SCAPE
Scottish Coastal Archaeology and the Problem of Erosion

University of St Andrews

Coastal Zone Assessment Survey Kintyre

Paul Murtagh, Joanna Hambly

The SCAPE Trust and the University of St Andrews
November 2024

Acknowledgements

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The survey was funded by Historic Environment Scotland through their Partnership Fund.

Joanna Hambly, Juliette Mitchell and Paul Murtagh of the SCAPE Trust led the fieldwork and recording.

Cover Photo: Volunteers and SCAPE officers recording the cleared slipway at A'Chleit (SCAPE ID: 16975)

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Key Findings

The July 2024 survey of the western and southern coastline of Kintyre focused on six main areas: A'Chleit to Tayinloan, West Loch Tarbert, Seal Point to Dunskeig Bay, Southend, Machrihanish and the Cauldrons and Machrihanish Bay. In addition, sites on Island Davaar were also updated.

The Kintyre peninsula is characterised by a rocky indented coast with longer beach systems found along the west coast and eastern half of the southern coast. It is relatively sheltered from the open ocean. The overall picture of coastal change gained in the areas surveyed was of dynamically stable longer beach sections with evidence of episodic erosion affecting the back shore and dunes caused by extreme weather events. The longest stretch of net erosion was observed south of Dalkeith. We also observed nuisance erosion and ad hoc coastal stabilisation at A' Chleit, Tayinloan and Polliwilline Bay. Our field observations broadly agree with modelled coastal change scenarios, but recorded less extreme coastal erosion at Dunskeig Bay and at the south end of Machrihanish Bay which would lessen near future predictions of coastline retreat.

Ninety-eight archaeological and built heritage sites were visited and documented by SCAPE officers and volunteers. Seventy-one of these (72%) were not previously recorded in heritage records. The majority of sites encountered during the survey related to maritime heritage: harbours, cleared slipways and jetties, accounting for 38% of the total number of sites with a further 4% relating to maritime safety and navigation. The second most numerous type of site encountered were intertidal field and land boundaries, making up 22% of the total number of sites. There were also notable, unique sites in the area including a 19th-century religious painting in a cave on Island Davaar, and a historically important radio mast site, to the west of Machrihanish at Uisaed.

Six sites have been identified as a priority for monitoring or further action, due to their cultural, historical, or archaeological significance and vulnerability, or potential future vulnerability to coastal erosion and deterioration. One site, a possible harbour or quay recorded in the intertidal zone close to the current ferry terminal at Tayinloan, is assigned a priority two status, given its potential historical importance and vulnerability.

The other five sites have been assigned a priority three status:

- An industrial landscape and associated maritime infrastructure based on limestone quarrying at Ronachan Bay and Ronachan Point.
- A rural harbour and coal depot at Dunskeig.
- The early 20th century Wireless Station at Uisaed, Machrihanish.
- The Rat Stane at Pennyseorach Farm.
- A mid-19th century gun emplacement at Dunskeig Bay.

We recommend the Wireless Station be assessed as a potential candidate for designation as a Scheduled Monument.

Although not assigned a priority status, we also recommend further survey and historical research for the maritime landscape of West Loch Tarbert and the harbour and site of historic salt pans at Machrihanish.

1. Introduction

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The aim of the survey was to characterise and assess the condition and vulnerability of the coastal archaeological resource along stretches of coastline identified as being at moderate to high risk of erosion by 2030. We also targeted coasts that were identified during a reconnaissance visit in May 2024 as having high archaeological potential. The walkover surveys covered A'Chleit to Tayinloan, West Loch Tarbert, Seal Point to Dunskeig Bay, Southend, Machrihanish and the Cauldrons and Machrihanish Bay and the south and east sides of Island Davaar (Figure 1). The surveys benefited from information from participants about local heritage and recent coastline change.

2. Project aims and objectives

The overarching aim of the survey was to identify and characterise archaeological sites and areas that are likely to be impacted by coastal erosion and other threats in the short to medium term.

The survey objectives were to:

- Identify the most vulnerable sections of coastline through desk-based assessment to target fieldwork to coastlines experiencing erosion,
- Involve volunteers from local communities and societies in the field surveys,
- Locate and record archaeological sites at the coast edge and intertidal zone,
- Assess the condition and vulnerability of the sites,
- Assess the field evidence for coastline change during the walkover survey,
- Share results with the West of Scotland Archaeology Service and Historic Environment Scotland.

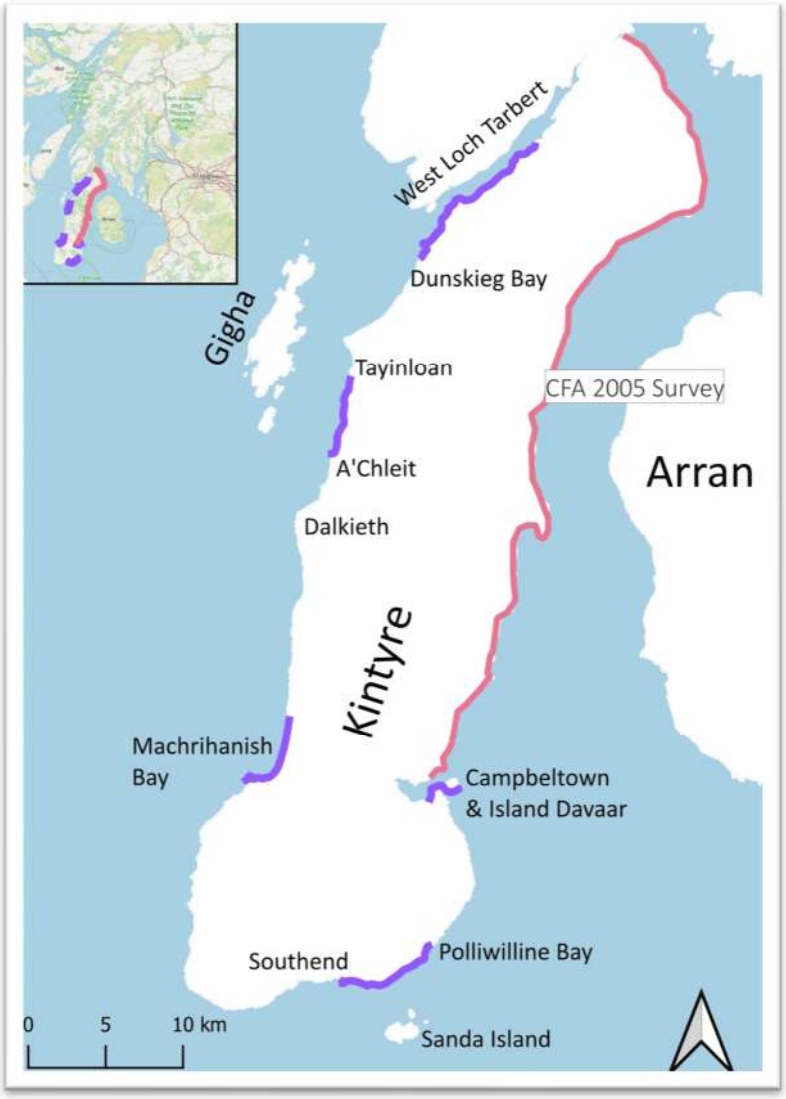

Figure 1. Surveyed coastline highlighted in purple, and CFA 2005 Survey highlighted in pink. Contains OS data© Crown copyright and database right 2024 Using: EDINA Digimap Service, https://digimap.edina.ac.uk.

3. Methodology

3.1. Prioritisation of field walkover survey areas

In advance of the walkover surveys, desk-based analysis of models of national coastal susceptibility and national coastal change were undertaken to understand the vulnerability of the coastline and target areas for walkover survey. Two models were combined; a coastal erosion susceptibility model (Fitton et al. 2016) and a model of projected coastal erosion rates by 2030 (Dynamic Coast, Hurst et al. 2021). The coastline was divided into 0.5 km^2 grid cells and each cell assigned a score based on the combined Figure 1 results from each model. Grid cells coloured yellow, orange and red contain coast which will experience erosion by 2030, with red cells having the highest score from both underlying models. The methodology used to combine the models is outlined in a short methodology report, available on the SCAPE website (Boyd, 2022).

The resolution of 0.5 km^2 grid cells was chosen to give a broad overview of the nature of the coastline for walkover planning purposes (Figure 2). Within a red or orange grid cell there may be areas of accretion or no erosion, however the cell will also contain coastline with moderate to high susceptibility of erosion by 2030.

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The July 2024 survey of the western and southern coastline of Kintyre focused on six main areas: A'Chleit to Tayinloan, West Loch Tarbert, Seal Point to Dunskeig Bay, Southend, Machrihanish and the Cauldrons and Machrihanish Bay. In addition, sites on Island Davaar were also updated.

