Broad Character: Cultural Topography.

Character Type: Cultural Topography (intertidal)

Regional Perspective: Southern England

Compiled by Seazone Solutions Ltd / M A Ltd, January 2011, after comment from D Hooley, English Heritage

INTRODUCTION: DEFINING/DISTINGUISHING ATTRIBUTES

This Character Type refers to those aspects of cultural topography whose physical expressions are predominantly in the inter-tidal zone, and which are not intensively used or managed. It includes the following Sub-types:

- Saltmarsh
- Sandy foreshore
- Rocky foreshore
- Sandflats
- Mudflats

The Southern England coastal region includes extensive examples of sandy, rocky and shingle foreshore. Long stretches of sandy and shingle foreshore are also associated with the renowned tourist destinations of Bournemouth, Brighton and Eastbourne amongst others, though from their active management and use as leisure beaches, their cultural character has long been dominated by recreation (see text for the 'Recreation' Character Type). Rocky foreshore also surrounds Brighton marina and Hurst Spit in Hampshire.

Saltmarshes and mudflats tend to occur in close proximity to each other and are common throughout the region, particular around harbour areas such as Southampton Water, Chichester and Pagham Harbours as well as Portsmouth Harbour. Mudflats support a plethora of wildlife (Tubbs 1997) and are often designated as Special Areas of Conservation (SAC) or Sites of Specific Scientific Interest (SSSI) reflecting the values society ascribes to their ecological qualities.

Saltmarsh and mudflats at Pagham Harbour (© Maritime Archaeology Ltd)

Saltmarshes tend not to have been used for agricultural purposes but the more sheltered areas were historically important for salt production and frequently provide evidence of such eg the remains of the industrial scale salterns at Lymington, Hampshire which were in production from the medieval period through to the nineteenth century.

HISTORICAL PROCESSES; COMPONENTS, FEATURES AND VARIABILITY

This Character Type contains remains of varied maritime human activities and their long-term relationship with the sea.

Intertidal mudflats and sandflats are generally found in tidal estuaries such as the Medina and Yar estuaries on the Isle of Wight, as well as various mainland harbours (examples include Southampton Water, Poole Harbour and Langstone and Chichester Harbours). Their anaerobic conditions often result in the preservation of archaeological remains, either buried such as prehistoric land surface, or on the surface of the flats such as quays. Most human activities that have left remains in these areas were connected with the marine environment. There is also potential for the presence of prehistoric remains on land that is now intertidal but which used to be dry ground.

Archaeological investigations at Langstone Harbour (© Hampshire & Wight Trust for Maritime Archaeology)

Where there are mudflats there may also be evidence of fish traps and it also seems likely that the archaeology of coastal fishing resource is greater than currently understood. It seems likely that at certain times of the tide these areas would have been exploited by canoe for the wild fowl (Hampshire County Council 2010). It is also an area which will have archaeological evidence of boats and hulks, lost or abandoned in the intertidal areas. The mudflats surrounding Portsmouth Harbour were historically utilized for the creation of oyster beds, for example at Emsworth and Chichester Harbour (www.hwtma.org.uk).

Saltmarshes develop in the intertidal zone where there is an accumulation of fine sediments. Some degree of shelter is required for this accumulation, so saltmarshes are found in the harbours and estuaries along the coast, with the largest and best developed examples occurring within Chichester Harbour (Cox 1997). The more sheltered areas of saltmarsh are historically important for salt production and frequently provide evidence of such. There is extensive evidence of industrial scale salterns at Lymington and in Langstone and Chichester Harbours. The latter supplied great quantities to the Royal Navy in Portsmouth who required enough salt to preserve meat from 5000 cattle per year (www.greatsaltern.org.uk).

Saltmarshes at Lymington (© Hampshire & Wight Trust for Maritime Archaeology)

Mudflats at Chichester Harbour (© Maritime Archaeology Ltd)

The western shoreline of Southampton Water continues to support a range of marshes and mudflats eg at Calshot and Dibden Bay, although several sections of mudflats and saltmarshes that would have historically been part of Southampton Water have been lost to built development in the form of docks and marinas.

Long stretches of foreshore, particularly sandy foreshore, occur in the region and have been a focus for holidaymakers for over a century eg at Brighton and Eastbourne. These areas are now used and intensively managed as leisure beaches and are discussed under the Recreation Character Type. Shingle foreshore areas are also found at the top of harbour beaches eg the area surrounding Christchurch Harbour.

VALUES AND PERCEPTIONS

Much of the intertidal zone in Southern England, whether or not it is intensively managed, is valued for its numerous and varied recreational opportunities. Where unmanaged, this zone is often subject to relatively low levels of visitors who enjoy its quiet and solitude as a source of relaxation and inspiration. The sense of remoteness and feeling of being open to the elements can dramatically increase in winter.

