for nature conservation. The coastal plain encompasses a diverse suite of marine, intertidal and lowland habitats.

The **saltwater and freshwater habitats** of the Harbour are a priority for nature conservation. They have highly dynamic features, being heavily influenced by erosion, sedimentation and water flows. They are strongly influenced by topography, the chemical composition of the water, and the soils and land-use found in the surrounding catchment. They provide a wide range of specialized micro-habitats, and support many types of aquatic plants and animals. The adjacent **mudflats** are sedimentary intertidal habitats consisting of silts and clays with a high organic content. Mudflats are highly productive areas which, together with other intertidal habitats, support large numbers of predatory birds and fish. They provide feeding and resting areas for internationally important populations of migrant and wintering waterfowl, and are also valuable nursery areas for fish.

Chichester Harbour has one of the largest areas of **saltmarsh** in the UK. It is found on the upper part of the mud, which the water reaches only when the tide is high. It is covered in plants that can cope with salt and with regularly being underwater. Saltmarshes start life as mudflats and through a process called 'succession' the habitat naturally changes.



Each saltmarsh provides tidal nursery areas for fish, food for waders and wildfowl and nesting sites for waders and seabirds. Many of the plants growing on saltmarsh are not found anywhere else, making it an internationally important habitat.

The shoreline of Chichester Harbour includes **shingle beaches** leading up to the **strandline**, the area at the top of the beach where the high tide deposits material from the sea. This is made-up from natural debris, mainly seaweeds, and other flotsam and jetsam caught by tidal currents and washed-up onto the shore. The strandline supports a whole variety of creatures, especially invertebrates. These small animals provide an important source of food for larger birds and mammals. The strandline can help with the development of sand dunes. **Sand dunes** are another very fragile, but important, coastal habitat. Several birds like to nest in the dunes, including skylarks, meadow pipets and stonechats, with ringed plovers and oystercatchers nearby. The dunes are also home to a selection of invertebrates.

The **reed beds** at Chichester Marina, Fishbourne Meadows, Emsworth and Thorney Island can grow over two metres high and are very important for bird life and mammals, such as the iconic water vole. Water trickling through reed beds is cleaned by microorganisms living on the root system. This natural process helps with water purification by breaking down the pollutants in the water.

The **pastures** of Fishbourne Meadows are an important habitat, managed through grazing. The area has never been ploughed so it has a wide range of plant and insect species. Freshwater streams flow through the meadow keeping the area moist. In places, it is bordered by areas of woodland. Although there is limited cover of **grassland** in Chichester Harbour, one place it is found is at West Chidham where there are long term plans to enable the creation of new saltmarsh habitat. Chichester Harbour has been farmed for hundreds of years for the production of crops and to raise livestock. During this time, wildlife has moved into the **farmed landscape** to make the most of the riches it offers, from flower-filled field margins to bushy hedgerows, reed-lined ponds to seed-filled stubbles. The network of **ditches**, used for drainage purposes, provide essential wildlife corridors between habitats.

Woodlands are the most diverse of all the habitats found in Chichester Harbour. One single oak tree can support 350 different species of insect and have over 30 different lichen species on its bark (Forestry Commission, 2009). Wildlife also seeks food and shelter in the crevices of the bark, the canopy of fresh leaves, the hollow trunks of old trees, leaf litter and branches of dead wood and rotting wood on the woodland floor. Furthermore, woodlands remove harmful pollution and carbon dioxide from the atmosphere. The two largest woodlands in Chichester Harbour, at Old Park Wood and Tournery, are both private estates. Other small copses found around the Harbour are collectively important to the natural landscape.

The Volunteer Rangers (Conservation) service was established by Chichester Harbour Conservancy and the Friends of Chichester Harbour in 2014. Since then, they have helped with coppicing, scrub and bramble clearance, weeding, tree planting and the creation of new ponds. They have also installed new fences, benches, signage, interpretation panels and other countryside infrastructure, as well as laying or resurfacing footpaths and occasionally, in support of the other Volunteer Rangers (Harbour Watch), litter picking. Finally, they have helped to maintain bird hides, repair shoreline defences, and regularly assist with community events.