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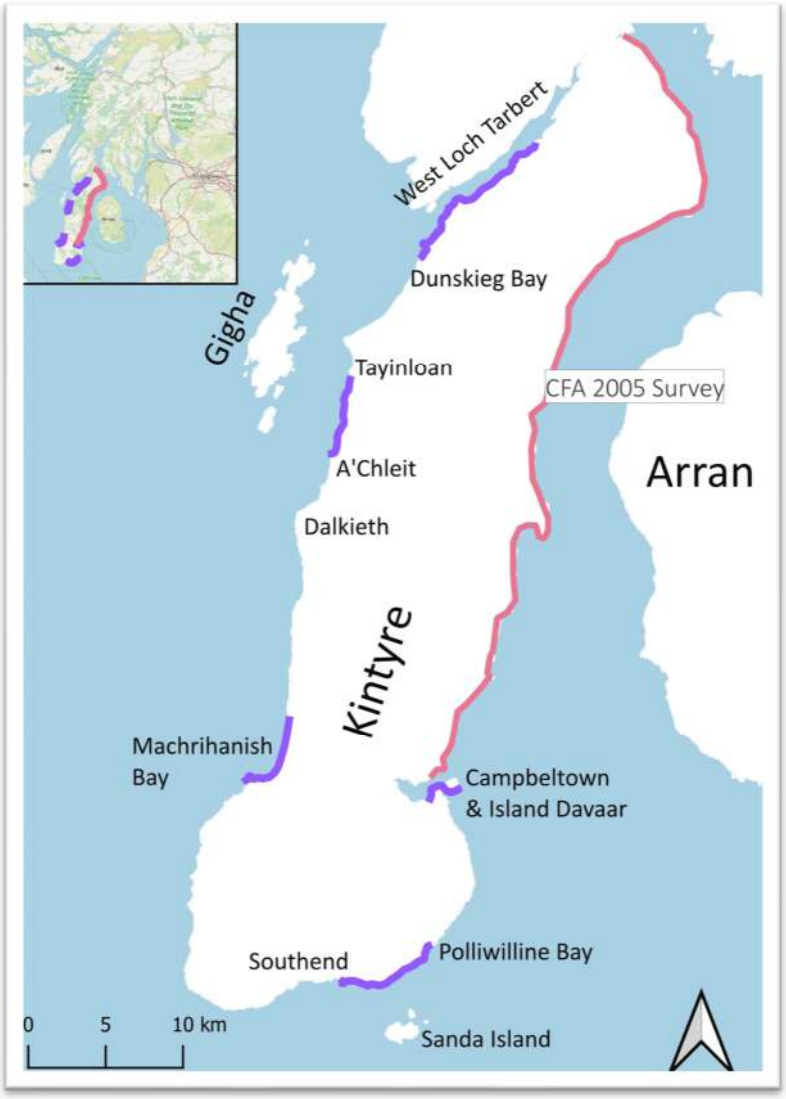

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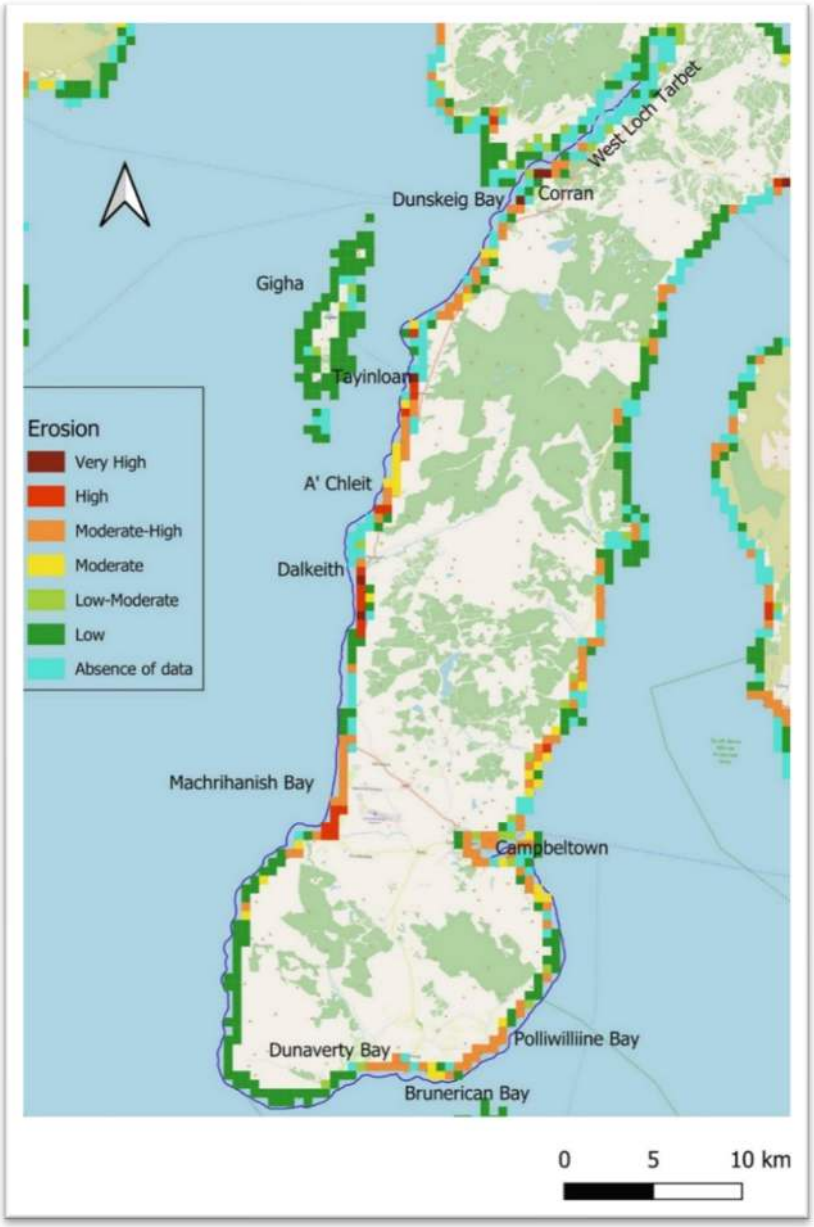


Figure 2. Modelled vulnerability of the Kintyre coastline. Red, orange and yellow cells denote coast which is experiencing erosion and therefore targeted during the 2024 CCZAS survey. Green cells denote coast that is not experiencing erosion, and blue cells denote areas where there is a conflict between the models, or which are only included by one model. EDINA Digimap Service, https://digimap.edina.ac.uk. Contains OS data © Crown copyright and database right 2024.

3.2. Preparation of coastal heritage baseline

Historic Environment Scotland and the West of Scotland Archaeology Service provided information and point data of all existing known heritage sites for the Kintyre survey area, extending 500m seaward, and 100m landward, of the mean high-water springs line. This data was imported into ArcGIS 10.7. The selected sites were then refined to screen out sites not relevant to the surveys. Table 1 presents information on main categories of sites removed from the coastal heritage baseline.

Site Category	Reasoning
Shipwrecks and other poorly located sites	Site records with only approximate coordinates (e.g. bottom left corner of a km grid square) were removed from the database due to the inability to accurately locate during fieldwork. Shipwreck records are often poorly located with multiple wrecks plotted in the same grid square corner. When wrecks were noted on our surveys, these were checked against the shipwreck database and linked to the correct record where identifiable.
Urban records	Records which are not at threat from coastal processes in urban coastal areas. This includes listed buildings, market squares, plaques, and memorials. For Kintyre, only one was removed relating to a listed building on Papa Kintyre.
Findspots and relocated heritage	Site records where finds were discovered and are no longer there or sites recording the original locations of objects which are now held in museums.
Miscellaneous	Wind Farm, General location records e.g. General Views

Table 1. Categories of sites removed from database.

The resulting sites were uploaded to SCAPE's interactive Sites at Risk web map and published to the linked SCAPE Coastal Archaeology Recording App (Figure 3). This app was developed for the project. It allows users to access the location and summary information about known sites, update existing site information and create new site records, including photographs and point and polygon location information. Satellite imagery and historic map layers provide additional information for users in the field. All features of the app are fully functional offline.

Site markers are initially coloured green to indicate that they have not yet been visited and updated during the CCZA survey. Once visited and moderated, a colour code is assigned to each marker to reflect the priority status of the site based on archaeological significance and physical vulnerability (see section 3.4).

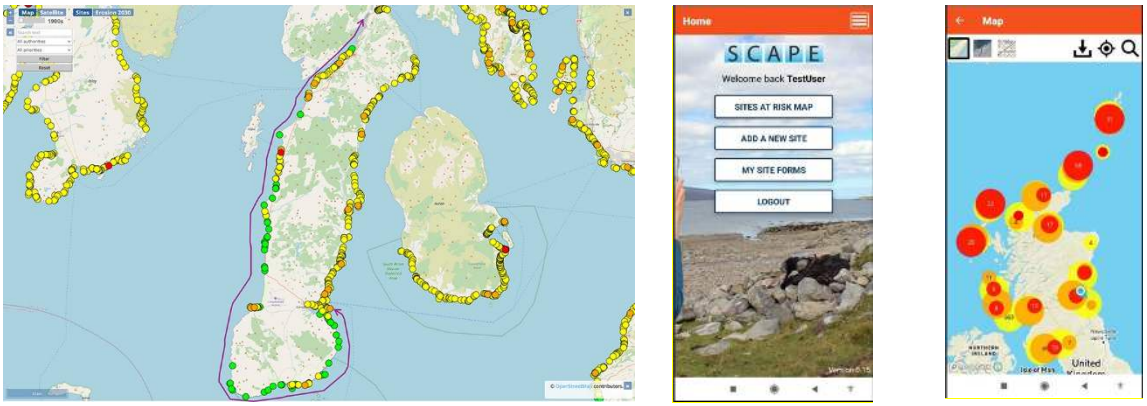


Figure 3. Screenshot of Sites at Risk web map and Coastal Archaeology Recording app. We use these to access and update heritage site data. The coastal heritage baseline was compiled for the area withing the purple arrows. The remaining east coast of Kintyre was surveyed in 2005.

3.3. Field survey

We targeted coastal areas identified as being susceptible to erosion in the walkover survey and also included West Loch Tarbert between Portachoillan and Kilchamaig farm which has only small pockets of modelled susceptibility but was identified as having high archaeological potential. The survey was timetabled to occur during a period of low tides and each walk was undertaken three hours either side of that day's low tide to gain the most visible exposure of the intertidal zone. SCAPE officers and volunteers generally walked along the coast edge with good views over the intertidal zone and hinterland, deviating to visit known sites and to check features and anomalies.

3.4. Moderation of records

After each walkover, the data collected using the app was submitted to the website and moderated by SCAPE officers. Moderation ensures that data is consistent and meets the standard required by historic environment records. During moderation, the significance, condition, and vulnerability of each site was also assessed, and a priority based upon site significance and threat from erosion assigned. SCAPE applies a colour code to denote priority for action. Yellow indicates no action and is applied to sites of either low archaeological significance, and/or sites generally not threatened by erosion. Orange indicates monitor and is applied to sites of medium to high significance, or potential significance, under potential threat from coastal erosion. Red denotes action required and is applied to sites of high archaeological significance or potential significance which are observed as being impacted by coastal erosion (Hambly 2017, p. 11). These categories are not fixed and updated information, either not available during the survey, or as a result of monitoring or further investigation may result in the priority status of a site changing. Moderated sites are then published and information publicly available on the SCAPE Sites at Risk web map. Sites not visited in the surveys retain their green marker and are visible only to registered users.