This Character Type is also valued ecologically for its biodiversity qualities. Mudflats and intertidal harbours are deemed of international importance for the wading bird and waterfowl populations which breed, feed and migrate through the area at different times of year. Intertidal areas also support considerable shell fish production, most significantly oyster beds and spat locations and recreational anglers bait dig the mudflats (Hampshire County Council 2010). Where such activities are of such intensity as to form the dominant cultural character, the areas in question are characterised and discussed under the 'Fishing' Character Type as 'bait digging'.

Many examples are now nature reserves or have been given national or county nature conservation designations. For example Pagham Harbour, the area surrounding Hurst Spit, and Langstone Harbour which has been designated as a Site of Specific Scientific Interest (SSSI), Special Protection Area (SPA), Special Conservation Area (SAC), and a RAMSAR designated area. These areas attract wildlife enthusiasts as well as day tourists interested in rural walks.

Pagham Harbour Nature Reserve (© Maritime Archaeology Ltd)

The wide variety of recreational opportunities can sometimes cause tension between the different users' interests, requiring careful management to resolve potential conflicts before they occur.

There is also increasing commercial pressures on the region's foreshore for recreational craft marinas, pontoons and moorings, houseboats and MOD vessels (Hampshire County Council 2010).

RESEARCH, AMENITY AND EDUCATION

Much of the Southern England region's foreshore is accessible to the public, with many relatively unmanaged beaches provided with nearby facilities such as car park, toilets, footpaths, café and interpretation boards. However, even at low tide, the large expanses of mudflats across the coastal region can remain inaccessible. Recreational water based activities in these areas are often restricted to a few hours either side of high water unless vessels have access to deep water channels beyond (Hampshire County Council, 2010)

Extensive research into the archaeology of the region's foreshore has been undertaken by the Hampshire and Wight Trust for Maritime Archaeology (www.hwtma.org.uk) and others, for example along Southampton Water and the Hamble River foreshores. Much of the fieldwork has included volunteer and community involvement. Foreshore hulks provide an excellent focus for cross-curricular studies with local relevance, being a more visible and accessible element of the maritime archaeology resource.

Many interest groups, such as walkers, artists, writers, and historians, already make use of this Character Type, offering scope to further develop education and outreach initiatives to

raise public awareness about the historic character of the foreshore area and its impact on today's landscape/seascape. Opportunities to do this will be greatly enhanced by the provisions to create a right of public access along England's coast in the Marine and Coastal Access Act 2009 (www.defra.gov.uk/environment/marine/legislation/index.htm).

CONDITION AND FORCES FOR CHANGE

This Character Type will continue experiencing ongoing gradual erosion, and in some cases accretion, as natural processes are enhanced in their effects by intensive beach management elsewhere and by the long-term and culturally induced trends of sea level rise. Other cultural forces for change include the increased pressures from recreational activities, the construction of sewerage schemes, flood and erosion defences, and coastal residential development.

Recreational pressures, even on currently less intensively-used foreshores, from the large coastal populations as well as visitors is significant, with damage caused to many sensitive coastal habitats from disturbance and trampling.

Pressures on intertidal saltmarsh and mudflats include physical disturbance, nutrient enrichment, introduction of alien species and coastal squeeze. The reclamation of former salt marshes for grazing was a significant historic process, and reclamation continues to this day, for the development in the form of docks and marinas. Impacts on saltmarsh are particularly significant as it provides a buffer to shoreline erosion by dissipating wave action. This has been seen at the small islands and areas of saltmarsh in upper reaches of the Langstone and Chichester Harbours (Hampshire County Council 2010).

There is continuing pressure to expand tourism and leisure facilities along the coast, and the excavation of marina basins in which to moor recreational sailing craft has resulted in the destruction of further areas of saltmarsh and intertidal mudflat. (Cox 1997)

Marine litter and pollution is also a continuing issue in this Character Type with serious effects on beach and water cleanliness which generate strong public responses. Litter is mainly derived from offshore shipping and fishing activity as well as from terrestrial sources and beach users themselves.

RARITY AND VULNERABILITY

Unmanaged sandy and shingle foreshore beaches are relatively frequent in the Southern England region, with rocky foreshore being rarer. Extensive areas of saltmarsh and mudflats are a common occurrence along the coastline particular around harbour areas.

This Character Type is under pressure from a range of erosion processes, increased intensity of recreational activities, the construction of sewerage schemes, coastal defences, and coastal residential development.

PUBLISHED SOURCES

Cox, J, 1997 South Coast Plain and Hampshire Lowlands Natural Area Profile

Hampshire County Council, 2010, Hampshire County Integrated Character Assessment 2 *Status: Draft March 2010* South East New Forest Coastal Plain

LDA Design, 2010 Dorset Coast: Landscape and Seascape Character Assessment

Tapper B, Johns C. 2008. *England's Historic Seascapes. Consolidating the National Method. Final Report*, Historic Environment Service Cornwall County Council on behalf of English Heritage, Cornwall

Tubbs, C 1997 The Ecology, Conservation and History of the Solent

WEBSITES

www.dorsetforyou.com/C-SCOPE
www.greatsaltern.org.uk
www.hants.gov.uk
www.hwtma.org.uk