

# How to get involved

Maritime Archaeology is not just for experts. Given that Ireland has an extensive coastline 7,500km in length (longer than most European countries), it is vitally important that local communities are involved in protecting and understanding our coastal archaeological heritage.

Although archaeologists have a good knowledge about aspects of Ireland's maritime archaeology, inevitably much less is known about the number of sites on the coastline, their condition and whether they are under threat from erosion or other pressures. It is likely that there are significant numbers of unknown archaeological sites on our islands, in coastal sand dunes and on the intertidal zone. Most likely, these will only be discovered by local communities appreciative of their value and role.

Your own coastal community could encourage the appreciation of our maritime archaeological heritage amongst tourists, walkers and other recreational users of our seascapes. You could help to trace the historical development of coastal landscapes using historical sources, folklore, early maps and photographs.

Using the Discovery Series 1:50,000 maps you can locate known archaeological sites close to the coast to visit. Sites on private land should only be visited with the



RIA-funded archaeological excavations of Mesolithic hunter-gatherer coastal site at Belderrig, Co. Mayo (G. Warren, UCD School of Archeology).

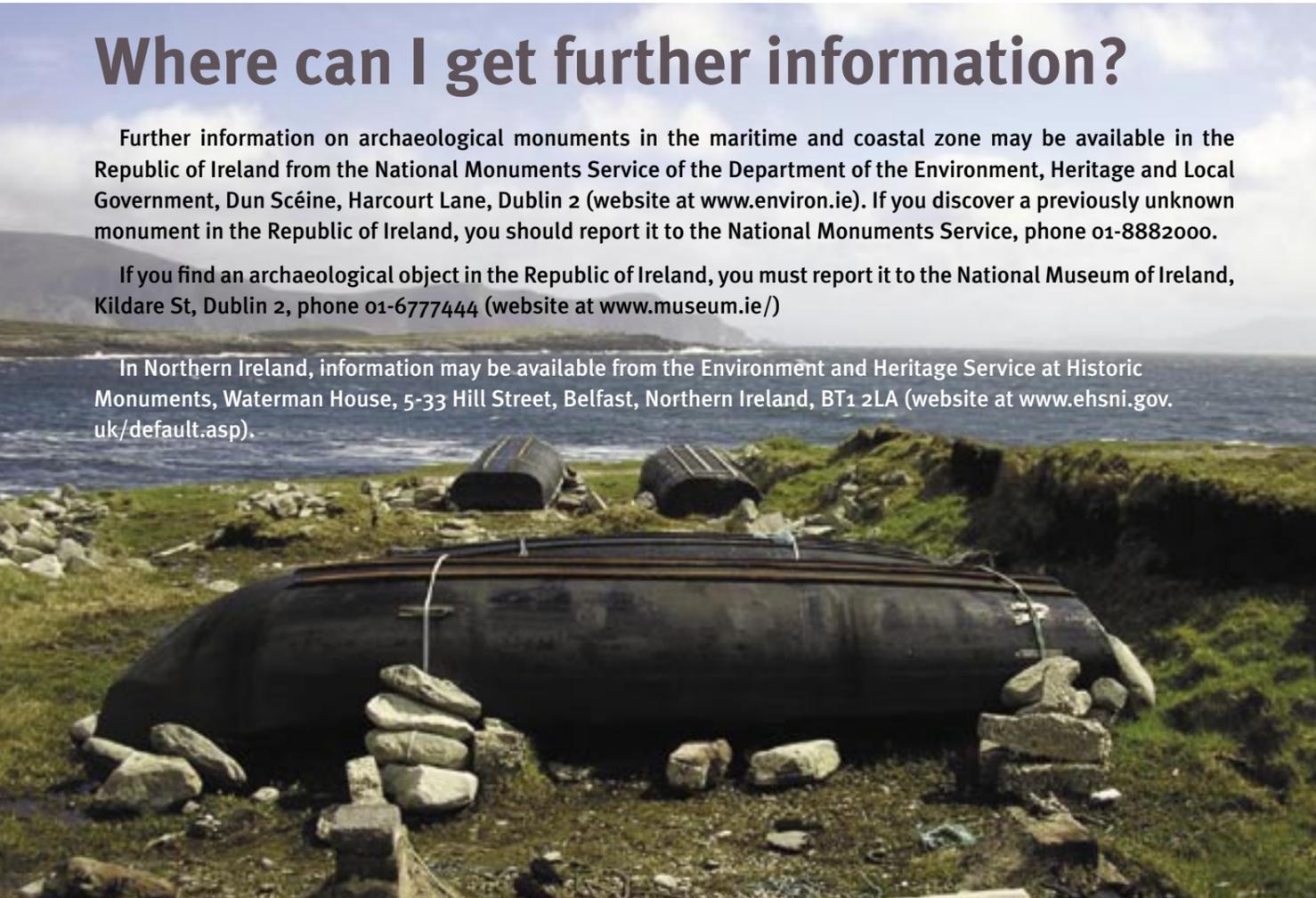
permission of the land owner. The best way to get involved is to join a local archaeological and historical society and seek to learn more about your own region's maritime archaeological heritage. You could also enrol in local Adult Education classes in Archaeology that are held in Universities, Institutes of Technology and other centres – perhaps you might even become a professional archaeologist!

