

Manx Marine Environmental Assessment
Historic Environment

**Marine & Coastal Historic
Environment**



Tower of Refuge, Douglas. Photo: Department of Infrastructure.

MMEA Chapter 5.1

October 2018 (2nd edition)

Lead Author:

Andrew Johnson - Manx National Heritage

Manx Marine Environmental Assessment

Second Edition: October 2018

© Isle of Man Government, all rights reserved

This document was produced as part of the Manx Marine Environmental Assessment, a Government project with external stakeholder input, funded and facilitated by the Department of Infrastructure, Department for Enterprise and Department of Environment, Food and Agriculture.

This document is downloadable from the Isle of Man Government website at:
<https://www.gov.im/about-the-government/departments/infrastructure/harbours-information/territorial-seas/manx-marine-environmental-assessment/>

Contact:

Manx Marine Environmental Assessment
Fisheries Division
Department of Environment, Food and Agriculture
The Slieau Whallian
Foxdale Road
St John's
Isle of Man
IM4 3AS

Email: fisheries@gov.im
Tel: 01624 685857

Suggested Citations

Chapter

Johnson A. 2018. Marine and Coastal Historic Environment. In: Manx Marine Environmental Assessment (2nd Ed). Isle of Man Government. pp. 33.

Contributors to 1st edition:

Andrew Johnson, Allison Fox - Manx National Heritage
Captain Michael Brew - Department of Infrastructure
Laura Hanley* – formerly Department of Environment, Food and Agriculture
Adrian Corkill
Steve Moore – formerly Department of Infrastructure

Disclaimer:

The Isle of Man Government has facilitated the compilation of this document, to provide baseline information on the Manx marine environment. Information has been provided by various Government Officers, marine experts, local organisations and industry, often in a voluntary capacity or outside their usual work remit. Advice should always be sought from relevant contacts where queries arise.

The editors have taken every care to ensure the accuracy of the information contained but accept that errors and omissions may be present. The editors accept no responsibility for the accuracy or currency of information provided on external sites.

All MMEA chapters may be amended and improved upon in light of new information or comments received. As such, all chapters should be considered as working documents.

Any initial guidelines or recommendations within the document are provided to help facilitate future discussions between stakeholders, Government Departments, future developers and the general public, and should be read only in the context of the document as a whole. This document does not provide legal or policy advice but rather a statement of known information about Manx territorial waters.

The mapping detail contained in this document is subject to the limitations of scale and depiction of any feature, does not denote or infer right of way and no claim is made for the definitive nature of any feature shown on the mapping. New marine datasets created for the project have not been subject to formal verification.

Copyright:

All mapping, overlay data and intellectual property in this publication are subject to the following copyright:

Charts: © Crown Copyright, Department of Infrastructure, Isle of Man. 2012.

United Kingdom Hydrographic Office admiralty charts: © SeaZone Solutions Ltd. Licence no. 2005, [GDDI/10 & 012011.006]. © British Crown Copyright, 2005.

NOT TO BE USED FOR NAVIGATION

Reproduction of the maps in any form is prohibited without prior permission from the publishers.

Marine & Coastal Historic Environment

Introduction

This chapter provides a summary of current knowledge on the Manx Marine and Coastal Historic Environment and considers the possible impacts of future marine developments in the waters around the Isle of Man. As is true of most areas, the records for Manx Territorial Waters are continually being updated and the probability of previously unrecorded sites being discovered must be taken into consideration.

As an island nation, Manx history is inextricably linked with the sea with a rich historic and archaeological record. There is a range of maritime (including seafaring) remains, features associated with coastal settlement, as well as remains of former terrestrial landscapes and their inhabitants. The Island has a strong fishing history and lies on important trade and military routes. These factors combined with the often treacherous nature of Manx coastal waters mean that there are numerous shipwrecks.

Elements of the Manx historic environment including buildings, monuments, sites, landscapes and shipwrecks are a finite and non-renewable resource, forming not only part of the cultural heritage of the Isle of Man, but also making a significant contribution to the education, recreation and leisure and tourism sectors.

This section of the MMEA provides a summary of the key elements of the baseline Manx historic environment and key groups and organisations with an interest in Manx marine and coastal heritage are provided. It then considers the likely effects on this environment of potential developments in the marine and coastal environment and suggests generic measures for impact assessment surveying and mitigation of any adverse effects. A few initial recommendations for monitoring predicted effects are also presented.

The text regarding effects and mitigation aspects is not currently comprehensive since the nature, scope and location of future development for Manx waters and the coast is currently unknown. In addition, this report does not replace existing requirements for appropriate site specific information to be brought together, to ensure marine management decisions are based on the best available local information.

Cultural heritage

Manx National Heritage and legal framework

Manx National Heritage (MNH), operating under the terms of the Manx Museum and National Trust Acts 1959-2011, is statutorily responsible for the protection of terrestrial cultural heritage on the Isle of Man down to the High Water Mark. Relevant parts of the Acts provide for the protection of archaeological remains, including sites and lands, and certain buildings; the safeguarding of individual sites as designated monuments; areas of land held in trust for the nation by MNH; and the conservation of the landscape generally. Standing buildings of architectural and historical interest, together with conservation areas for built heritage, are separately protected under the Town and Country Planning Act 1999, and, although legally there is some overlap in the protection of buildings not in residential use, this is the primary legislation used for such purposes.

As the Island's national museum service and inspectorate of Ancient Monuments, MNH keeps extensive records of its collections, including archaeological artefacts, and also maintains a National Monuments Record (NMR) of archaeological sites and monuments. The NMR is currently (2018) commencing a process to upgrade it to a Historic Environment Record. MNH is also a key partner in the Manx Biological Recording Partnership for the Island (alongside Department of Environment, Food and Agriculture and the Manx Wildlife Trust) in the acquisition and maintenance of biological records.

MNH plays a full and active role in the planning process, commenting on individual planning applications and the formulation of planning policy, and is a frequent consultee for pre-planning investigation and environmental assessment and evaluation of all types, including Environmental Impact Assessment.

A new Heritage Bill (title to be confirmed) has been proposed and preliminary review undertaken of existing protective provisions within the Manx Museum and National Trust Act and other relevant legislation (for example the Town and Country Planning Act 1999 and the Wildlife Act 1990). The resulting Act is likely to retain all of the responsibilities summarised above and to modernise and strengthen where necessary.

Manx law also differs from that operating in some neighbouring jurisdictions, particularly in relation to the following areas of cultural interest:

- **Protection and Designation of Monuments:** nationally important archaeological sites and monuments, including certain buildings, may be protected as monuments. Such protection may be afforded through ownership by MNH; the placing of sites into the Guardianship of MNH; or, through the placing of a site on a List of Monuments. The protection afforded by different classes of monument varies according to the type of designation.

- **Archaeological Artefacts:** the discovery of any form of archaeological artefacts must be reported to MNH. Any activity which might result in the destruction or alteration of excavated artefacts, including scientific analyses, must also be licensed by MNH.
- **Archaeological Excavation:** all excavation for archaeological purposes must be licensed by MNH. In practice this also extends to other fieldwork activities (e.g. geophysical survey and prospection) where the ultimate intention is for further intrusive investigation.
- **Export:** no archaeological artefacts may be exported off the Island without a licence from MNH.
- **Metal Detecting:** the use of metal detectors is unrestricted except on sites designated by MNH. As before, artefacts must be reported to MNH.
- **Treasure:** a new Treasure Act came into force in 2017. All items of potential treasure must be reported to MNH.

Please also see MMEA Chapter 1.2 (The Legislative System).

Protected lands

MNH owns about 2,500 acres of land which is held in trust for the nation. The majority of this land lies in coastal locations, such as south of Cregneash, Fort Island, Marine Drive, Maughold Head, The Ayres and Eary Cushlin, and is protected for its natural and cultural heritage value. Additionally, more than 135km of the Island's coastline has long been designated through planning policy as 'areas of high landscape or coastal value and scenic significance', and the whole of the Island has now been the subject of a landscape character assessment undertaken for Department of Infrastructure which identifies key characteristics of different types of coastline including vulnerability to change.

Often these coastal landscapes contain marginal land preserving a significant time span and reservoir of landscape history. Even coastal landscapes comprising agricultural land farmed to modern practices will contain individual archaeological sites and preserve a significant depth of history in the pattern of landholding and land division, down to the character and form of field boundaries.