4. Results

4.1. RESULTS: Coastal Change

4.1.1. Summary of coastal change

The Kintyre peninsula is relatively sheltered from the open ocean by Islay to the west and the island of Ireland to the south. The peninsula is generally characterised by a rocky indented coast with longer beach systems found along the western and eastern half of the southern coast. Around 20% of the coastline is classified as soft and susceptible to erosion. Dynamic Coast assess that around half of the soft coast is stable but that there is a general trajectory of coastline change from accretion [slightly decreasing] through a transitional condition of no change [slightly increasing] to erosion [slightly increasing] (Rennie et al., 2017; Fitton et al., 2017). Our observations largely accord with the vulnerability and coastal change modelled outputs but diverge in some areas with near future coastline change predictions, for example we noted less than predicted erosion at Dunskeig Bay and at the south end of Machrihanish Bay. This may be due to uncertainty over the position of the historic mean high-water springs (MHWS) which will affect the models. The overall picture gained in the areas surveyed was of dynamically stable longer beach sections with evidence of episodic erosion affecting the back shore and dunes caused by extreme weather events. We observed nuisance erosion and ad hoc coastal stabilisation at A' Chleit, Tayinloan and Polliwilline Bay.

Sand and shingle beaches

Machrihanish

Along the longest stretch of sandy beach backed by dune systems at Machrihanish Bay (Figure 4) we found that there was landward migration of the mean high-water springs in the order of 5m to 20m since 1898 along about half of the beach. We also observed stretches where the position of the MHWS had not changed or migrated slightly seaward. The movement in the relative position of the MHWS didn't necessarily coincide with movement in the position of the coast edge or unstable sections. At least half of the dune faces appeared stable and well-vegetated, interspersed with areas of slumping especially of the higher dunes.

Figure 4. The figure stands on the 1898 MHWS around halfway along Machrihanish Bay at a stable section of the dunes. Just beyond is an actively eroding high dune face.

Dynamic Coast highlighted 24m of landward migration of the MHWS position between circa 1980 and 2014 at the southern two kilometres of Machrihanish bay (Figure 5). We did not observe this level of coastline change here but note that the outflow of the

Machrihanish Water has progressively moved north since 1898, and this may account for the high rate of past migration of the MHWS here which has affected the modelling of future erosion.

Figure 5. Figure standing on the 1898 MHWS at the south end of Machrihanish Bay with the current outflow of Machrihanish Water in the background. In the second photograph the person is standing on the position of the river outflow as mapped in 1898 with the villa.

Southend

At the southern tip of the Kintyre peninsula, we surveyed two of the three sandy beaches backed by low dunes, Dunaverty Bay (Figure 6) and Brunerican Bay. These appeared to be stable with some sand blow against the front of the dunes, which is probably seasonal. A site of a millstone quarry at the east end of Brunerican Bay is a useful marker of the movement of sand across the beach profile. A rough-out millstone at the top of the beach is usually deeply buried but exposed periodically in winter storms.

Figure 6. The sweep of Dunaverty Bay, looking west.

Travelling eastwards, the sandy beach between the Rubha MacShannaich and Dun Dubh headlands becomes narrower and is backed not with dunes but by a narrow section of raised beach and fossil cliffs (Figure 7). These appeared generally stable, with no

discernible consistent change in the position of the coast edge, although ad hoc rock armour has been tipped over one stretch of soft coast below Coledrain Farm. This would indicate episodic erosion here, even though the coast edge was vegetated and stable at the time of the survey (Figure 8).

Figure 7. Beach backed by low raised beach and fossil cliffs looking towards Rubha MacShannaich.

Figure 8. Ad hoc rock armour at the coast edge below Coledrain Farm. There is an erosional step in beach sediment in the foreground.

Further east at Macharioch Bay and Polliwilline Bay, the sand becomes thinner punctuated by rocky outcrops and areas of shingle (Figure 9 & Figure 10). We observed a landward migration of the MHWS in both bays in the order of 10m-18m with corresponding erosion of the low-lying soft coast backing the beach. There are ongoing attempts to stabilise the coast edge in front of the small caravan site at Polliwilline Bay.

Figure 9. Figure standing on the position of the MHWS in circa 1900 at Polliwilline Bay.

Figure 10. Ad hoc coastal stabilisation at Polliwilline Bay.

West Coast: Dunskeig Bay to Dalkeith

The small sandy bay at Dunskeig (Figure 11) is located at the west end of West Loch Tarbert as it opens into the sea. Dynamic Coast models significant future erosion here under a High Emission Scenario, although in 2000 no erosion was noted during research for the Coastal Cells in Scotland Series (Ramsay & Brampton 2000). We observed a migration of up to 10m landwards of the MHWS since circa 1900 in the north end of the bay and an accretion of around 5m towards the south end of the bay. A mid-19th century gun platform located in the northern end of the bay is the only known heritage asset that is at risk.

Figure 11. The southern end of Dunskeig Bay where slight accretion is occurring.

Between Dunskeig Bay and Tayinloan most of this long stretch of coast (Figure 12) is composed of shingle beach which Ramsay & Brampton (2000) recorded as well vegetated and stable but containing evidence of frontal erosion of the sand and shingle ridge backing the beach indicating that this coast can be extremely dynamic under north westerly storm conditions. We observed a similar picture during the field survey, but there are few known heritage assets behind the ridge that would be affected.

Figure 12. The long stretch of shingle beach backed by a sand and shingle ridge, photo taken in front of the former fish farm, looking north.

The coast between Tayinloan and A' Chleit church is protected by Gigha and characterised by thin sandy beaches resting upon, and dissected by, rock reefs and outcrops. At the time of the survey this coast was generally stable with beach vegetation, although we recorded modest changes in the position of the MHWS and both accretion and erosion of the coast edge in the order of 5m to 10m since circa 1900. The most notable recent erosion in this section is occurring on the south side of the modern ferry terminal at Tayinloan (Figure 13). An array of wooden posts and chestnut paling along with old concrete pipe sections have been installed to stabilise the sand in front of a campervan parking area. Paradoxically, this is an area of recent sediment accretion, presumably since the installation of the ferry terminal in the 1960s, and these stabilisation efforts are to keep it.

On the north side of the A' Chleit point a recent storm has created an erosional bite in front of a property, now filled with rubble and hard core (Figure 14).

South of Dalkeith, erosion is affecting the soft low-lying coast edge in places, parts of which are protected by rock armour (Figure 15). The position of the MHWS and the coast edge along this narrow beach has migrated landward by 15-30m between Dalkeith and Bellochantuy since circa 1900 and this is the longest stretch of net erosion encountered during the survey.

Figure 13. Fencing and old concrete pipes are struggling to consolidate sand built up here since the 1960s adjacent to the Tayinloan ferry terminal.

Figure 14. An erosion bite on the north side of A' Chleit church.

Figure 15. Rock armour protecting the soft coast edge of the caravan park south of Dalkeith.

West Loch Tarbert

We walked over the south side of West Loch Tarbert because of the heritage interest, although its sheltered location means that this low-lying muddy coastline is very stable. Our observations accord with this, although there is local information of a specific erosional event of the old West Loch Pier Road that occurred during severe weather over the winter of 2023-4, and anecdotal evidence suggesting wake caused by the Islay ferry is resulting in localised erosion and accretion downstream in Kilchamaig Bay.

In this quiet low energy environment, the route of intertidal tracks remain visible over many tidal cycles and in low lying sections the shore merges with the land (Figure 16 & Figure 17).

Figure 16. Tracks of farm traffic preserved in the foreshore.

Figure 17. Beach sediments merge with woodland towards the west end of West Loch Tarbert.

4.2. Results: Built heritage and archaeology

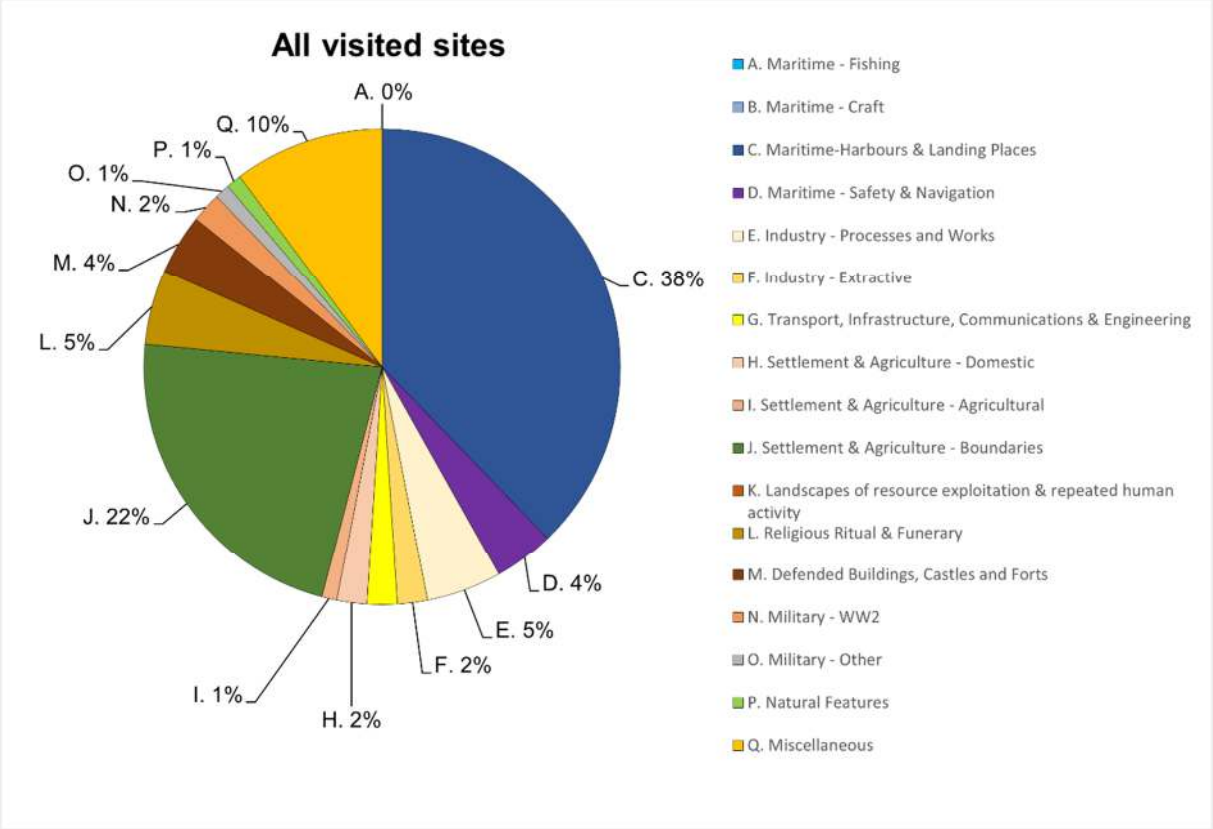
Sites were categorised into broad site types to aid discussion (Table 2) and a breakdown of the percentage of each site type recorded during the survey is provided (Figure 18). An overview of the main findings is given below followed by a short section highlighting notable sites and examples.