# Where can I get further information?

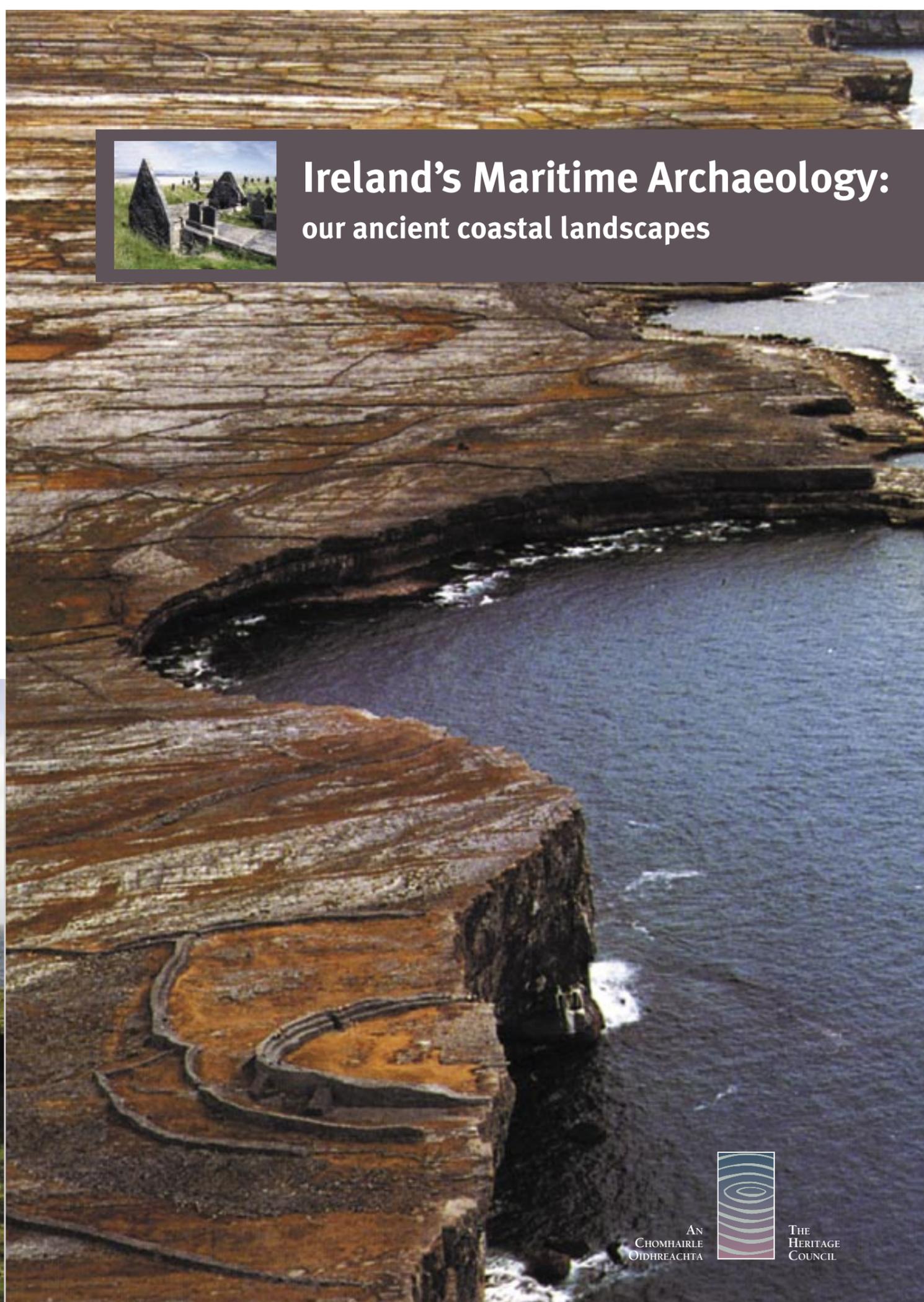
Further information on archaeological monuments in the maritime and coastal zone may be available in the Republic of Ireland from the National Monuments Service of the Department of the Environment, Heritage and Local Government, Dun Scéine, Harcourt Lane, Dublin 2 (website at [www.envron.ie](http://www.envron.ie)). If you discover a previously unknown monument in the Republic of Ireland, you should report it to the National Monuments Service, phone 01-8882000.