Protected sites

At the time of writing, MNH owns 22 Ancient Monuments and is guardian of a further 26 statutorily protected monuments in private ownership and of just over 200 medieval carved stone crosses, the majority of which are displayed at fifteen churches around the Island. At

the time of writing a further 39 monuments in private ownership are protected as Listed Monuments, on which there are restrictions against alteration and damage. It is likely that this latter figure will increase in future.

A significant number of these monuments are in coastal locations, and even more are sufficiently close to the coast to be physically or visually affected by marine development.

Manx context and baseline

Due to its size and varied topography, the Isle of Man contains a great range of archaeological sites and landscapes: at the time of writing, the MNH National Monuments Record (NMR) contains 5,000 records of sites.

The ancient rocky cliffs which characterise much of the Island's coastline harbour caves that have the potential to contain evidence for early human activity and perhaps even material dating from before the Ice Age. No such material has yet been identified, however, and greater potential instead lies in these rugged landscapes for late - and post-medieval mining remains (see below).

The eroding coastline from Kirk Michael northwards to Ramsey is an ever-changing record of late-glacial and early post-glacial geological activity, but also contains important palaeo-environmental evidence in kettle holes, lake bed sediments, and early buried occupation deposits. Both the geological and the environmental evidence are of regional importance within the Irish Sea context. Early zoological evidence, including examples (c. 10,000+ years old) of extinct species such as giant deer (*Megaloceros giganteus*) are also preserved, and are of international significance.

There are a considerable variety of archaeological sites dating from all periods after the end of the Ice Age, once climatic amelioration allowed human occupation. The Ice Age itself greatly modified the Island, adding a large landmass, which itself is still changing, to the north and west of the upland core. Changing sea-levels and isostatic rebound have further complicated the picture, but generally sites have been continuously lost to coastal erosion, and some archaeological remains are now located in the coastal zone despite not having originated there. Some such remains are thus significantly vulnerable to further environmental change.

Some of the earliest surviving landscape sites are now located in shallow water in the intertidal and subtidal zones, and are associated with important palaeo-environmental remains. Submerged forest beds are frequently seen around the north-eastern part of the Island near Port Cranstal, but have also been recorded around *Baie ny Carrickey* in the south of the Island.

It is possible that submerged archaeological and palaeo-environmental remains survive offshore in areas where the seabed is quite shallow and inundation of the Irish Sea basin

took place comparatively recently (<15,000 years before present). The area to the north and east of the northern part of the Island would appear to have particular potential, and comparison should be made with the now-inundated landscape of Doggerland in the North Sea.

No evidence is known for pre-glacial Palaeolithic human activity on the Island; as stated caves offer the best prospect for remains of this date, though no such evidence has yet been found. Instead, the Mesolithic period (c. 8000-4000BC) has left behind substantial evidence for hunters and gatherers exploiting the natural harvest of land and shoreline, and their most enduring remains take the form of flint tools worked in characteristic and contrasting fashions: an earlier microlithic industry and a later heavy-bladed toolkit (Woodman 1978, 1987). Recent development at the Isle of Man (Ronaldsway) Airport in 2009 revealed the cliff-top site of a sunken-floored, post-framed circular house with an occupation deposit containing approximately 17,000 pieces of microlithic flint (Johnson 2012), suggesting that coastal resources played a significant part in early Mesolithic survival.

Concerted field walking particularly in the north and west of the Island has meanwhile shown a significant concentration of the later Mesolithic heavy-blade flintworking sites (McCartan 1990); here the pebble-rich shores seem to have heavily influenced the likely collecting strategy for the raw flint necessary for the industry.

The Neolithic and Bronze Ages (c. 4000-500BC) have also left behind substantial evidence for human activity. There is an even more substantial record in the form of worked flint than for the previous period, and such material can be expected anywhere around the coastline and is particularly vulnerable to disturbance along the glacially-deposited coastal areas stretching from *Gob ny Creggan Glassey* between Peel and Kirk Michael, to Ballure south of Ramsey. There are also a range of more substantial sites from this period. Stone-built chambered tombs of the earlier Neolithic period have a clear coastal distribution: all but one have views of the sea, often extending as far as the surrounding Irish Sea coastlines. The same may also be true of later Neolithic cemeteries. The latter sites are more vulnerable than their more monumental predecessors because they lack a built superstructure, and only sometimes utilise any form of topographic feature such as a pre-existing natural mound.

The later Neolithic period on the Island appears to have been a time when a locally distinctive culture grew up, reflected not only in artefacts but perhaps also in beliefs and customs. The site of Ronaldsway in the south of the Island not only produced, within 250m of the sea, one of the first Neolithic houses to be discovered in the British Isles (Bruce *et al* 1947), but together with several other sites, notably Billown less than 2.5km inland (Darvill 1996, 1997, 1998, 1999, 2000a, 2000b, 2003, 2005), examples of buried pots whose deposition seems to have nothing to do with either human burial rites or the storage of food. Sites throughout the Island during this period are identified by distinctive local forms of pottery and flint tools. The later Neolithic in the Isle of Man is certainly of regional significance, not least because it is markedly different from the rest of the Irish Sea.

Bronze Age burials, often in artificial mounds, are numerous, and their distribution more general across the Island, but it would be wrong to presume that the sea did not sometimes play a part in their location. Though distribution has since been slightly modified by more recently metal-detected finds, Davey and Woodcock (1996) also draw attention to a largely coastal distribution of Bronze Age metalwork, which relates to a range of manufacturing, recycling, sepulchral and possibly also ritual deposition sites. Good evidence for an extensive late Bronze Age village has recently (2008) been excavated within 300m of the coast at Ronaldsway (Johnson op cit).

A long Iron Age (500BC-500AD) is characterised on the one hand by a lack of direct Roman occupation and on the other by a growing body of artefactual evidence for trade with Roman and post-Roman Britain. A range of sites date from the period, in particular more than twenty promontory fortifications around the rocky eastern and south-west coastlines; coastal erosion is likely to have removed obvious evidence for further examples around the north-west of the Island, but without entirely destroying the hinterland associated with them. Excavation has produced several examples of Romano-British brooches from coastal sites, and these are now being augmented with metal-detected discoveries suggesting that the effects of contact and influence from elsewhere were not purely coastal. At a regional level the coastal sites of this period around the Irish Sea and on the Isle of Man are a significant phenomenon.

It is justifiable to see this Iron Age extending into an Early Christian period (500AD-900AD) wherein the most visible remains are often related to Christian belief and ritual, and comprise Ogham-inscribed stone monuments at the beginning of the period, frequent inhumation cemeteries located throughout the lowland farmland, and sometimes early chapels associated with such burial grounds. However a small number of domestic and industrial sites have produced evidence both for use during the 6th- 9th centuries AD and also contact with post-Roman Britain.

The Medieval period begins with the arrival and settlement of Vikings from the early 900s until the collapse of the Norse Kingdom of Man and the Isles in 1265 (Wilson 2008, 2018). The Viking settlers utilised the whole of the landscape from the shoreline to the hill-land. This included temporary use of beaches for markets and more permanent operation of inlets and river mouths as sheltered harbours; the reoccupation and re-use of some of the cliff-top promontory fortifications, and the development of a system of coastal watch-keeping and defence; and the evolution of St Patrick's Isle and later Castle Rushen as foci for royal, military and administrative activity. Some of the existing burial grounds were rejuvenated under Viking rule by the building of small chapels, and whilst the network of cemeteries stretches across the whole of the landscape, a sufficient large number are coastally situated (indeed at least one example has been subject to coastal erosion) for them to be relevant to this study.

The Vikings were followed by Scottish and English overlords until 1765, when the British Crown acquired the Duke of Atholl's rights to the Island. This was a period characterised by continuity, during which very gradual change took place. The rural landscape gained its patchwork field pattern, though the system of landholding – which may be Viking Age or

earlier, and is frequently characterised by strip farms stretching from coastline to mountain – seems to have undergone very little change. The main settlements – all of them coastal – of Peel, Castletown, Douglas and Ramsey, expanded and consolidated, and their core street patterns and harbours are likely still to contain important archaeological, historical and developmental information in spite of piecemeal modernisation and redevelopment. Between 1405 and 1736 the Stanley Earls of Derby were responsible for the further development of the coastal castles on St Patrick's Isle and at Castle Rushen, and of various coastal gun batteries, whilst the Dukes of Atholl later undertook similar works around the coastline until 1765. The 4th Duke oversaw some further activity as governor until 1826. Coastal defence – in the form of continued development of gun batteries – continued after 1826 under British rule until the 1860s.