Ninety-eight archaeological and built heritage sites were visited and documented by SCAPE officers and volunteers (Figure 19). Seventy-one of these were not previously recorded in heritage records. The majority of sites encountered during the survey related to maritime heritage; harbours, cleared slipways and jetties, accounting for 38% of the total number of sites with a further 4% relating to maritime safety and navigation. The second most numerous type of site encountered were field boundaries and other boundaries extending into the intertidal zone, making up 22% of the total number of sites. There were also several other unique sites in the area including a 19th-century cave painting on Island Davaar, as well as a historically important radio mast site, to the west of Machrihanish at Uisaed.

The 2005 survey carried out by CFA Archaeology of the east coast of Kintyre recorded 191 archaeological sites revealing a similar range of archaeological site types but these were classified according to period rather than site type and so it is not possible to include them in our analysis (Cressey and Badger, 2005, 167).

Site Type	Definition
Maritime Fishing	Fixed sites or objects with a direct link to fishing industry e.g. fish traps, fishing stations, bothies, boat houses, icehouses, winches.
Maritime Craft	Craft, ballast mounds, components of crafts such as timbers, boilers, capstans.
Maritime Harbours & Landing Places	Formal harbour structures associated with and serving settlements, e.g., built harbours, piers, jetties, breakwaters, docks. Informal and small-scale, landing areas or structures, e.g. cleared slipways, piers, jetties, breakwaters.
Maritime Safety and Navigation	Infrastructure related to navigation e.g. lighthouses, beacons and maritime safety e.g. rocket apparatus sites
Industry Processes and Works	Industry not directly related to fishing, e.g. rope works, brick works, tide mills, lime kilns, salt pans.
Industry Extractive	Extractive industries, e.g. coal mining, quarrying.
Transport, Infrastructure, Communications & Engineering	Railways, tracks, bridges, embankments, drainage, Radio Stations, Masts
Settlement & Agriculture Domestic	Buildings related to settlements
Settlement & Agriculture Agricultural	Buildings related to agriculture
Settlement & Agriculture Boundaries	Boundary stones, fences and walls demarking property or land boundaries.
Landscapes of resource exploitation & repeated human activity	Middens, shell middens, artefact scatters, lithic scatters, burnt stone, buried anthropogenic soils/ ground surfaces
Religious, Ritual & Funerary	Churches, burial sites, holy wells, crosses.
Defended Buildings, Castles and Forts	Remains of brochs, duns, castles and promontory forts.
Military WW2	Military sites constructed as part of Second World War coastal defences e.g. pillboxes, observation posts, gun emplacements, anti-tank cubes, anti-glider posts or roadblocks.
Military Other	Military sites which are not solely Second World War, e.g. Napoleonic or WW1 targets and rifle ranges or military bases and airfields.
Natural Features	Geologic or geomorphologic features e.g. sea stacks, mounds, intertidal peat, unmodified caves, unmodified springs.
Miscellaneous	Sites out with the outlined site types.

Table 2. Site type categories and definitions



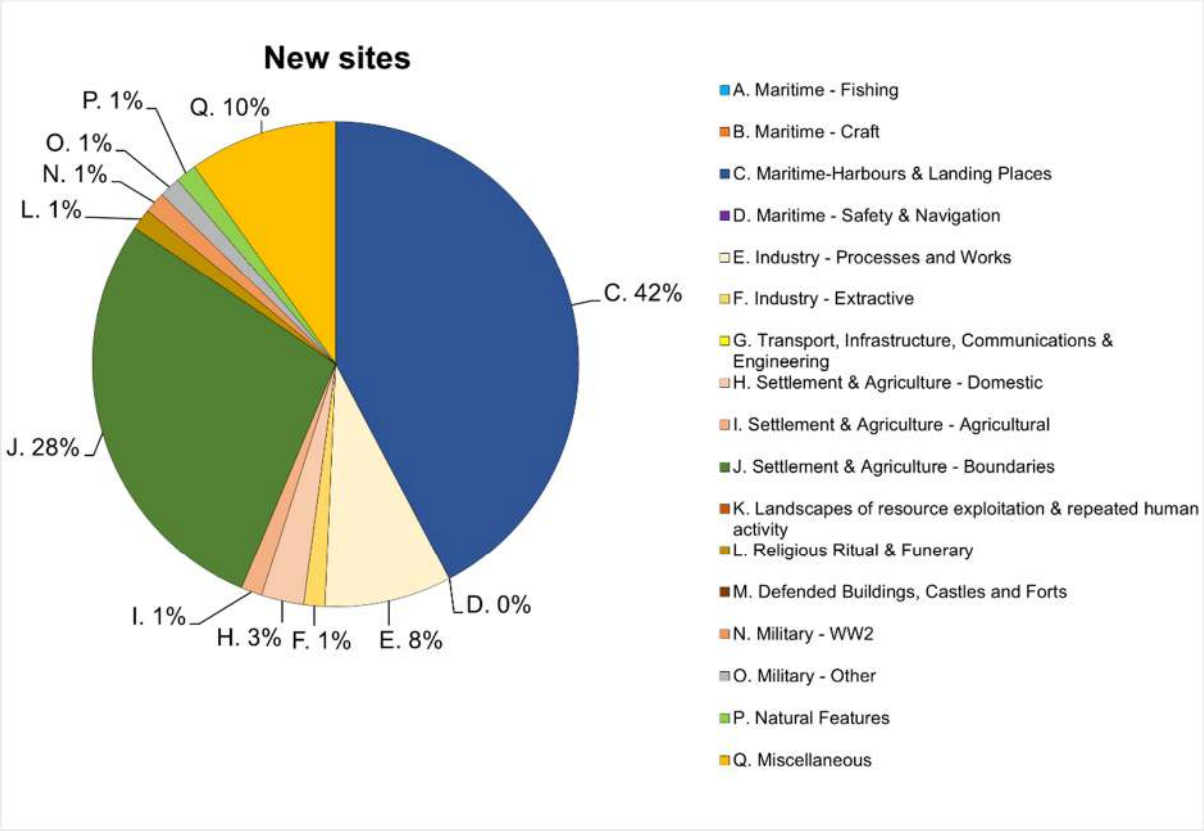


Figure 18. All Kintyre sites updated during the survey, arranged by category (n=98); New sites recorded during the Kintyre survey, arranged by category (n=71).