If you find an archaeological object in the Republic of Ireland, you must report it to the National Museum of Ireland, Kildare St, Dublin 2, phone 01-6777444 (website at [www.museum.ie/](http://www.museum.ie/))

In Northern Ireland, information may be available from the Environment and Heritage Service at Historic Monuments, Waterman House, 5-33 Hill Street, Belfast, Northern Ireland, BT1 2LA (website at [www.ehsni.gov.uk/default.asp](http://www.ehsni.gov.uk/default.asp)).



# Ireland's Maritime Archaeology: our ancient coastal landscapes



# Ireland's Maritime Cultures and Traditions

Ireland's island story is written on its seashore. About ten thousand years ago, our first human settlers – hunter-gatherers of the Mesolithic era - came here by boat. Since then, people have lived, worked, travelled and buried their dead around Ireland's coastal landscapes - using the sea as a source of food, raw materials, as a means of travel and communications and as a place to build communities.

Maritime archaeology explores the ways that people lived and worked by the coast, how they made use of its maritime resources and how they used the sea as a means of travel and movement. Ireland's maritime cultural landscapes are the product of thousands of years of human occupation and it is best to imagine them as encompassing the entire coastline; from the land, across the intertidal zone and out onto the seabed.

Although Ireland's maritime landscapes have still to be explored in detail by archaeologists, thousands of archaeological sites are known from coastal districts, more have been recently found on the inter-tidal zone, while there are at least ten thousand shipwrecks from around our coastline. These sites include ancient settlements along the coast and islands, piers, harbours, fish traps, middens on the intertidal zone and shipwrecks and submerged landscapes on the seabed.

Ireland's maritime archaeological heritage remains poorly understood and is largely undiscovered. It faces threats from both natural and human impacts. This leaflet will help you to recognise coastal archaeological sites so that you may be responsible for discovering them, protecting them and helping people to understand their coastal heritage.