After 1765, substantial investment saw the construction of various public buildings and infrastructure, the expansion of the old capital of Castletown in the Georgian period and the rapid development of Douglas as the *de facto* economic and tourist capital and subsequent new seat of government in Victorian times. Most of the other major coastal settlements – Peel, Ramsey, Laxey, Port St Mary and Port Erin – also saw significant development of harbour facilities and associated fishing and shipping industries.

Alongside agriculture, fishing was for many centuries a mainstay of the Manx way of life, and many crofters alternated between the two according to the season. In 1883 it was estimated that some 3,500 people were directly or indirectly employed in the fishing industry and overall perhaps a quarter of the Manx population depended upon fishing for its livelihood. At this time the chief catch was herring, which went to produce the world famous Manx kippers, and Manx boats would regularly make the long journey down to the herring grounds off Kinsale, Ireland.

The later 19th and early 20th centuries also saw the Island's mining bonanza (Bawden *et al* 1972). Lead and zinc, and to a lesser extent copper and iron, were all prospected for and exploited with varying degrees of success. The Island's rocky coastline offered many opportunities for mining, particularly fine remains surviving at locations such as Bradda Head in the south-west, whilst Laxey harbour and its infrastructure owes its development to being the port from which ores were exported. More ephemeral trials of mineral-bearing quartz where it outcrops on the coastline are often difficult to spot and vulnerable to damage.

The same period saw the development of the Island's tourist industry (Beckerson 2007), and whilst the hotels and promenades of Douglas, Ramsey, and Peel (Port Erin and Port St Mary have lost a significant proportion of their Victorian hotel architecture) are a prominent reminder of this once-booming industry, it should not be forgotten that transportation was an important component. A high proportion of the Island's steam and electric rail networks, parts of which are still functioning, were for practical engineering reasons built in coastal locations, but was also designed to exploit the dramatic coastal scenery for the tourist audience, and continues to do so today. The same is as true for the abandoned parts of the network, which today serve as public footpaths, and also preserve along their length significant evidence for industrial archaeology and heritage.

During the 20th century the Island played a significant role in both world wars, resulting in a range of military remains (Francis 2006). Britain's largest civilian internment camp was built at the coastal site of Knockaloe during the Great War, whilst the hotels along the promenades of the Island's coastal towns were requisitioned for similar purposes in the Second World War. Some of the hotels also served as accommodation for various training schools for the armed services during the same war.

Four coastal sites at the Point of Ayre, Scarlett, Meayll Hill and Dalby were used as radar stations during WW2, and whilst the masts supporting the antennae have been dismantled, substantial concrete bunkers, equipment buildings and defensive installations still survive.

Two out of the three air stations constructed during WW2 are in coastal locations, one of them now serving as the Isle of Man (Ronaldsway) Airport. Both preserve significant infrastructure and buildings associated with their wartime use; Jurby Airfield in the north-west of the Island in particular has amongst the best surviving perimeter defences of any WW2-era airfield in the British Isles, and some interesting remains to the seaward side of the site, including WW2 gunnery practice facilities and a post-war control and observation tower for an offshore aerial bombing range which was only decommissioned in the early 1990s. A map showing the former Isle of Man Air Gunnery and Bombing Range is available in Francis (2006). Admiralty charts show the area the "Unexploded Ordnance" area off the North West of the Island (Jurby) where the presence of potentially hazardous unexploded ordnance remains on the seabed. For a map please see MMEA Chapter 6.2 (Shipping and Navigation).

Finally it is worth noting that the Island also preserves remains which span several time periods, and are more to do with the use of the landscape than the creation of specific features within it. Thus, many coves were used as landing sites before (and to an extent, after) the creation of formal harbours at Douglas, Castletown, Port St Mary, Port Erin, Peel, Ramsey and Laxey by fishermen-farmers, and whilst some are obvious because of surviving boathouses, stores and the clearance of tidal hazards, many more are only obvious because of the existence of a public right of way down to the shore or the use of certain types of place-name.

New archaeological discoveries are made all the time, and more sites are placed under protection as their significance becomes understood, or new threats arise. For the latest information, contact:

Manx National Heritage
 Manx Museum
 Kingswood Grove
 Douglas
 Isle of Man
 IM1 3LY
 Tel: (01624) 648000

Historic wrecks

The sea around the Isle of Man is known to contain historic wrecks, some of which are well recorded and located, but many more are likely to be present. The most comprehensive database that is readily available for Manx shipwrecks is contained in Adrian Corkill's book, "Dictionary of Shipwrecks off the Isle of Man (1740 – 1995)". The information available in this book may be supplemented by information available from divers and boat owners and also from the information shown on the charts issued by the UK Hydrographic Office.

The Island also has its own Receiver of Wreck to which any flotsam, jetsam and/or wreck must be reported and approval is required from the Department of Infrastructure to disturb any historic wreck. Historic wrecks are protected by the Wreck and Salvage (Ships and Aircraft) Act 1979 which is broadly similar to UK legislation but contains significant differences. War graves are covered by separate legislation and require a significant exclusion zone at all times.

Further information is available at the following link:

<https://www.gov.im/about-the-government/departments/infrastructure/harbours-information/information-and-legislation/diving-and-wrecks/>

Documented shipwrecks in Manx waters

The Irish Sea has been a vital transport route for thousands of years and so it is to be expected that many vessels have foundered in these waters. Within the boundaries of Manx Territorial Waters (12 miles offshore) there are 1,126 recorded shipwrecks. Within the three mile limit, there are records of 964 shipwrecks (162 between three and 12 miles). Vessels have been most vulnerable whilst negotiating the areas of dangerous coast round Langness in the south east (63 wrecks), the Calf of Man in the south west (50 wrecks) and the Point of Ayre in the north (42 wrecks). There are also records of vessels being wrecked in or near to the main ports of the Island – Douglas (120 wrecks), Ramsey (101 wrecks), Peel (48 wrecks), Castletown (46 wrecks) and Port St Mary (32 wrecks).

The map in Figure 1 shows the known dive site shipwreck locations for Manx waters although there are more that are not yet located to display on charts.

The recorded shipwrecks mostly date from 1800 to 1900 (63%) with a peak in the 1860s (8.9%), but the date range spans 1630 to 2006. However, it is possible that much earlier shipwrecks exist – the medieval manuscript, "The Chronicles of the Kings of Man and the Isles," for example mentions the sinking of a Viking fleet at Peel in 1228. Vessels of all types have been lost, from trading boats to passenger ferries, naval ships to U-boats and fishing vessels. Many human lives were lost with the ships and the shipwrecks are the last resting places of these souls, as well as being sources of historical information.

The records vary in detail and accuracy. Sources such as the UK Hydrographic Office have been used to compile a database of shipwrecks, along with records from contemporary newspapers, Lloyd's of London, the Board of Trade, the Admiralty, Customs, the Police, the Northern Lighthouse Board, Isle of Man Shipping Registers, the Courts, Registers of Death, Inquest Files and many other such sources, as well information from divers and fishermen. Only around 7.8 % (88 out of 1,126) of the wrecks have been verified as being extant and 6.1% (69 out of 1,126) of locations have had the identity of the wreck confirmed. Of the remainder, locations are vaguer and only a general description of the area of loss is known. These figures are constantly changing with new records becoming available, more research being carried out and reports of positive and negative positions being reported.

The state of preservation is inevitably variable from wreck to wreck. Wrecks such as the Ben Veg are in good condition, whereas the Ballina has suffered more from erosion and past salvage work. Areas that have been subjected to trawling and other seabed disturbance may have more poorly preserved wreck, but equally it is possible that this disturbance may have brought to the surface of the seabed remains which were previously covered.