Chichester Harbour Conservancy and the Friends of Chichester Harbour help to manage the following sites, all of which are in the stewardship of Chichester Harbour Trust: Ellanore Spit (West Wittering), Fishbourne Meadows (Fishbourne), The Dell and Maybush Copse (Chidham), and Eames Farm (Thorney Island).



MANAGEMENT CHALLENGES

- Saltwater and freshwater habitats are negatively affected by high levels of water pollution. This stimulates the growth of macro-algal weed on the mudflats, due to the high nitrate levels.
- Saltmarsh habitat can be lost by the installation of hard sea defences which prevents the natural process of succession. This is called coastal squeeze.
- Flotsam and jetsam in the strandline is accumulated litter, which is often unsightly and can be dangerous to humans and wildlife.
- The sand dunes at East Head are subject to change both through natural processes and erosion, with the latter caused by trampling in restricted areas.
- The reed beds require constant management otherwise they will naturally turn into woodland.
- The loss of hedgerows and wildflower meadows as land has been repurposed.
- The future of European designations (SAC, SPA, Water Framework Directive) is going through an uncertain period, which may impact on conservation measures.
- Woodlands require sound management otherwise the diversity of species will decrease through loss of sunlight.
- The threat of diseases to plants and trees, most notably Chalara dieback of ash (*Hymenoscyphus fraxineus*) first reported in the UK in 2012.

PRINCIPAL PARTNERS

- Arun & Rother Rivers Trust
- Arun & Western Streams Catchment Partnership
- Associated British Ports
- British Trust for Ornithology
- Chichester Harbour Conservancy
- Chichester Harbour Trust
- Chichester Water Quality Group
- Eastern Solent Coastal Partnership
- Environment Agency
- Farmers
- Friends of Chichester Harbour
- Hampshire Ornithological Society
- Individual Residents
- Landowners
- Local Authorities
- National Trust
- Natural England
- Parish Councils
- Residents Associations
- The RSPB
- Solent Forum
- Sussex Marine & Coastal Forum
- Sussex Ornithological Society
- Thorney Island Conservation Group
- Universities
- Wildfowlers
- The Wildlife Trusts
- The Woodland Trust

Chichester Harbour Conservancy owns or has a management agreement at these sites: Birdham Reserve (Birdham), Salterns Copse and Beaky's Wildlife Area (Apuldram), Stakes Island (Chidham), Nutbourne Marshes (Southbourne), Thornham Point (Thorney Island), North Common (North East Hayling Island), and Earnley Triangle (Hayling Island).

Other sites that Chichester Harbour Conservancy and the Friends of Chichester Harbour help others to look after include: Chalkdock Marsh (West Itchenor), Pilsley Island, Gutner Point and Sandy Point (Hayling Island).

Actions to be taken by Chichester Harbour Conservancy:

- 3.1 In partnership with the Friends of Chichester Harbour, to deploy Volunteer Rangers (Conservation) to help with practical management tasks in the AONB.
- 3.2 To prepare and publish new 10-year management plans for all sites managed by Chichester Harbour Conservancy and/or Chichester Harbour Trust.
- 3.3 To improve the value of the AONB for the conservation of wildlife.
- 3.4 To continue to restrict public access to some particularly sensitive habitats.
- 3.5 To provide advice to landowners and homeowners about managing land and gardens for conservation.
- 3.6 To assess the conservation value of the large ponds in the AONB and thereafter to seek actions to improve biodiversity.

Actions to be taken by other stakeholders:

- 3.7 To identify sites in the AONB, and those which connect to the AONB, that can be improved for their biodiversity value.
- 3.8 To monitor the condition of the Site of Special Scientific Interest, the Special Area of Conservation, the Special Protection Area and the Ramsar Site.
- 3.9 To investigate opportunities for new managed realignment projects, to help create new saltmarsh.
- 3.10 To work with partners to identify and manage instances of tree disease.