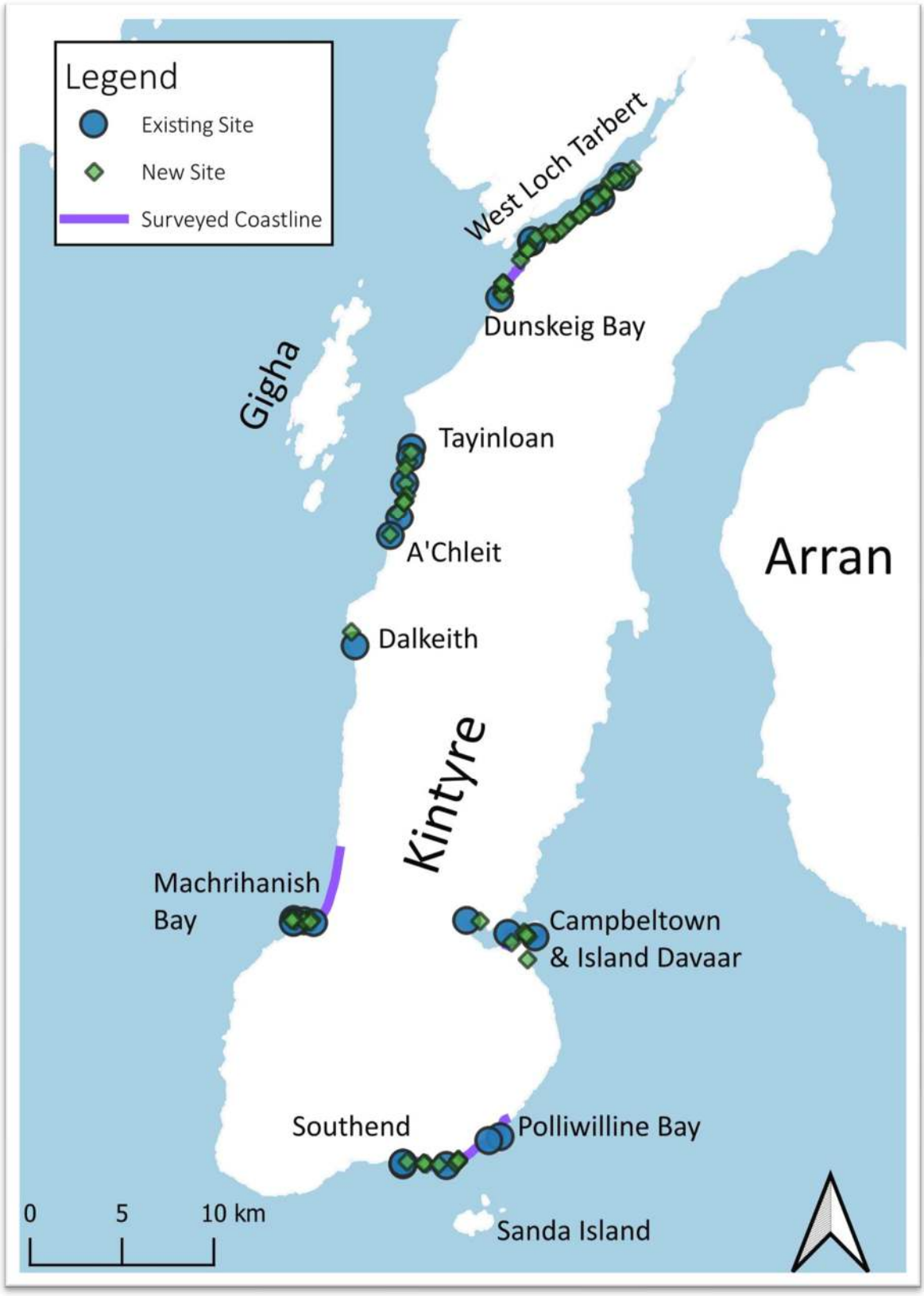


Figure 19. Sites visited during the 2024 CZAS of Kintyre

4.2.1. Maritime

The majority of all sites recorded in the areas surveyed were related to maritime activity. The harbours, jetties and slipways of West Loch Tarbert and the coastline walked between Tayinloan and A' Chleit dominate the coastal archaeological record of these areas demonstrating the maritime nature of this coast and its importance in connecting the mainland of Argyll with the islands and the industrial heartlands of the central belt, where coal and other goods would be landed to supply the hamlets, townships and estates of the area. Other notable groups of landing places are associated with the coal depot at Dunskeig, the original site of Marypans in present-day Machrihanish and at Ronachan Point where coastal infrastructure is related to both the quarrying and Ronachan House. Two lifeboat stations were also recorded.

Harbours and landing places

The use of the coast of Kintyre for maritime trade and transport is reflected in the number of harbours, cleared slipways and jetties that were discovered during the survey (Figure 20). Coal was a main import into the area, primarily for domestic use, and also for the burning of limestone for agricultural use, as noted in the Old and New Statistical Accounts of the Parish (Gordon 1999; Sinclair 1999). This is illustrated in the many Coal Depots and Coal Yards marked on the first and second edition Ordnance Survey maps of 1873 and 1899 and recorded, at Kilchamaig (SCAPE ID: 16980), Ronachan (SCAPE ID: 16992) and Killean (SCAPE ID: 16917). The export of agricultural produce, and in particular of potatoes, was also an important element of maritime trade in Kintyre. According to Martin (1987, 43) up to 3,175 tonnes of potatoes were exported annually in the 1840's, with Ireland being the primary market at this time. The frequency of jetties and cleared slipways discovered along the coast reflects this important economic activity.

Twelve landing places were recorded between the Portachoillan and Kilchamaig ferries. Of these, seven are jetties (SCAPE ID: 16924, 16926, 16927, 16933, 16935, 16968, 16987) each of which was defined by linear arrangements of stone extending into the intertidal zone. The remaining five sites are cleared slipways (SCAPE ID: 16930, 16931, 16985, 16983, 16830). A notable well-preserved example lies on the southern edge of Gartnagrenach Bay (SCAPE ID: 16830) which is defined by two parallel linear arrangements of stone and rocks up to 1m in width, positioned to the north and south, spanning an area 5m in width and extending 40m from the shoreline into the intertidal zone. A similar site was recorded on the northern edge of a small bay below Leamnamuic Farm. This site (SCAPE ID: 16983) is defined by a linear arrangement of boulders and stones 15m in length on the south side with a small circular concentration of stones on the north side of a cleared area, 4m in width. This site also utilises the natural bedrock outcrop that surrounds the bay to create a sheltered area in which to pull up boats.

The concentration of landing places along the southern shore of West Loch Tarbert is associated with the many historic townships and farmsteads in the area. These landing places, some of which may be relatively long-lived, would have been critical for the movement of people and goods especially as the roads of the area were in a poor state of repair as is highlighted by Weyndling (2003, 144).

Cleared Slipway SCAPE ID: 16830, Gartnagrenach Bay

Jetty SCAPE ID: 16926, Loup

Cleared Slipway SCAPE ID: 16968, Corran

Jetty SCAPE ID: 16927, Loup

Cleared Slipway SCAPE ID: 16983, Leamnamuic

Jetty SCAPE ID: 16933, Kilchamaig

Figure 20. Selection of Cleared Slipway's and Jetties at West Loch Tarbert

Four landing places (SCAPE ID: 16826, 16915 16975, 16976) as well as a possible historic harbour at Tayinloan (SCAPE ID: 16821) which is discussed below, were recorded between Tayinloan and A'Chleit. The example at A'Chleit (SCAPE ID: 16975, front cover photo) is directly below the historic church which was built in 1787. This site was defined by a cleared area 8m wide and 28m long, with rocks piled on each side. This church replaced an older church at Killean and served the parish of Killean and Kilchenzie which stretched

from Westport in the south to Rhunahaorine Point in the north and it is highly likely the landing place was used by parishioners attending church.

A more substantial and modern concrete harbour is located at Killean (SCAPE ID: 16826, Figure 21). The harbour is defined by two jetties, 20m apart. The 4m wide north jetty is made of poured concrete on top of the bedrock, while the narrower south wall combines large boulders and bedrock with a concrete overlay, each extending for approximately 30m from the shore. On the beach side of the south jetty, there is a curved concrete wall, and the north jetty features at least two mooring points. Additionally, there's an eroding patch of concrete in the middle of the slipway. The harbour is likely linked to the nearby Killean estate and was constructed after 1915, as it does not appear on the third edition Ordnance Survey map surveyed at that time, or on any earlier historic maps. A boat house (SCAPE ID:16917) is recorded here on the second edition Ordnance Survey map of 1899, all that survives of which is the concrete footings measuring 5.5m by 5m. This indicates that this area served as a landing place for the estate before the construction of the harbour.

Figure 21. Killean Estate harbour (SCAPE ID: 16826)

Two further harbours documented in the survey deserve a mention: the harbour and possible coal depot Dunskeig and the harbour near the historical area of Marypans in Machrihanish.

Figure 22. An aerial shot of the landing places and boat sheds at Dunskeig, with the iron plinths seen in the top left of the picture. North is to the right-hand side of the picture.

To the north of Dunskeig Bay is a landing area, referred to locally as the Coal Depot (SCAPE ID: 16993, Figure 22). Two boat houses are depicted here on the 2nd edition OS map of 1899 (Figure 23). All that remains of the western boat house (Figure 24), which is 13m by 5m in extent, are nine iron plinths (with one fallen on the northwestern side) each of which is 2m in height with ornately rounded tops, some of which have wood attached, secured in place with large iron pins. Slots on the sides of the plinths indicate that there would have been wooden slats making up the walls. Although mapped as a boat house, it is hard to see how the architectural form and location of the remains of the present building, with no easy access to the shore, would be suitable for this use. A coal store as suggested by local information is more likely. It is possible there was an earlier boat house in this location. The eastern boat house survives as a turf-covered rectangular foundation, measuring 6m by 2.5m in extent. A modern brick-built building, with an asbestos roof, is located 3m to the east of this boat house, measuring 15m by 10m, which is still in use as a storage shed. A harbour and cleared slipway are located in the bay around 50m to the north of the buildings. The harbour is defined by a coursed stone jetty on its east side which is tumbled in places and runs for around 25m from the shore into the intertidal zone. In the bay just to the east is a further cleared slipway with a much-tumbled alignment of stone on the east side. A winch, the concrete and stone base of a probable second winch, and two mooring rings set into a ridge of bedrock are located in the area between the harbour and bay and the buildings. This landing place lies close to a track that leads from the Portachoillan Ferry to Clachan and may be associated with this township.

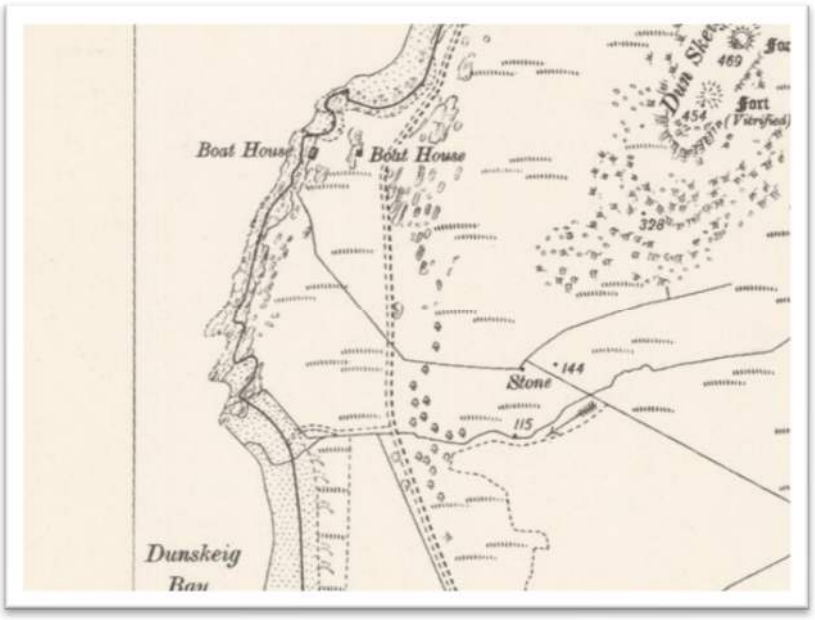


Figure 23. Boat Houses at Dunskeig (Argyll and Bute Sheet CCXII.SW, Date revised: 1898, Date Published: 1900) (Reproduced with the permission of the National Library of Scotland).

Figure 24. Western Boat House at Dunskeig (SCAPE ID: 16993) looking Northwest.

At Machrihanish a group of slipways and moorings were recorded in the harbour (SCAPE ID: 16959, Figure 25) near the original area of Marypans, named after the salt pans, that once stood near here. The harbour is still in use with two slips used for small fishing boats, with metal rails leading down to the sea. These slips appear to utilise older cleared slipways while a larger cleared area lies to the east, which would have accommodated more or larger boats. There are several mooring rings around the harbour, some of which are still in use while others have been degraded or rusted into position. According to MacDonald (1982, 181) Marypans was often mentioned in the historical records of the 18th century as a place for landing goods and cattle from Ireland. To the east of this site and clustered around the Little Scone rock are several modern iron moorings (SCAPE ID:

16960), which local volunteers said were in use until recently for lobster boats. An older concrete jetty (SCAPE ID: 16999) is located on the eastern side of the bay, on the Carack Caban rock, which is first marked on the second edition Ordnance Survey map of 1899.