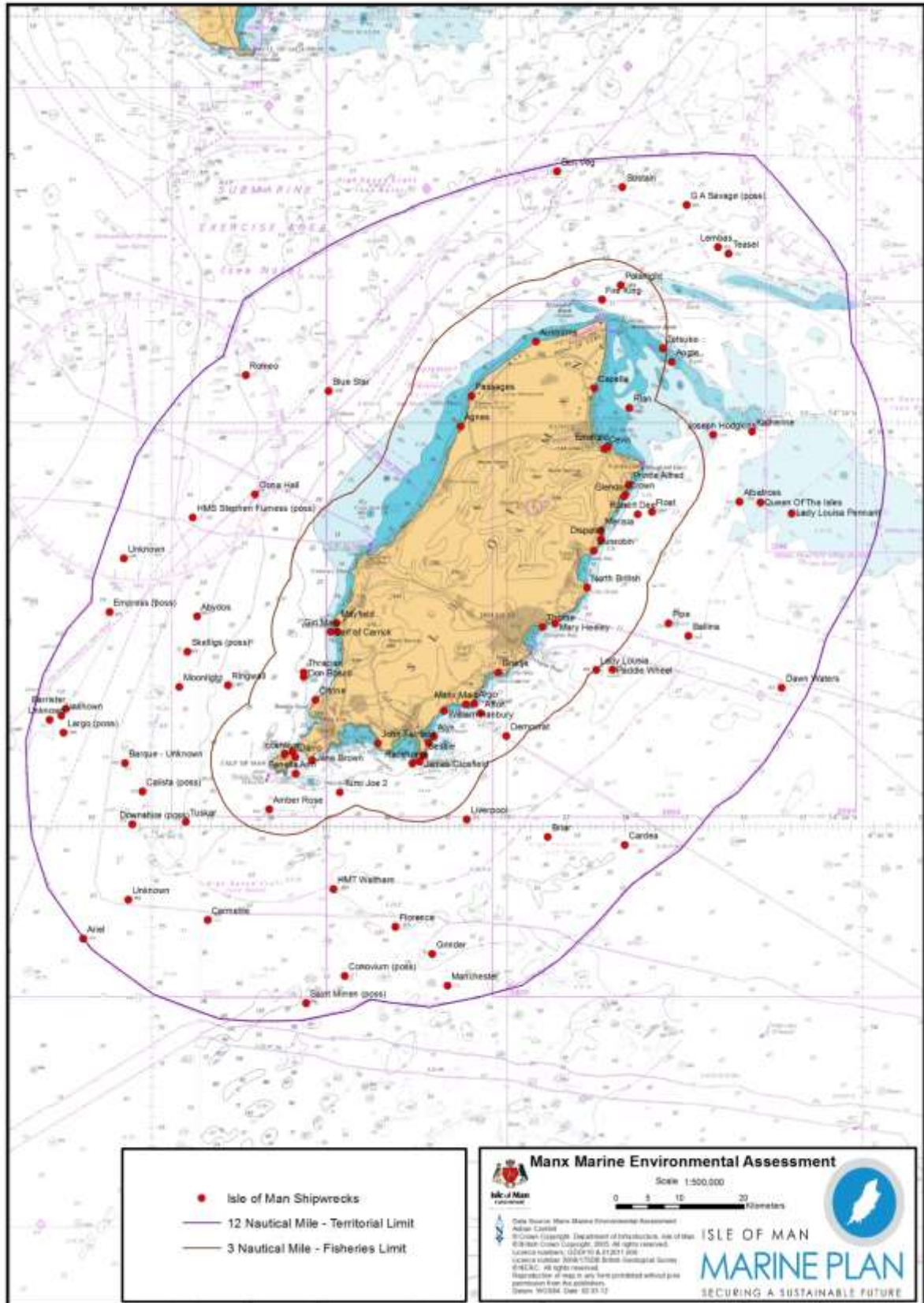


Figure 1. Known dive site shipwreck locations for Manx waters. Source: A. Corkill.

Protected wreck

There is one Protected Wreck Site in Manx waters, the site of HMS Racehorse, a Royal Navy brig sloop lost in 1822. Figure 2 shows the location of the wreck off the Langness Peninsula in the south of the Island. The wreck is owned by the Isle of Man Sub Aqua Club who purchased it “many years ago” prior to an Order being approved by Tynwald on 16th February 1982. The Order was made under the Wreck and Salvage (Ships and Aircraft) Act 1979 and it created a Restricted Area around the wreck of HMS Racehorse. The area is described in the Order as follows:

“An area 350 metres radius round a position 54° 3′.2N 4° 37′.75W but excluding any part which falls above the high water mark of ordinary spring tides.”

Within this area diving on the wreck and salvaging anything from it can only be undertaken following the issuing of a licence by the Department of Infrastructure. To date only one licence has been issued and that was to the Isle of Man Sub-Aqua Club on 24th January 1983.

Current detailed information on shipwrecks is available from:

Adrian Corkill, Creg Cottage, Bradda East, Port Erin, Isle of Man, IM9 6QA,

Email: adrian.corkill@manx.net,

Tel: (01624) 835911

Formation of the RNLI (Royal National Lifeboat Institute)

One of the reasons that the wreck site of HMS Racehorse is protected lies in its historical associations, and particularly with the formation of the Royal National Lifeboat Institution. Many of those lost on the Racehorse were locals who went to her aid. Their families consequently suffered significant financial hardship and this encouraged local resident William Hillary to petition the UK government for some form of assistance to families of those who died attempting the rescue of others at sea. The precursor of the RNLI was formed in 1824.

The Tower of Refuge in Douglas Bay was planned by Hillary in 1832 to save life and remains a lasting memorial at the entrance to Douglas Harbour (cover image). There are also three memorials to Sir William in Douglas, at, the Sunken Gardens on Loch Promenade; St George's Church (his place of burial); and on Douglas Head.

For further information on the history of the RNLI and Sir William Hillary see the RNLI Heritage Trust at: <http://rnli.org.uk/heritage>,

See also MMEA Chapter 6.2 (Shipping and Navigation).