*Prehistoric (c. 2500 BC) submerged pine forest exposed on the Shannon estuary intertidal foreshore at Rinevalla Bay, Co. Clare (A. O'Sullivan).*



*An eroding early medieval shell midden of limpets and cockle shells dated to about AD 800 at Doonloughan, near Ballyconneely, Connemara, Co. Galway. Shellfish meat has been used as food, as fish bait and as a raw material since earliest times up until the modern era. Shell middens are the rubbish dumps of the unwanted shells from oysters, limpets, periwinkles. Shell middens can be identified by walking along the edge of sand dunes and looking out for thin layers of shell, stone and earth exposed in the eroding cliff sections (A. O'Sullivan).*



*Galway Hookers at full sail. Over the centuries a rich variety of boats have been used in Irish waters (Darina Tully).*



*Modern pier and boat winching equipment on Inishark, Connemara. Large fishing harbours and piers – as well as their sheds and waterfronts – are an important element of our maritime heritage. In the 19th century, hundreds of small piers and jetties were built by the Congested District Board to support local fishing boats, the transport of turf and other economic activities (A. O'Sullivan).*



*Ireland's earliest known lighthouse is that on Hook Head, Co. Wexford, which was first built in the early thirteenth century, where it was maintained by local monks. Most of Ireland's other lighthouses were built in the 19th century. They are often connected to houses, other buildings and walled yards that testify to the lives of the keepers and their families. Other signal towers also survive from the 19th century (Billy Colfer).*



*A pond for the cultivation of oysters in northwest Co. Clare. Aquaculture has been carried out since the mid-nineteenth century around our coastline (Moore Group).*

# Ireland's Maritime Archaeology:

## our ancient coastal landscapes

### Mesolithic hunter-gatherers to Neolithic farmers (8000 - 2500 BC)

Ireland's earliest known inhabitants were Mesolithic hunter-gatherers who lived here between 8000-4000 BC. For these communities the sea was a place of huge importance. Archaeological excavations at Ferriter's Cove, Co. Kerry have produced evidence for their tents, their exploitation of shellfish, fish, seals, whales and waterfowl, stone tools. During the Neolithic period (4000-2500 BC) our first farming communities navigated between Ireland and Europe, bringing cattle, cereals, stone axes and other objects to this island. At Neolithic landscapes like Céide, Co. Mayo, their megalithic tombs can be found amidst the ancient fields where they grew crops and herded cattle.

### Anglo-Norman and Gaelic lordships (AD 1100-1550)

The Anglo-Normans developed the ports of Carrickfergus, Drogheda, Dublin, Cork, Waterford, Limerick, Galway that enabled expansion of maritime trade. The safe navigation of shipping into the Anglo-Norman ports of Waterford and New Ross was facilitated by a lighthouse built at Hook Head, on Waterford Harbour. In the western Gaelic lordships of the O'Sullivan Beares, O'Driscolls, O'Malleys, and the O'Donnells, native maritime economies were established relating to the fishing fleets that operated offshore.

### Post-medieval maritime landscapes (AD 1550-1840)

With the collapse of the Gaelic order and the Munster and the Ulster Plantations, new coastal towns (e.g. Londonderry, Coleraine, Belfast, Newry, Youghal) brought an entrepreneurial approach to the exploitation of maritime resources. In the 18th century, Ireland's larger ports saw growth and development (e.g. Cork, Galway). Ireland was also affected by the French Revolution of 1789. French military ships such as La Surveillante in Bantry Bay, Co Cork, were lost in Irish waters. The English government built fortifications along the coast of Ireland, including the well-known Napoleonic Martello towers and signal towers while the forts of Cork Harbour and Bere Island were designed to protect the British Navy fleet.

Medieval church and modern graveyard in sand dunes at Killeaney, Aran Island, Co. Galway. On the Connemara, Mayo and Donegal coastlines, ancient houses, field-walls, churches and burial places often lie buried in the sand dunes and under the sandy machair soils. Such sites are often prone to coastal erosion (A. O'Sullivan).