Figure 25. The harbour at Machrihanish looking east (SCAPE ID: 16959)

Ferries

In West Loch Tarbert there were two ferries that connected Kintyre with Knapdale, both of which were depicted on the first edition Ordnance Survey map, surveyed in 1867 and published in 1873. The northernmost ferry connected Kilchamaig in Kintyre to Dunmore in Knapdale, while the southernmost ferry connected Portachoillan in Kintyre to Ardpartick in Knapdale. Both ferries appear to have been in existence for many centuries, as evidenced by the fact that both sides of the loch formed part of the same parish of Kilberry and Kilcalmonell until 1965, sharing a minister and priest with parishioners and clergy having to make the journey across the loch when the weather and tides allowed (Weyndling 2003, 138). According to Weyndling (ibid) the first mention of the Kilchamaig ferry was in 1689 when Jacobite supporters crossed to Kintyre to face the troops of William of Orange at the "Battle of Loup". There is a further reference to the Portachoillan ferry in 1747, when the Factor of Loup was requested to employ tenants of the Loup Estate to repair the quays on both sides of the ferry (Weyndling 2003, 139). The ferry at Kilchamaig was the first to cease operation, around 1926, while the Portachoillan ferry operated until the 1950s (Ibid, 146).

The Kilchamaig ferry site (SCAPE ID: 16980, Figure 26) survives as a ruinous stone-built jetty with an associated cleared slipway within a small natural harbour. The jetty survives as a collection of rounded stones and boulders spread to 2.5m in width and 30m in length.

Iron mooring fittings were pointed out by the local farmer and landowner Mr Mundell and can be seen attached to the rock on either side of the bay. The remains of a track can be seen leading away from the shore in the direction of a building, the base of which is all that remains, which was depicted on the 2nd edition OS map of 1899, as a coal depot but latterly used as a boat shed by the farmer.

The ephemeral nature of this site is in contrast to the ferry jetty at Portachoillan (SCAPE ID: 16825, Figure 27) which, while surviving in use for a longer period of time, was also the main harbour for the nearby settlement of Clachan, and therefore possibly required more permanent infrastructure. The jetty is labelled as a "quay" on the first edition OS map of 1873 and though there may have been an earlier structure at this site, this jetty probably dates to the 19th century. The jetty, which is approximately 90m in length, survives as a combination of concrete and rocks with the central walkway capped with concrete, while the south side is enhanced and protected by large rocks.

Figure 26. Kilchamaig Ferry Harbour (SCAPE ID: 16980)

Figure 27. Portachoillan Ferry jetty (SCAPE ID: 16825)

To this day the west coast of Kintyre remains a vital navigation route to the Isles. At the northern end of the study area, the Kennacraig ferry terminal (CANMORE ID: 158636), constructed in the late 1960s, continues to expand. Prior to the modern terminal, boats to the Isles departed from West Loch Tarbert Quay (CANMORE ID: 244453). The modern ferry terminal at Tayinloan was also built in the 1960's replacing an older pier and ferry keeper's house located 75 metres to the north. These are depicted on the first edition OS map of 1873 and annotated 'Old Pier' and Ferry on the 2nd edition, revised in 1898. The pier has been dismantled but the concrete and stone quayside survives (SCAPE ID: 16820) and the ferry keeper's house has been converted into a dwelling.

This pier and ferry house would have been a much-needed lifeline for the people of Gigha as there does not appear to have been a sufficient landing place for a ferry before it was built. According to the Rev. Mr William Fraser writing the Statistical Account of 1793 for the Parish of Gigha and Cara, transport to and from the mainland had proven difficult for some time:

"Between Gigha and the opposite coast of Kintyre, there is a regular ferry and two boats, one in the island, and one on the mainland. The disadvantage attending this ferry, is, the want of a quay on the Kintyre side, which is so much exposed to the storm, that in winter it is not easy to save a boat, otherwise than by drawing her up. To this may be added another inconvenience, the want of a proper house to accommodate people who wait at the ferry. Both these inconveniencies might be removed at a small expense, and, if removed, that expense would soon be refunded. It is with regret it must be observed that such inattention to public convenience has been, and still is, too frequent in the Highlands" (OSA 1793; Sinclair 1999, 43)

Fifty years later, by the time of the 2nd Statistical Account in 1843 (published in 1845) the Rev. James Curdie writes that:

"A quay is greatly needed at both ends of the island, and also at Tayinloan on the Kintyre side" (NSA 1845; Gordon 1999, 406).

The 'Old Pier', therefore, must have been built between 1843 and the survey of the first edition Ordnance Survey map carried out in 1867.

None of these accounts make any mention of one of the most substantial intertidal features that we encountered, located 400 metres south of the current Tayinloan ferry terminal site (SCAPE ID: 16821, Figure 29). The structure measures 3-4m in width and extends for approximately 74m in a crescent from southeast to northwest. The foundations of the structure are defined by a kerb of boulders filled with smaller stones. A prominent upright boulder at the terminal end likely served as a mooring post. While not annotated on any historic maps there is a curving line of stones depicted on the first edition OS map of 1873, in the location of the site, suggesting that it was ruinous by this time.

A record of the Commissioners of Supply in 1772 (Figure 28), notes that:

"…the inhabitants [of Gigha] are … to pay this years road money to Largie towards building a Quay at the ferrying place near Tayinloan"

However, in the Old Statistical Account twenty years later the Rev. Fraser is complaining that there is no good landing place at Tayinloan. If this is the quay referred to in the Commissioners of Supply record, then it was either constructed and went out of use in the twenty years between these two records or was constructed and went out of use in the fifty years between the publication of the Old and New Statistical Accounts. It is also possible that the structure was already ruinous in 1772. It is hoped that further research may shed light on this interesting feature.

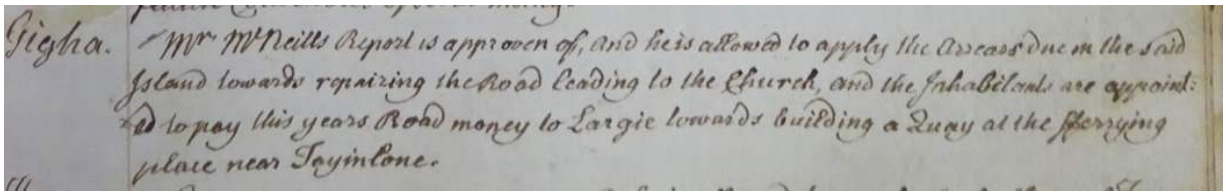

Gigha. Mr M'Neills Report is approven of, and he is allowed to apply the Assessment in the said Island towards repairing the Road leading to the Church, and the Inhabitants are appointed to pay this years Road money to Largie towards building a Quay at the ferrying place near Tayinlone.

Figure 28. Extract from the Commissioners of Supply Record from 1772 (Courtsay of LiveArgyll archives)

Figure 29. Possible quay at Tayinloan (SCAPE ID: 16821)

Maritime – Safety and Navigation

Campbeltown Loch is one of Argyll's busiest harbours and historically was an important transport hub for several industries including the Campbeltown distilleries, fishing, shipbuilding and more recently naval operations. The entrance to the loch is shielded from the south by Island Davaar, which is a tidal island that can be reached across a shingle sand bar, known as the Doirlinn. To aid safe navigation a beacon was constructed at the northern end of the sand bar, which was first depicted on the first edition Ordnance Survey map of 1869. The current beacon is of more recent date, but occupies the same position, and is constructed of iron and stone (SCAPE ID: 16822, Figure 30). Some of the fittings, such as the ladder and top railings are slightly rusting, but it is in a good state of preservation overall. A corresponding beacon lies just off Trench Point on the north side of the loch (CANMORE ID: 305468).

Figure 30. Beacon (SCAPE ID: 16822) on the Doirlinn looking towards the Clyde Estuary to the East.

Numerous shipwrecks lie off the Kintyre coast, many recorded in the National Monuments Record, and so the establishment of lifeboat stations were an important and welcome development in the 19th century, two of which were recorded during the survey.

West of Machrihanish at Uisaed, is the short-lived Machrihanish lifeboat station built in 1911 and closed in 1930. The original prefabricated slipway survives intact and has not been renovated, but it is showing signs of weathering and erosion and is no longer safe to walk on. The Henry Finlay lifeboat, oar and sail propulsion, built at Bow Creek, Blackwall, London was stationed here until the closure of the station (local information). This site was converted into a marine research lab by the University of Stirling in the 1990s, and while few original interior features remain, the exterior largely retains its original appearance (SCAPE ID: 17000, Figure 31 & Figure 32).

The Dunaverty lifeboat station (SCAPE ID: 16806 & 16814; Figure 33, Figure 34 & Figure 35) was established in 1869, with several original elements surviving, such as a two-story lifeboat house. This building housed the boat on the ground floor and provided accommodation for the coxswain and his family upstairs. In 1904-05, a second boathouse and concrete slipway were built to accommodate a larger lifeboat, with the original house being converted into a winch house. The second boathouse was demolished in the mid-20th century but has recently been replaced with a modern building. This modern building, the original stone-built boathouse and the ancillary buildings have recently been converted into private houses, but many of the original features survive and are well preserved. Several other elements of the lifeboat station survive around the site, including an original slipway, which according to Leach (2013) pre-dates the lifeboat station and was used to transport stone to offshore craft, while a winch is also preserved at the side of the original house, though this does not appear to be in situ.

Both sites were designed by RNLI architect W.T. Douglass as part of a nationwide lifeboat station improvement program in the early 20th century and are noteworthy historical sites as few such stations survive, with other notable examples in Ackergill, Caithness and Stronsay, Orkney (Leach 2013).