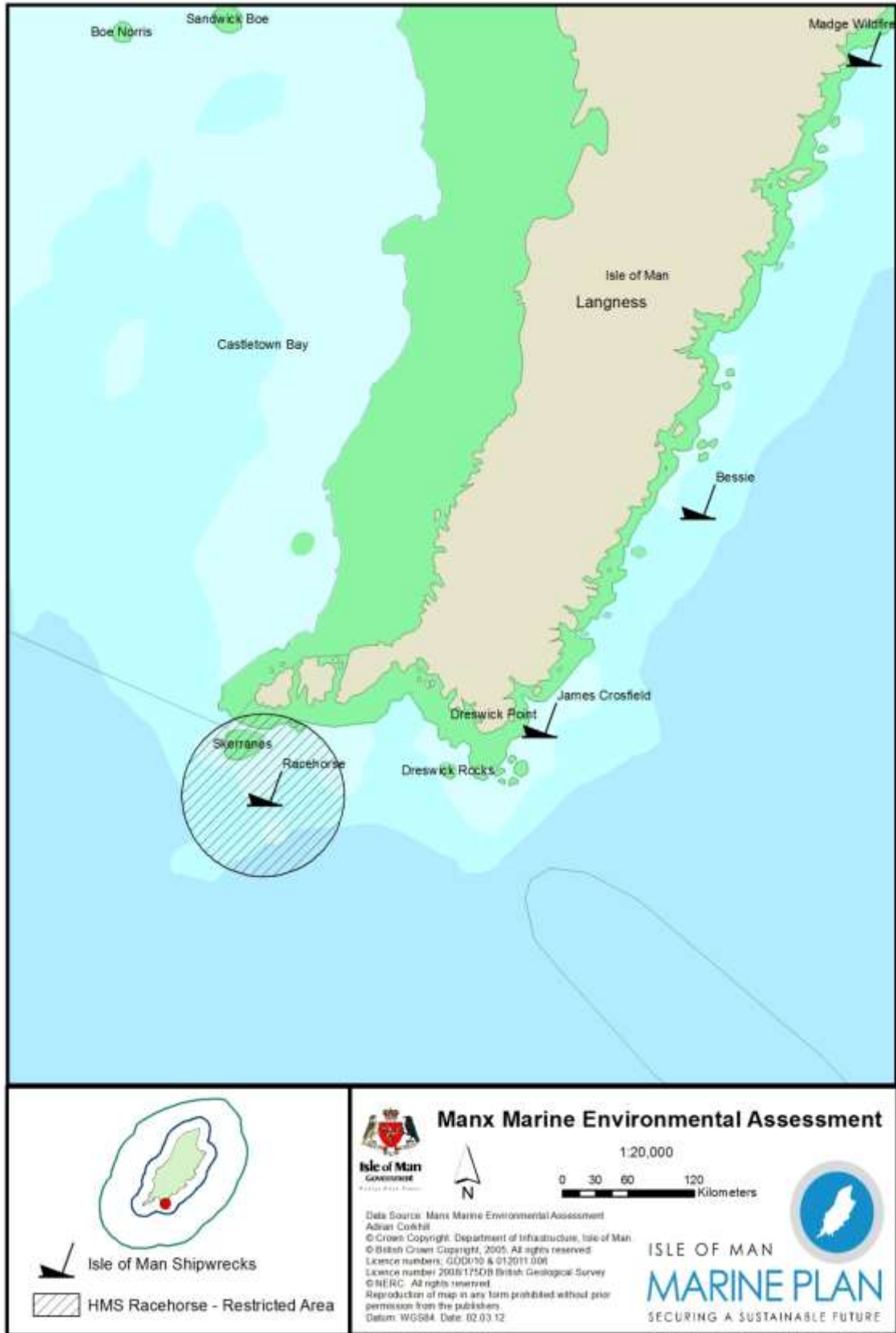


Figure 2. HMS Racehorse and restricted area (under the Wreck and Salvage (Ships and Aircraft) Act 1979).

Documented aircraft wrecks in Manx waters

For information relating to Aircraft wrecks in Manx waters please refer to the following publication:

S. Poole (1999) *Rough Landing or Fatal Flight: A History of Aircraft Accidents On, Over, and Around the Isle of Man*. Amulree Publications.

Manx Aviation Preservation Society

The main objective of the Manx Aviation Preservation Society, which was formed in 1994, is to heighten public awareness of the aviation and military heritage of the Isle of Man, with particular reference to the significant role the island played during World War II and beyond.

A number of excavations have been carried out on the Island and there is a small museum adjacent to the airport at Ronaldsway.

For further information please see: <http://www.maps.org.im/museum>

The historic built environment

Future development proposals in Manx coastal regions will require consideration to the current protection of the built environment depending of the nature, scope and location of development.

In 1987, the Isle of Man became a signatory to the Council of Europe Convention for the Protection of the Architectural Heritage of Europe, thus reflecting the commitment which the Island has to its unique built heritage. As a consequence, policy, law, and guidance for the Conservation of the Built Environment of the Isle of Man includes policy for the identification and protection of historic buildings, conservation areas and other elements of the built environment. In this context, the “historic built environment” is intended to include man-made structures which are judged to be of special architectural or historic interest or which individually, or as a group, make a vital contribution to the special character of the Island’s rural landscape or historic townscapes.

Many structures have the benefit of statutory protection such as being Registered Buildings; being located within a Conservation Area or, in due course, within National Heritage areas. Many of these areas are coastal in nature.

In addition, features such as historic field boundaries in the form of dry stone walls and sod hedges, footpaths, roadways and verges which might contain stiles, wells or original gates or gate posts, should also fall within this group for consideration, as well as the more obvious buildings and structures.

Heritage areas

Heritage areas are recognised and protected by statute for their cultural and national importance to the Island's heritage. There are two areas where consideration is being given towards achieving this status; Sulby Glen (including *Tholt y Will*), and the Meayll Peninsula and Calf of Man. Whilst initial consultation has commenced and early discussions held with the respective Local Authorities and interested residents, no further progression at this stage has been made.

Registered buildings

The Manx coastal zone contains a large number of statutory Registered Buildings, for example lighthouses, quaysides, piers and ancient remains, and while not strictly below the mean high water mark, these features may be indirectly affected by activities at sea or at coastal landfall. A map of the Registered Buildings (under the Town and Country Planning Act 1999) is shown in Figure 3 and a current list is available from the Department of Environment, Food and Agriculture – Planning and Building Control.

Table 1. Registered and noteworthy buildings around the Manx coast.

Building
Castles & Forts e.g. Peel, Rushen
The Tower of Refuge, Douglas
Lighthouses e.g. Point of Ayre, Langness, Chickens
Port Erin Marine Laboratory Buildings
The Calf Observatory
Wartime e.g. internment locations
Wartime coastal defences e.g. pill boxes, nissen huts
Coastguard units e.g. old look-outs
Marina's, pontoons, breakwaters e.g. Queens Pier
Mining heritage sites e.g. Bradda head
Thatch Cottage at Niarbyl
Fishing heritage sites e.g. the former premises of T. Moore & Sons, Mill Road, Peel (the Kipperyard)

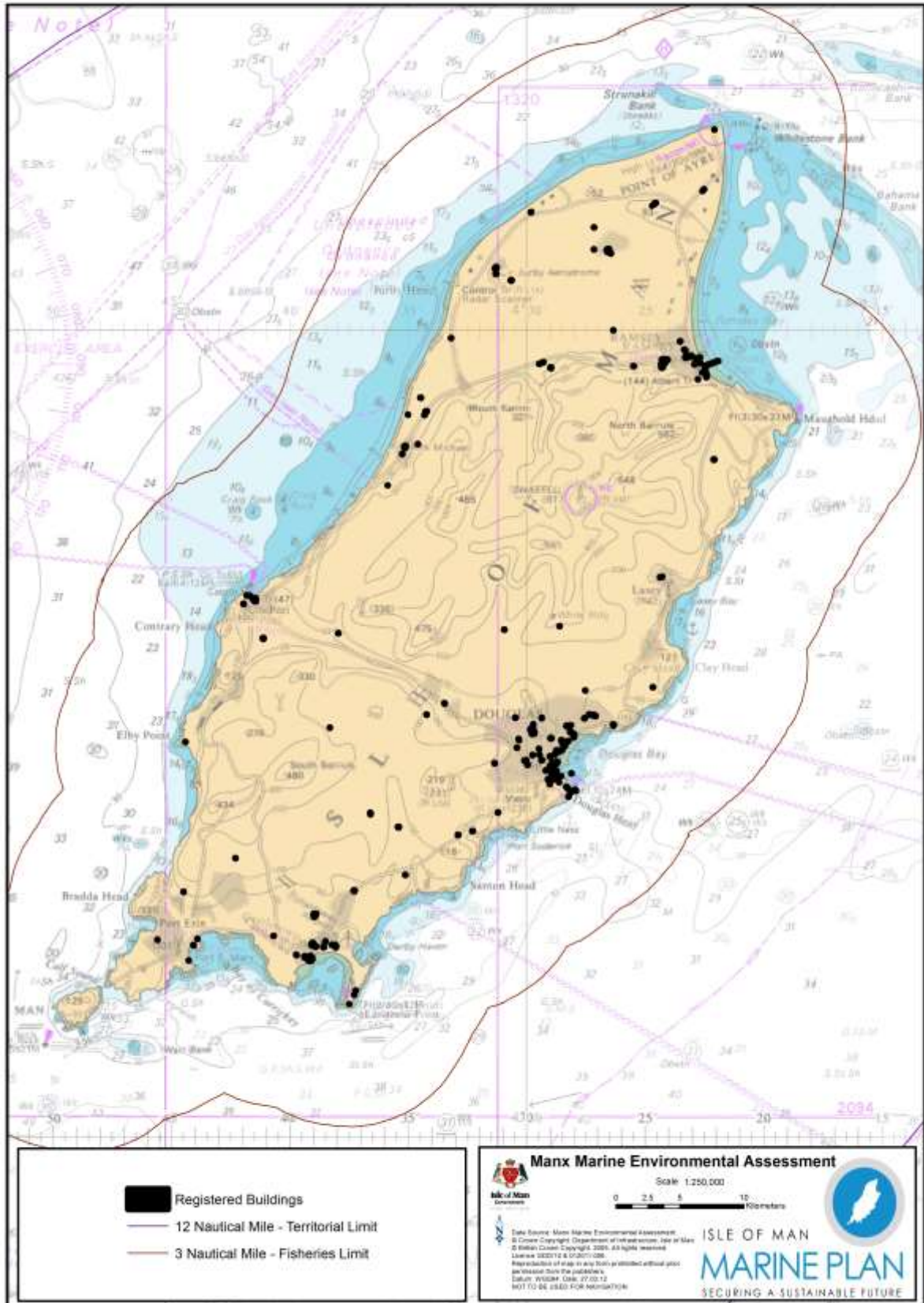


Figure 3. Locations of the Registered Buildings (under The Manx Town and Country Planning Act 1999).