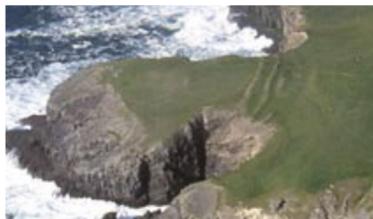
A Medieval fishtrap at Bunratty, Co. Clare. Archaeologists have recently discovered the remains of such ancient wooden and stone fish traps on Strangford Lough and the Shannon estuary. Intertidal surveys can reveal long traditions of fishing around our coast (Reconstruction drawing by Simon Dick).



Medieval church and 19th century Martello Tower on Dalkey Island, Co. Dublin. This small island has archaeological sites from earliest times to the modern era. (A. O'Sullivan).



A spectacularly preserved Late Medieval fishtrap, radiocarbon dated to about AD 1415, at Boarland Rock, on the Fergus estuary, Co. Clare. These survive today as large V-shaped or L-shaped structures partly enclosing a large space on the foreshore to catch fish. They have been dated from the early medieval period up until modern times. Most have yet to be recorded by archaeologists (Mary Dillon).



Promontory fort on Kerry Head, Co. Kerry. The fort was created by digging a bank and ditch across the neck of the promontory, seen here as two parallel lines across the most narrow part of the promontory. Since prehistory, people have built fortresses across the promontories and headlands around Ireland's coast (A. O'Sullivan).



Viking ship found at Skuldelev, Roskilde, Denmark. Recent dendrochronological research confirms that one of these ships was built in Dublin in the late eleventh century AD. (Photo: A. O'Sullivan).



Local Gandelow boat laid out in a marsh creek on the Shannon estuary, Co. Limerick. Local boat traditions are a significant part of our coastal heritage (A. O'Sullivan).



Connemara currach in north Co Mayo (Darina Tully).

### Bronze Age and Iron Age (2500 BC - AD 400)

The spectacular cliff-top fort of Dún Aonghusa, on the Aran Islands, Co. Galway, was probably first occupied in the Bronze Age. The fort's inhabitants gathered shellfish on the island's rocky shorelines and fished the ocean below using lines. During the Iron Age (400 BC - 400 AD), Roman objects found in Ireland may have been brought here by merchants, returning mercenaries or by refugees fleeing warfare in Britain. The spectacular golden Broighter boat model, dating to the first century BC can be seen in the National Museum of Ireland.

### Early Medieval coastal life and traditions (AD 400-1100)

In the early medieval period, archaeology and historical sources provide exciting insights into the lives of coastal communities. On the promontory fort of Dunseverick, Co. Antrim, the kings of the sea-kingdom of the Dal Riada tribe of northeast Ireland watched ships sailing past their territories to Scotland. Early Christian monks lived out on Ireland's Atlantic islands. On Skellig Michael, Co. Kerry, Inishmurray, Co. Sligo and many other islands, ancient stone huts, churches and terraced fields cling to the steep, rocky slopes, testifying to the presence of these monks.

In the Viking Age (AD 800-1100), Ireland was drawn into the maritime cultures and traditions of the north Atlantic, with the development of urban ports of Dublin, Wexford, Waterford, Cork and Limerick. Archaeological evidence indicates that these towns were on international trading routes (silks, walrus ivory, amber and slaves were brought from distant lands).

### Archaeology of the modern coastline (AD 1840-2000)

The western coastline was devastated by the Famine of the 1840s, yet many of its earlier coastal traditions survived and were prevalent until recent times. Irish coastal communities - such as those on the Aran and Blasket Islands - developed their own maritime traditions, using boats (e.g. currachs, naomhógs) to gain a livelihood from the sea. By the 19th century, the development of aquaculture led to an organised management of oyster beds, particularly along the west coast bays and inlets. Ponds, walls and piers were used to collect and transport the oyster catch. Seaweed was a significant source of income - producing iodine for glass-making, bleach, soap and as fertiliser. Gathered from the shore, it was slowly burned in rectangular stone ovens known as kilns. A nascent whaling industry developed - on Iniskea Island, Blacksod Bay and Donegal - to obtain oils for ointments and lighting as well as whale bone for corsets and costumes.