Figure 31. Uisaed Machrihanish lifeboat station looking east (SCAPE ID: 17000)

Figure 32. Uisaed Machrihanish lifeboat station slip looking west (SCAPE ID: 17000)

Figure 33. Dunaverty lifeboat station and boathouse looking west (SCAPE ID: 16814)

Figure 34. Dunaverty lifeboat station looking east, with slip in foreground (SCAPE ID: 16806)

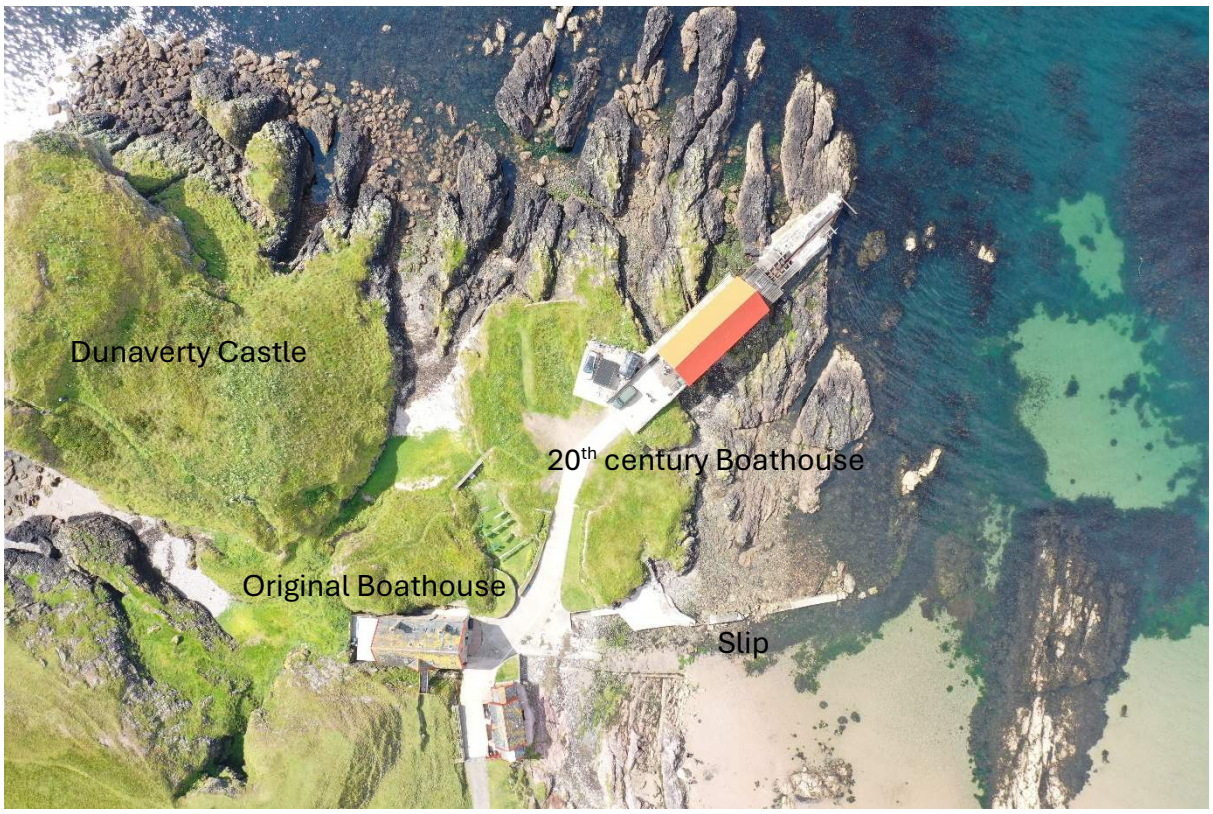


Figure 35. Aerial view of Dunaverty Lifeboat Station (SCAPE ID: 16806 & 16814) and Dunaverty Castle (SCAPE ID: 16762) to the top left.

4.2.2. Industry

The industrial sites recorded during the CZAS of Kintyre account for 7% of the total number of sites and includes the possible last vestiges of evidence for salt making at Machrihanish, coal depots, and quarries relating to different extractive industries including limestone quarrying at Ronachan and a millstone quarry at Brunerican Bay.

Salt was being made in present day Machrihanish by the late 17th century. The first known reference appears in a lease of Knockhantybeg farm to John McConnachy, dated Whitsunday 1673, when the Earl of Argyll reserved two acres "*for the salt pans then possessed by William Brown*" (Colville 2020, 6). The area gained its historical name Marypans from this industry. Marypans is depicted on Roy's map of 1747-52 (Figure 36), comprising at least eight roofed buildings and three enclosures. It is not clear if any of these structures relate to the salt pans themselves, but it is possible, given that they were in use at least until the late 1750s when were finally "*given up some time … after a final unsuccessful attempt by William and Sam Mitchell to work the poor, sulphurous and wet coal that supplied the pans" (*Whatley 1987, 23). There is a further reference that by "*1774 the pans were in ruins and the salt watchman was dismissed",* but it is not clear whether they were used in the intervening period (MacDonald 1982, 191). The salt itself was of relatively poor quality, used mostly for domestic use, such as for dairy products or curing meat. It was also not suitable for the growing demands of the fishing industry and in particular for the curing of herring (Ibid, 203) and therefore salt was increasingly being imported into the area. The only trace of a structure identified during the survey that might relate to the buildings depicted on Roy's map was the seaward wall of a square or rectangular drystone building, around 4m wide, located on the coast edge (SCAPE ID:

16958, Figure 37). This is one of two small buildings depicted here on the first and second edition Ordnance Survey maps, which are too small to be dwellings and more likely sheds or outbuildings. They are in the general location of the probable site of the 17th and 18th salt pans, and it is possible they could have their origins in structures associated with the works here. This structure is located close to the coast edge, but it is not in any danger of coastal erosion, but it is ephemeral and could be lost to development or casual disturbance. One piece of fuel slag or clinker typical of that found in association with salt pans was recovered from the foreshore (Figure 37).

Figure 36. William Roy's Map (1747-52) of Marypans showing the buildings and enclosures close to the shore (British Library (CC-BY (BL))

Figure 37. Possible building associated with saltpans (SCAPE ID: 16958) and piece of clinker found on shore.

A long-lived industrial landscape comprising the remains of historic limestone quarries, a lime kiln and associated coastal infrastructure was recorded around Ronachan Bay and Ronachan Point. The occurrence of limestone in the area was noted in both the Old and New statistical accounts of the parish of Kilcalmonell and Kilberry, in which Ronachan is located, where there was an:

"*abundance of limestone … but that there was a scarcity … of coal to burn the limestone*" (OSA 1794; Gordon 1999, 409) and that "*there are beds of limestone from north-east to south-west (but of inconsiderable thickness) to be found in several localities in the parish*" (NSA 1845; Sinclair 1999, 62).

The historical Geological Survey of Britain, One-Inch to the Mile map of the region shows that the area around Ronachan had several seams of limestone (Figure 38), and the area appears to have become the focus of extraction for a period in the 19th and early 20th centuries.

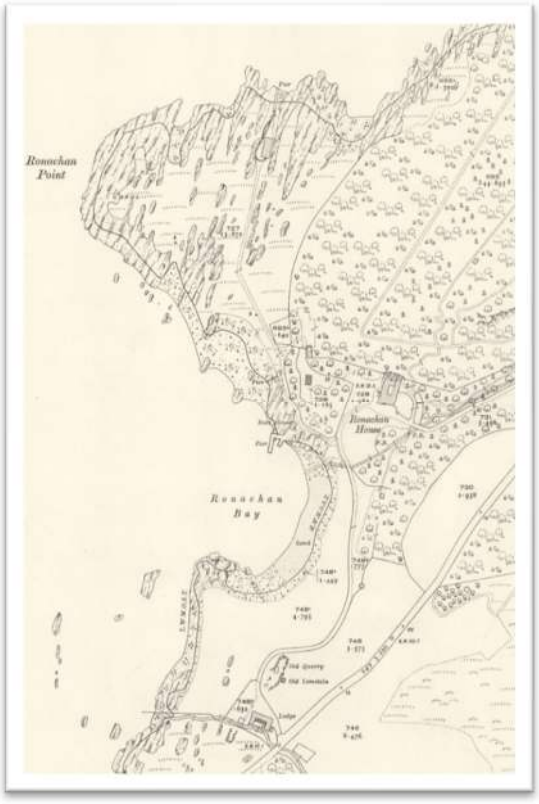
The early phase of limestone quarrying seems to have been focused near the present-day lodge house. Here we recorded a one-arched, single-draw, stone-built, rectangular lime kiln, around which there are remains of a quarry (SCAPE ID: 16992). The kiln is depicted on the first edition OS map of 1873 (Figure 39) with a coal yard on the present site of the lodge, as well as a track leading down to the beach, where a cleared slipway was recorded (SCAPE ID: 16936), probably used to bring coal ashore for use in the kiln. The kiln appears to have gone out of use by the time the second edition OS map was surveyed in 1898 when it is referred to on the 25-inch map as an Old Limekiln, while the coal yard is built over by the lodge and current house. On the third edition six-inch OS map of 1924 an Old Quarry is also illustrated next to the kiln (Figure 39).

By 1898, three large quarries were being worked at Ronachan Point (SCAPE ID: 16939, Figure 40). They are oriented north-south, following seams of limestone through the surrounding rock. Debris from the quarries lie scattered around the site including large blocks of stone with chisel marks. A track, tramway and jetty (SCAPE ID: 16940) associated with the quarries are depicted on the second and third edition OS Map of 1899 and 1915. The slipway is defined by a rock-cut area with a concrete surface and iron fittings for the tramway extending to the end of the slip. A weighbridge made by W&T Avery Ltd is still in situ on the track next to an area of concrete hardstanding which marks the site of a large building depicted on the 1915 OS map. To the south of this site, at the northern end of Ronachan Bay is another more substantial concrete jetty and slipway with an associated boat house (SCAPE ID: 16989, Figure 41). The track links the concrete slipways at Ronachan Point and Ronachan Bay and it is probable that both were used by the quarry according to the weather and tide conditions. Another cleared slipway and the ruins of a boat house on the eastern side of Ronachan Point (SCAPE ID: 16991) are still used as a small harbour and boat laying up area and is associated with Ronachan House.