Building conservation areas

The Town and Country Planning Act 1999 provides the Department of Environment, Food and Agriculture with responsibility to determine which parts of the Island are areas of special architectural or historic interest. A Conservation Area is therefore an area of special architectural or historic interest, the character or appearance of which it is desirable to enhance or preserve. Due to their special nature, Conservation Areas are subject to tighter planning controls and obligations in respect of demolition, new development, property alterations and advertisements and signs.

By Order there are currently twenty areas designated as Building Conservation Areas and updated maps and data (GIS shapefiles) for each area are produced by the Planning and Building Control Division and available via website link below. An example is provided in Figure 4 below.

NB: Neither Heritage Areas nor Conservation Areas extend to low water (MLW).

Table 2. Building Conservation Areas.

Building Conservation Areas	At high water (MHW)
Douglas (North Quay)	YES
Douglas (Little Switzerland)	*
Douglas (Ballaquayle Road)	*
Douglas (Selborne Drive)	*
Douglas (Windsor Road)	*
Douglas (Olympia)	*
Douglas (Woodbourne Road)	*
Douglas Promenades	YES
Douglas (Athol Street/Victoria Street/Duke Street)	*
Silverdale	*
Castletown	YES
Laxey	YES
Onchan	*
Maughold	YES
St Marks Village	*
Glen Wyllin	YES
Kirk Michael	YES
Ramsey	YES
Peel	YES
Colby	*

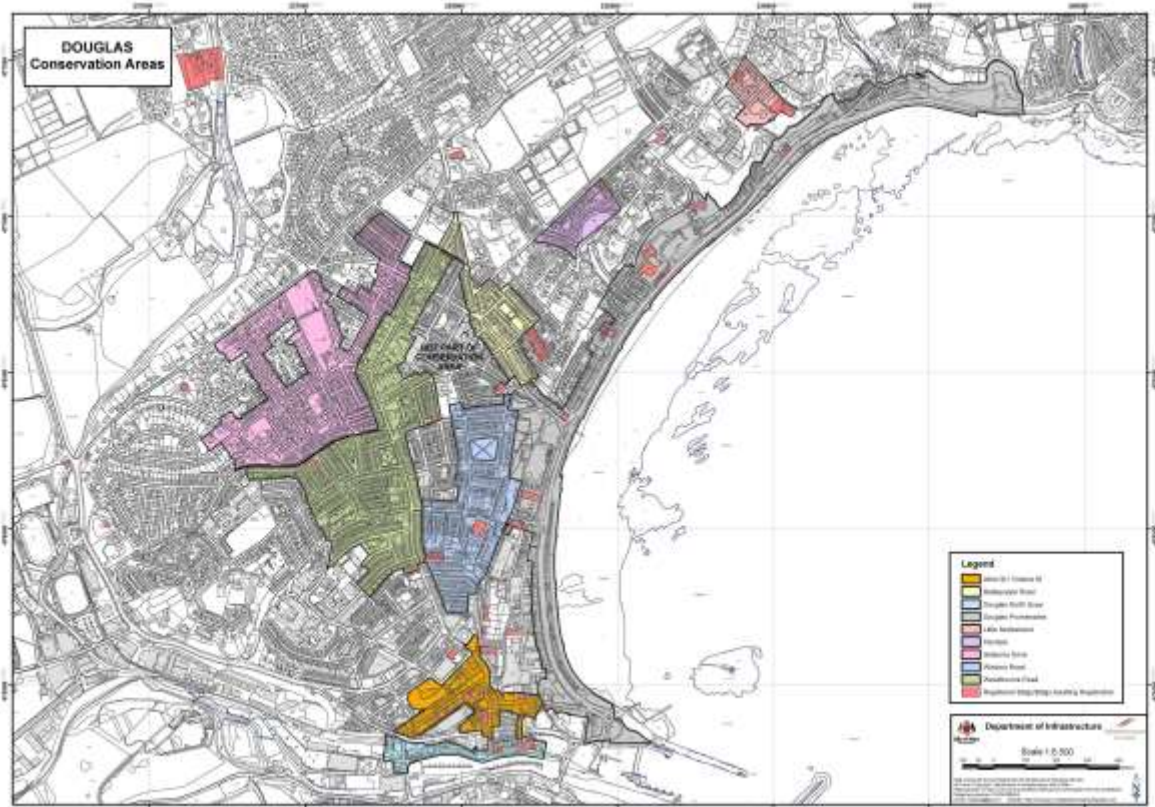


Figure 4. Example Building Conservation Area Map for Douglas (under The Manx Town and Country Planning Act 1999).

Proposed building conservation areas

Proposed boundaries for towns and villages identified as having the potential for Conservation Area status were also raised as part of the Southern Area Plan with areas subject to character appraisal (subject to output of public inquiry October 2011).

NB: The Proposed Building Conservation Areas do not extend to low water (MLW).

Table 3. Proposed Building Conservation Areas

Proposed Building Conservation Areas	At high water (MHW)
Port Erin	Yes
Port St Mary	Yes
Cregneash	*
Ballabeg	*
Silverdale/Ballasalla Extension	*

As a rule of thumb all properties within a Conservation Area are excluded from all permitted development and planning permission is required in most instances. Any queries should be directed to the Conservation Office at:

Planning & Building Control Division
Department of Environment, Food and Agriculture
Murray House
Mount Havelock
Douglas
IM1 2SF
Tel: (01624) 685944

For further details and Policy and Guidance Notes for the Conservation of the Historic Environment of the Isle of Man see website:

<http://www.gov.im/transport/planning/conservation/registeredbuildings.xml>

Visitor centres/ museums

House of Manannan, Peel – visitor centre focussed on the Island’s Celtic, Viking and maritime heritage; the latter includes fishing, smuggling, naval and commercial maritime history, with extensive coverage of the Isle of Man Steam Packet Company, the world’s oldest passenger shipping line.

Leece Museum, Peel – local museum specialising in the history of Peel and its environs, with some notable items of maritime heritage.

Nautical Museum, Castletown – home of the 18th century armed yacht “Peggy” (inscribed in the Core Collection of the National Historic Fleet on account of its historical significance administered by the UK) and an exploration of the maritime heritage of the Island.

Manx Museum, Douglas – headquarters of Manx National Heritage, holds displays and reserve collections of main periods of Manx history and point of contact for further information on sites and artefacts.

iMuseum, Douglas – a growing digital archive providing access to over 200 hundred years of Manx history; highlights include Manx newspapers from 1792 onwards; baptism, marriage and burial records; archive photographs of people and places.

Sound Café - views across the Sound to Kitterland and the Calf of Man, interpretation of marine wildlife and heritage.

Niarbyl – spectacular views and interpretation of coastal scenery and wildlife.

Please note: All of the above, except for the Leece Museum, are operated by Manx National Heritage: contact manxnationalheritage.im or tel: 01624 648000.

To contact the Leece Museum, tel: 01624 845366, see: <http://www.peelonline.net/leece/>

Other key groups and organisations with an interest in Manx marine and coastal heritage

Isle of Man Natural History and Antiquarian Society

The Isle of Man Natural History and Antiquarian Society was founded in 1879. The objectives of the society are the advancement of knowledge of natural history and human history and cultural development, especially in the Isle of Man.

The society has over 500 members and organises events throughout the year - excursions in the summer and lectures in the winter. Papers on the lectures are published in the Proceedings which comes out every two years. Please see: http://www.manxantiquarians.com/page_224389.html

Manx Heritage Foundation, now Culture Vannin

Culture Vannin was set up by Act of Tynwald in 1982. Its over-arching policy is to support and promote Manx culture. To this end it awards grants for approved projects and also initiates schemes of its own. The members meet on a regular basis throughout the year to consider applications for grants and to develop schemes which range over a wide area of Manx life including wildlife, geology, language, music, archaeology, history, social anthropology, oral history, archiving, education and the production of recordings and videos. Please see: <http://www.manxheritage.org/index.shtml>.