The 19th century saw a massive rise in coastal shipping and trade, leading to tens of thousands of shipwrecks around the coastline. Emigration ships left from many of our ports and a number of these were lost around the coast. One famous tragedy was the loss in 1853 of over 400 lives when the Tayleur sank off Lambay Island, Co. Dublin. The two World Wars (1914-18 and 1939-45) saw hundreds of ships and aircraft lost in the seas off Ireland, while observation posts and pillboxes were built to monitor the coast.

## Threats to our maritime archaeology

### Climate and sea-level changes

The world's oceans are changing because of global climate and rising sea-levels and this will impact on Ireland's coast. Predicted increases in storms, flooding of low-lying land, and increased erosion of intertidal deposits in estuaries and bays will damage or destroy archaeological sites. In response to this we need to be careful in how we design coastal defences (e.g. building of sea-banks) so as not to destroy or damage traces of our past coastal heritage.

### Natural coastal erosion

Coastal erosion is a natural, on-going process - while some beaches, sand dunes, estuary mudflats or cliffs are being eroded by the sea today, they may be forming through coastal deposition elsewhere. Marine scientists often emphasise that such natural coastal processes should not be interfered with or obstructed, in case this causes unforeseen problems elsewhere. However, archaeological sites cannot be thought of in the same way! Once an archaeological site is destroyed by natural coastal and intertidal erosion, a part of our past is gone forever and can never be replaced or recreated elsewhere. So, while sometimes, we may not always be able to prevent the destruction of coastal archaeological sites by the sea, we must record them before they disappear - often through archaeological excavations.

### Fishing and shell-fish farming

Coastal communities often depend on fishing, fish farming and shell-fish farming for their economy and livelihood. The modern re-development of ports and harbours, the use of beaches for shell-fish farms and the scouring of the sea-bed by fishing gear can seriously damage intertidal and submerged archaeological sites (e.g. shipwrecks, ancient ports). Archaeologists, working with government authorities, can identify sites of interest and suggest means of protecting them or investigating them prior to their removal.

### Off-shore developments

Energy concerns will lead to the increasing construction of off-shore platforms, pipelines and wind-turbines for oil, gas and wind-farm resources. Such industrial developments may directly impact on archaeological sites, or indirectly through alteration of currents and erosion patterns. Harbour dredgings, the dumping of spoil offshore and maintenance of shipping channels may lead to the damage or destruction of underwater archaeological sites.

### Coastal developments and other human pressures

Growing human pressures on coastal landscapes include urban expansion, tourism developments, caravan parks and the building of links golf-courses. Fragile archaeological sites like shell middens may also be damaged unknowingly by people driving their vehicles across them. Farming and industrial pressures on sand-dunes may include intensive sheep or cattle grazing and the quarrying of dunes for sands and gravels. It is appropriate that local communities continue to live and work in coastal landscapes. However, it should also be possible to do this in ways that encourages respect for our coastal archaeological heritage. All archaeological sites and objects are protected under the National Monuments Act 1930 - 2004.

An Initiative of The Heritage Council  
Text by Aidan O'Sullivan, UCD School of Archaeology with additions by Ian Doyle and Beatrice Kelly of the Heritage Council, 2006.

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CHOMHAIRLE  
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THE  
HERITAGE  
COUNCIL

KILKENNY, IRELAND. TELEPHONE: +353 56 7770777. FAX: +353 56 7770788. E-MAIL: mail@heritagecouncil.com  
CILL CHAINNIGH, ÉIRE. TELEAFON: +353 56 7770777. FAICIS: +353 56 7770788. E-MAIL: mail@heritagecouncil.com  
www.heritagecouncil.ie



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