

Broad Character: Cultural Topography

Character Type: Cultural Topography (marine)

Irish Sea Regional Perspective

Introduction: Defining/Distinguishing Attributes

This Character Type refers to those aspects of cultural topography whose physical expressions are predominantly seaward of Mean Low Water. In the Irish Sea region the marine cultural topography is characterised by fine sediment plains, with some patches of coarse sediment plains off the coast of Cumbria, at the edge of Morecambe Bay and on the western boundary of the English sector. The fine sediments of mud, silt and sand extend up the many river estuaries and are characterised by their mobility and shifting water channels. The sediments create areas difficult to navigate and are associated with numerous shipwrecks, the location of many of which is uncertain.

Historical Processes; Components, Features And Variability

The marine sediments of this area lie in fairly shallow waters, and in the earliest phase of the Mesolithic, by *c.* 7250 BC, the coastline of north-west England was around 20m lower than today (Tooley 1974, 33). This produced a coastline drawn roughly along a line from just west of Anglesey to west of Walney Island in Morecambe Bay, forming a belt of now submerged land, about 10-15 km wide (Tooley 1985, Fig. 6.1). This gradually diminished up to *c.* 5200 BC, when it lay at 2m below the current sea level, by which time Britain had become an island (Tooley 1974; 1978; 1985). The extensive mud and silt sediments of England's Irish Sea region, therefore suggests this is an area of medium to high archaeological potential. This is supported by the discovery of human and animal footprints at Formby, and the discovery of Mesolithic activity at various sites along the region's coastline.

Values And Perceptions

This Character Type is highly valued ecologically because of its biodiversity. For example, Morecambe Bay, the Solway Firth, Ribble Estuary and Mersey Estuary have extensive fine sands and silts, as well as drying banks of sand and are internationally important for the conservation of wild birds. The region is also valued as fishing grounds for shrimp and bottom-feeding fish. This Character Type has received little attention from archaeologists, however, but it has much potential to contribute to the understanding of past communities' dynamic and varied use of the landscape they inhabited.

Research, Amenity And Education

Bournemouth University's Navigational Hazards project aimed to use the UK's extensive hydrographic archives, including charts, sailing directions and pilotage notes, and modern seabed geology mapping to identify and map Areas of Maritime Archaeological Potential (AMAP), areas where high potential for shipwreck losses coincide with areas of high preservation potential (Merritt *et al* 2007). This project provided the foundations for the development of a quantitative system for assessing the archaeological potential for shipwreck material in the marine environment according to different sediment types. Application to shipwrecks as well as other archaeological deposits such as submerged prehistoric landscapes would be highly beneficial to enable a deeper understanding of the archaeological potential of the marine environment. Collaborative projects between industry and the heritage sector through the analysis of further geophysical data and sediment characteristics and dynamics would contribute to clarify issues regarding archaeological potential and its preservation in the marine environment.

Although commercial fishing in this sector of the Irish Sea is now much reduced, it still has valued fishing grounds and has amenity value for leisure fishermen, who are serviced by the small fishing fleet which remains at Fleetwood. The advent of the energy industry, particularly the large-scale windfarms off Walney Island and Liverpool Bay, restrict fishing activities, and result in a greater biodiversity and increased conservation value. This presents an enhanced opportunities for amenity activities such as wildlife watching.

The amenity value of this Character Type could be further explored through, for example, interactive CDs and web resources. This Character Type also offers potential for educational initiatives to raise public awareness about the strong links between both the natural and historic cultural dimensions of the environment within a marine context.

Condition And Forces For Change

Human forces for change include offshore wind farms, aggregate extraction areas, spoil and waste dumping and bottom trawling, amongst others. The impact of these activities as well as the movement of water and sediments could have an intrusive impact on this Character Type potentially disturbing any historic features within it. Yet the scale of development of the oil and gas fields and areas renewable energy installations in the Irish Sea is creating a new character related to energy generation. Plans for larger windfarms off the coast of Walney would mean that large areas of the Irish Sea are dominated by this emerging character.

Rarity And Vulnerability

This Character Type is under pressure from processes such as erosion, sea level rise and global warming. As ecosystems, this Character Type is potentially under pressure for change from human activities such as fishing (e.g. trawling) and offshore development (e.g. wind farms, and aggregate extraction amongst others). Even so, future developments also offer opportunities to better understand the character of the current marine environment and its archaeological potential.

Published Sources

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