Isle of Man Victorian Society

Founded in 1979 to encourage interest in Victorian and Edwardian aspects of Island life.

Island Heritage Groups including:

Peel Heritage Trust

Formed in 1989 to promote the preservation, development and conservation of the buildings and amenities of Peel and its history. The Trust has organised around 200 events relating to the social, economic and architectural history of Peel and the Isle of Man. The trust hosts around a dozen events each year comprising outdoor visits and walks in the summer and a series of lectures in the winter. The 'Secret Gardens of Peel' are opened to the public every couple of years, bringing hundreds of visitors to the town. Please see: <http://www.peelheritagetrust.net/>.

Laxey and Lonan Heritage Trust

The Laxey and Lonan Heritage Trust was formed in 1987. Its main objective is "to do all such acts and things as may promote and assist the promoting, in the Isle of Man and elsewhere, knowledge relating to the history of Laxey and the history and archaeology of the mining industry in the Isle of Man and in particular the Great Laxey Mine in the Parish of Lonan and its associated structures". Please see:

<http://laxeyminerailway.im/laxey-lonan-heritage-trust/>

Ramsey Heritage Trust

Ramsey Heritage Trust was inaugurated in 2000 and the aims of the Trust are to promote the preservation, development and conservation of the buildings, heritage and amenities of Ramsey.

Other societies with an interest in maritime heritage:

The Friends of Queen's Pier

Please see: <http://www.queenspier.org/index.htm>

Initial considerations for future marine development

Coastal and offshore development around the Isle of Man has the potential to impact on the marine and coastal historic environment, in the course both of installation of structures and devices, and their subsequent operation.

Due to its central location in the Irish Sea, the Island's cultural heritage shares many affinities and connections with neighbouring landmasses, often blended together in a unique way. The capacity for modern marine development, particularly from a visual perspective, to interfere with such connections should not be underestimated. Sometimes such interference is as much to do with intangible issues as with physical effects. The intervisibility of the Island, particularly with north-west England and south-west Scotland, for instance allowed and encouraged the exchange of cultural ideas (e.g. similar Neolithic chambered tombs) and cultural material (e.g. trade in Neolithic stone axes with Northern Ireland, Cumbria and north Wales) more than four thousand years ago. The same processes result in the arrival of Georgian architecture in Castletown in the early 1800s, and development of particularly strong trading links with north-west England from the 1700s to the present day. Developments which visually intrude on views to and from the Island have the potential to impair understanding of such links, which have ultimately been responsible for the creation of the cultural heritage of the Isle of Man.

Although the full extent of the underwater cultural heritage is relatively unknown and has far fewer statutory protection measures by comparison with the terrestrial record it is equally threatened by natural and human influences. Development in coastal areas including renewable energy projects, pipelines, dredging and fishing may all have an impact on the marine and coastal heritage resource.

Cultural heritage is not restricted to physical features but also applies to socio-cultural associations with particular areas that contribute to a sense of place. This is important to the Isle of Man for example due to its strong historical fishing connections and trade.

Effects on marine archaeological remains

Developments in the offshore zone have the potential to uncover, disturb or destroy historic remains lying on or under the sea bed and any impacts should be taken into account in decision making as informed by marine planning and environmental impact assessment procedures.

For example, the installation of structures on and/or in the seabed evidently has the potential to damage or destroy wreck sites, whether they are lying on the seabed or are concealed below the surface. It is possible to avoid damaging them by undertaking detailed pre-installation surveys e.g. using side-scan sonar equipment. Ancient land surfaces may also be damaged during installation. This may be avoided by siting structures in areas where the seabed is rocky and where there are no substantial silt deposits. Initial, exploratory operations, such as coring to investigate the geology and grabs for analysis of benthic ecology, should also be considered potentially damaging and cores should be inspected for any archaeological and palaeo-environmental material. Indirect impacts are not always fully appreciated, and they can include changes to local current patterns, sediment movements and scour from cables and structures.

Cable and pipeline laying operations may also damage sites and artefacts in the marine environment.

Dredging (including aggregate extraction) and benthic (particularly scallop and queenie) fishing methods will disturb the sea bed and may damage sites, wrecks or underwater landscape features.

Whilst artificial coastal defence works can help to retain the stability of eroding sections of coastline, they can have adverse impacts down drift and offshore as sediment movement becomes disrupted. Increased rates of scour may expose or erode deposits of potential archaeological value. The resulting situation is one which requires continual surveying of sites at a suitable frequency to support the monitoring of sites and where appropriate the recovery and conservation of artefacts.

The visual impacts of development on landscape/seascape have the potential to affect the setting of historical features (Wessex 2007). Changes may be significant from a heritage perspective, but also affect the potential for income from tourist related activities. These may arise from both offshore developments and their coastal-based infrastructure.

There is a risk that future developments may add to the erosion of a 'way of life' associated with the declining fishing communities in which historic connections and family ties with the fishing industry may diminish further (where they still exist). The same may be true of other industries where pressures to reduce manpower or reform working practices would have an adverse impact on cultural associations

Co-location of activities and developments with areas of archaeological interest requires attention, in order to optimise marine spatial planning and thereby support access and long-term conservation.

Effects on the coastal historic environment

The principal impact on the coastal historic environment will take place where cables, pipelines and/or ancillary works come ashore. Any works undertaken for this purpose are likely to damage or destroy sites and should either be routed to avoid known sites or subject to a watching brief by a suitably qualified person whilst construction takes place.

Once the installation of cables, pipelines or other structures is complete there should be no further disturbance of the coastal historic environment. It is however conceivable that repair or maintenance work could impinge on previously undisturbed elements of a historic site.

Effects on marine archaeological remains

Developments in the marine and coastal environment and their associated infrastructure will almost certainly lead to localised changes in tidal flow and wave energy. These in turn will affect the pattern of sedimentation around these sites. This may lead to new sites being exposed and in contrast, other sites may be buried beneath new accumulations of sediment.

Initial considerations for handling potential effects from future marine development

By the very nature of submerged archaeological sites and remains, it is not always possible to predict exactly where new sites might be discovered. To best mitigate against damage to these sites, a full and detailed survey of the potential locations should be carried out prior to the construction of any future development in the coastal or marine environment. In addition to obtaining surveys and where possible, it would also be advisable to check material disturbed from the seabed in case it contains any archaeological artefacts. It should be noted that there is a legal obligation to report historic wreck material, or other finds, to the Receiver of Wreck. Further information is available at the following link: <https://www.gov.im/about-the-government/departments/infrastructure/harbours-information/information-and-legislation/diving-and-wrecks/>

If new sites are discovered as a result of survey work the preferred outcome would be to avoid them during development, ie leave them undisturbed and in situ. Some flexibility in planning is therefore to be encouraged so that avoiding the sites does not have a negative impact on a development timetable.

Environmental Impact assessments

Environmental impact assessment is required in specific circumstances under the terms of the Strategic Plan and it is recommended that the historic environment – including landscapes of historical, cultural or archaeological significance - is addressed in supporting documents accompanying applications for future development.

It is recommended that a desk-based assessment of the area concerned, by an appropriately qualified person, should be undertaken as a first step. Further evaluation and/or investigation may then be required including boat-based marine survey to determine what heritage assets may exist within the area of proposed development.

Best practice would be to follow recommended professional standards during environmental impact assessment and subsequent detailed project planning and delivery. Reference to similar development applications in neighbouring jurisdictions and other Crown Dependencies e.g. Ireland, UK, Channel Islands should also be drawn.

Stakeholder Engagement

For the Historic Environment it is recommended that early stakeholder engagement is carried out ahead of a development application particularly with the Isle of Man Government's Marine Spatial Planning Officer Group and Manx National Heritage.

Recommendations for Surveying and Monitoring

Marine renewable energy devices on the seabed should be monitored once they are in place. Such monitoring will provide valuable information on how the structures influence the scouring and/or deposition of sediments and silts around them, which will be relevant to archaeological considerations in the future.

Historic seascape characterisation maps would provide an understanding of the cultural processes shaping the present landscape in coastal and marine areas. Best practice might be to refer to the UK's nationally-applicable methods which are being adopted by Marine Plans in a number of locations used to inform their marine planning process e.g. Historic Seascape Characterisation project work commissioned by English Heritage.

It is recommended that standard protocols for Archaeological Discoveries are followed. For example please refer to guidance documents prepared for the renewable and aggregate industries by Wessex Archaeology on behalf of the UK's Crown Estate: <http://www.wessexarch.co.uk>. See also: <http://www.english-heritage.org.uk/> and <http://www.unesco.org/>.

Data collected for archaeological purposes (e.g. site assessments) could be useful for ecological studies also. For example, incorporating ecological and biological recording into archaeological survey work could help gain ecological perspective of species movements due to climate change.

Social & economic benefits and impacts studies regarding coastal and marine heritage could also be undertaken.

Confidence and Knowledge Gaps

The summary information provided as the baseline information is intended to draw attention to the most significant types of archaeological sites to be found in the more coastal parts of the Island, and should not be viewed as a full description of the cultural heritage of the Isle of Man. The summary goes beyond immediately coastal features because the Island's hilly topography and not only allows inland sites to be visually affected by offshore development but also because the relatively small scale of the Island means that coastal sites are connected with a range of different landscape hinterlands that potentially include the whole of the Island.

Knowledge of offshore archaeology is limited by the practical and economic problems involved in searching large areas of the sea floor. In the sea area around the Isle of Man these knowledge gaps could be largely removed by detailed seabed survey and characterisation assessment.

Data Gaps

The nature of archaeological remains is such that there will always be gaps in the data, without either extensive and detailed survey work across the entire area and excavation where appropriate to shed further light on the results of the survey work.

The relationships between shipwrecks in Manx waters and fauna and flora that inhabit them is an area for potential study. For an example of such research undertaken elsewhere in British Isles see:

http://www.wessexarch.co.uk/projects/marine/alsf/wrecks_seabed/ecology/index.html.

In summary, data gaps include:

- Lack of spatial detail regarding underwater archaeological sites.
- Uncertainty regarding the full extent and detail of undiscovered remains.
- Lack of historic seascape character maps.
- Further details on statutory heritage features along the coast can be added at the next iteration of the MMEA and the Isle of Man Marine Plan where applicable.

Archiving

Copies of reports gathered on the marine historic environment as the result of future marine and coastal development should be deposited with the Manx National Library and Archives, c/o Manx National Heritage. It is recommended that reports are also provided in an electronic format.

This is the first time such information has been summarised for Manx waters and therefore acts as an initial baseline on which further evidence can be added, working towards a more comprehensive evidence base to guide marine planning.

Selected Bibliography

- Bawden T.A., Garrad L.S., Qualtrough J.K. and Scatchard W.J. (1972). *The industrial archaeology of the Isle of Man*, David & Charles.
- Beckerson J. (2007). *Holiday Isle: the Golden Era of the Manx Boarding House from the 1870s to the 1970s*, Manx Heritage Foundation.
- Bruce J.R., Megaw B.R.S. and Megaw E. (1947). 'A Neolithic Site at Ronaldsway, Isle of Man', *Proceedings of the Prehistoric Society* 13, 139-160.
- Corkill A. (2002). *Peel's Golden Shipwreck, The Lucy of London 1702*.
- Corkill A. (2003). *Shipwrecks of the Isle of Man*. The History Press Ltd.
- COWRIE (2007). *Historical Environment Guidance for the Offshore Renewable Energy Sector*. COWRIE Report ARCH-11-05. Prepared for COWRIE Limited by Wessex Archeology. COWRIE Limited. London.
- COWRIE (2008). *Guidance for assessment of cumulative impacts on the historic environment from offshore renewable energy*. COWRIE Report CIARCH-11-2006. Prepared for COWRIE Limited by Oxford Archaeology with George Lambrick Archaeology and Heritage. COWRIE Limited, London.
- Darvill T. (1996). *Billown Neolithic Landscape Project, Isle of Man, First Report, 1995*, Bournemouth University.
- Darvill T. (1997). *Billown Neolithic Landscape Project, Isle of Man, Second Report, 1996*, Bournemouth University.
- Darvill T. (1998). *Billown Neolithic Landscape Project, Isle of Man, Third Report, 1997*, Bournemouth University.
- Darvill T. (1999). *Billown Neolithic Landscape Project, Isle of Man, Fourth Report, 1998*, Bournemouth University.
- Darvill T. (2000a). *Billown Neolithic Landscape Project, Isle of Man, Fifth Report, 1999*, Bournemouth University.
- Darvill T. (2000b). *Billown Neolithic Landscape Project, Isle of Man, Sixth Report, 2000*, Bournemouth University.
- Darvill T. (2003). *Billown Neolithic Landscape Project, Isle of Man, Seventh Report, 2002*, Bournemouth University.
- Darvill T. (2005). *Billown Neolithic Landscape Project, Isle of Man, Eighth Report, 2003*, Bournemouth University.
- Davey P.J. and Woodcock J.J. (1996). 'History and archaeology – Isle of Man', in JH Barne, CF Robson, SS Kaznowska, JP Doody & NC Davidson (eds) *Coasts and seas of the United Kingdom: Region 13 Northern Irish Sea, Colwyn Bay to Stranraer, including the Isle of Man*, JNCC, 166-169.
- English Heritage (2003). *Marine Aggregate Dredging and the Historic Environment*, Prepared for English Heritage by Wessex Archaeology. UK .
- Francis P. (2006). *Isle of Man 20th Century Military Archaeology Parts 1-5*, Manx Heritage Foundation.

Johnson A.C.C. (2012). 'Excavations at Ronaldsway 2008-2009: A Note' Proceedings of the Isle of Man Natural History and Antiquarian Society XII, 510-517.

McCartan S.B. (1990). 'The early prehistoric colonisation of the Isle of Man: Mesolithic hunter-gatherers', Proceedings of the Isle of Man Natural History and Antiquarian Society IX, 517-534.

Poole S. (1999). Rough Landing Or Fatal Flight: A History of Aircraft Accidents On, Over, and Around the Isle of Man. Amulree Publications.

Wilson D.M. (2008). Vikings in the Isle of Man, Aarhus University Press.

Wilson D.M. (2018). Manx Crosses: A Handbook of Stone Sculpture 500-1040 in the Isle of Man, Manx National Heritage and Archaeopress.

Woodman P.C. (1978). 'A reappraisal of the Manx Mesolithic', in, PJ Davey (ed) Man and Environment in the Isle of Man, British Archaeological Reports, British Series 54, 119-139.

Woodman P.C. (1987). 'Excavations at Cass ny Hawin, a Manx Mesolithic site, and the position of the Manx microlithic industries', Proceedings of the Prehistoric Society 53, 1-22.

Wessex Archaeology (2010). Protocol for archaeological discoveries: offshore renewables projects. The Crown Estate.

Website links

<http://www.english-heritage.org.uk/>. English Heritage. Last accessed 05/06/2018.

<http://www.gov.im/transport/harbours/legislation.xml>. Department of Infrastructure - Harbours. Last accessed 05/06/2018.

<http://www.gov.im/transport/planning/conservation/registeredbuildings.xml>. Department of Infrastructure - Planning and Building Control. Last accessed 05/06/2018.

<http://laxeyminerailway.im/laxey-lonan-heritage-trust/> Laxey and Lonan Heritage Trust. Last accessed 05/06/2018.

<http://www.manxantiquarians.com/> Isle of Man Antiquarian Society. Last accessed 05/06/2018.

<http://www.manxnationalheritage.im>. Manx National Heritage. Last accessed 05/06/2018.

<http://www.maps.org.im/>. Manx Aviation Preservation Society. Last accessed 05/06/2018.

<http://www.peelheritagetrust.net/>. Peel Heritage Trust. Last accessed 05/06/2018.

<http://www.queenspier.org/index.htm>. Friends of Queens Pier. Last accessed 05/06/2018.

<http://www.unesco.org/>. United Nations Educational Scientific and Cultural Organisation. Last accessed 05/06/2018

<http://www.wessexarch.co.uk/projects/marine/bmapa/index.html>. Wessex Archaeology. Marine Aggregate Industry protocol for the reporting of finds of archaeological interest. Last accessed 05/06/2018.

http://www.wessexarch.co.uk/projects/marine/alsf/wrecks_seabed/ecology/index.html. Wessex Archaeology. Wrecks on the seabed: ecology. Last accessed 05/06/2018.