Figure 38. Geological Survey of Britain, One-Inch to the Mile, Sheet 20, Killean. Solid and drift edition. Published: 1896 (National Library of Scotland) with limestone seems highlighted in purple.

Argyllshire and Buteshire CCXXIII.4 Ordnance Survey 25 inch 1st edition Scotland, surveyed 1867, published 1873.

Argyllshire CCXXIII.4 - Ordnance Survey 25 inch 2nd edition Scotland, revised 1898



Argyllshire CCXXIII.4 - Ordnance Survey 25 inch 3rd edition Scotland, revised 1915.

Figure 39. Development of Ronachan limestone quarrying landscape in the 19th and 20th centuries.

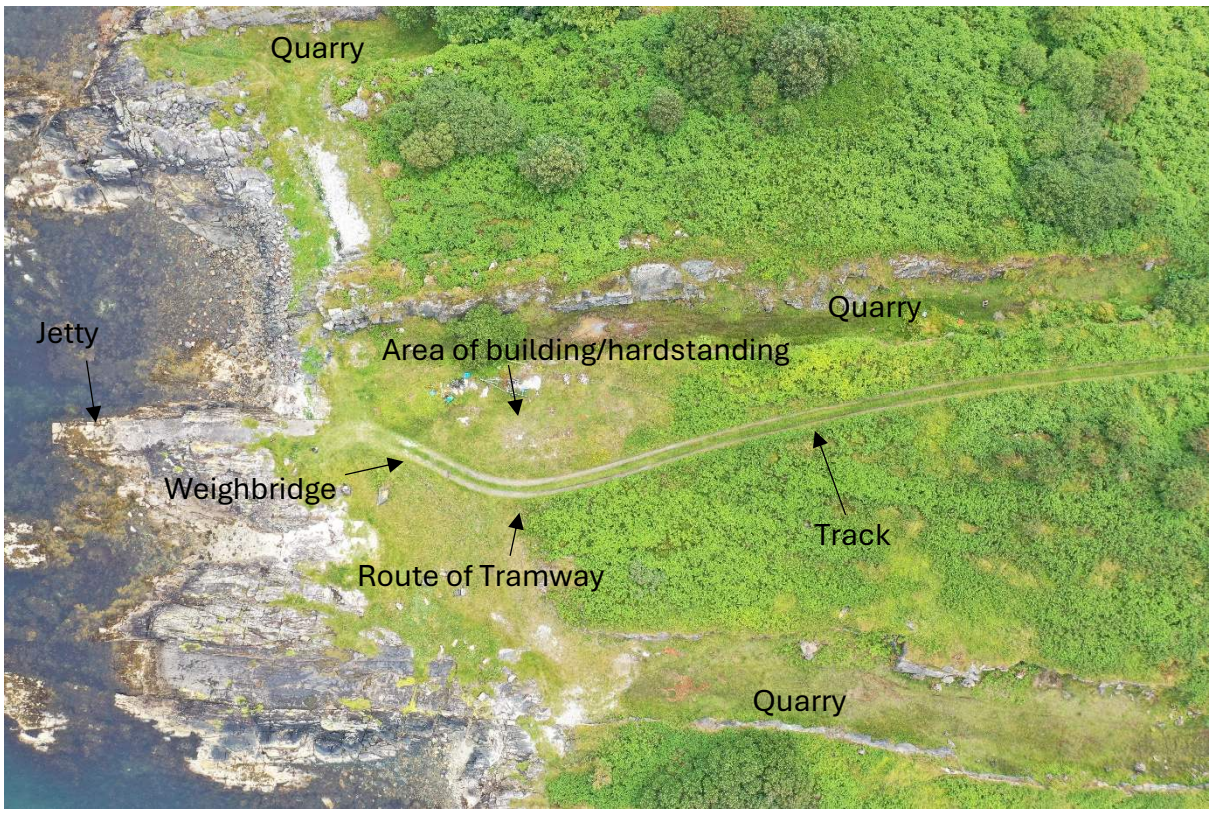


Figure 40. Aerial shot of the Limestone quarry at Ronachan point (SCAPE ID: 16939)

Figure 41. Concrete Jetty at Ronachan Bay (SCAPE ID: 16989) looking west.

A quarry was also recorded on Island Davaar. Measuring 45m in length and 20m in width, it has been carved into the western side of the island's hill (SCAPE ID: 16970). A substantial spoil mound is present on the western side of the quarry, with three potential scoops that have been dug out for later extraction. Martin notes that several quarries were located on Davaar (2016, 84-87) and that the stone was well known for its quality and attractive green and red colouration. Several buildings in Campbeltown were constructed from it including, the original “Relief” church in 1767, several tenements on the High Street and significantly the First World War memorial in Kinloch Public Park.

There is documentary evidence of a millstone quarry at the southern tip of Kintyre in the general area below Dun Duirn at the eastern end of Brunerican Bay operating in the 18th and 19th centuries. According to an article by Martin (2008, 27-28) based on an extract from “Southend Fifty Years Ago” published in the Argyllshire Herald in 1867 and reproduced in the Kintyre Magazine (no. 64, 2008) the stones were cut from the conglomerate outcrops on the beach and transported by horses to Machrimore meal mill 1.7 kilometres to the north. A broken rough-out of a millstone usually buried in sand is occasionally uncovered. We identified a further probable rough-out near the bottom of a graded trackway which runs from the beach up to the plateau above the shore (SCAPE ID: 16956, Figure 42). The current mill, which has been converted into a house, was built in 1839 under the terms of a new lease granted by the Duke of Argyll apparently to replace an earlier site.

Figure 42. Possible millstone roughout (SCAPE ID: 16956)

4.2.3. Transport, Infrastructure, Communications and Engineering

Fessenden’s Machrihanish Wireless Station, the remains of which survive at Uisaed near Machrihanish (SCAPE ID: 16832; Figure 43) was a remarkable feat of early 20th-century engineering and innovation. Established by the Canadian-American inventor Reginald

Fessenden in 1905, the station was strategically positioned to maximize its effectiveness for transatlantic wireless communication. The site featured a massive 400-foot (120-meter) tall mast, designed to support the antenna arrays necessary for long-distance radio transmission (Figure 48). The station's equipment included advanced high-frequency alternators and radio receivers which were invented by Fessenden. The station, along with a similar facility built at Brant Rock, Massachusetts, in the United States, took part in the first wireless communication transmissions across the Atlantic in January 1906. Unfortunately, the radio mast collapsed in a storm in December 1906 and was not rebuilt, but the site retains a number of significant features associated with its design and layout. These include concrete foundations relating to the base of the mast and antenna (Figure 44 & Figure 45), concrete anchor points for the mast mounting blocks for the boiler and steam engine that powered the station (Figure 46 & Figure 47), a water tank and the operator's shed that contained the equipment. The site is in a relatively good state of preservation, but remnants of the concrete antenna base are slowly deteriorating due to weathering, revealing its lower iron strata, though fragments of the ceramic resistors remain in place. Wooden components of the steam engine house are still in situ, although some of the concrete shows signs of decay. The site was recently recorded by Steve Birch (2021; 2022), of West Coast Archaeology Services, ahead of the expansion of the marine research facility, when he also carried out excavation and detailed recording of the remains of the engine house, alongside trial trench evaluation within the backfilled water tank. Several artefacts relating to the use of the site, including kitchen ware, bottles, and domestic items, were recovered as well as features relating to water management for the boiler and steam engine house.

Figure 43. Aerial view of Fessenden's Machrihanish Wireless Station (SCAPE ID: 16832)

Figure 44. The concrete base of the mast at Fessenden's Machrihanish Wireless Station (SCAPE ID: 16832)

Figure 45. The Machrihanish workforce beside the base of the mast in 1905 (courtesy Fessenden Archive, North Carolina State Archive)

Figure 46. Foundations of steam engine used to power radio station (SCAPE ID: 16832)

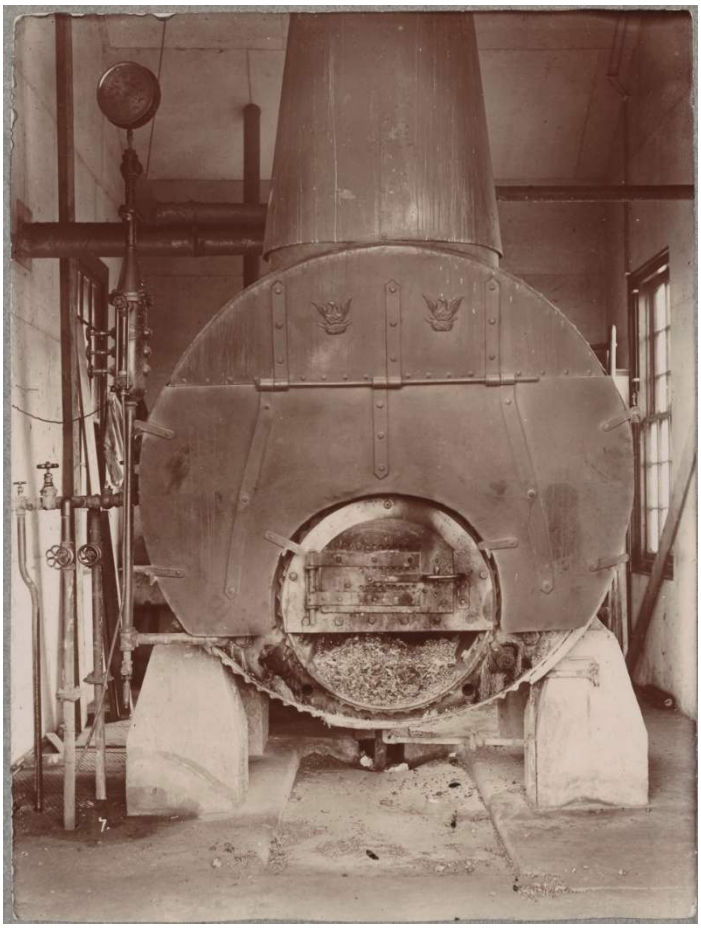


Figure 47. The Steam in engine in position in 1905 courtesy Fessenden Archive, North Carolina State Archive)

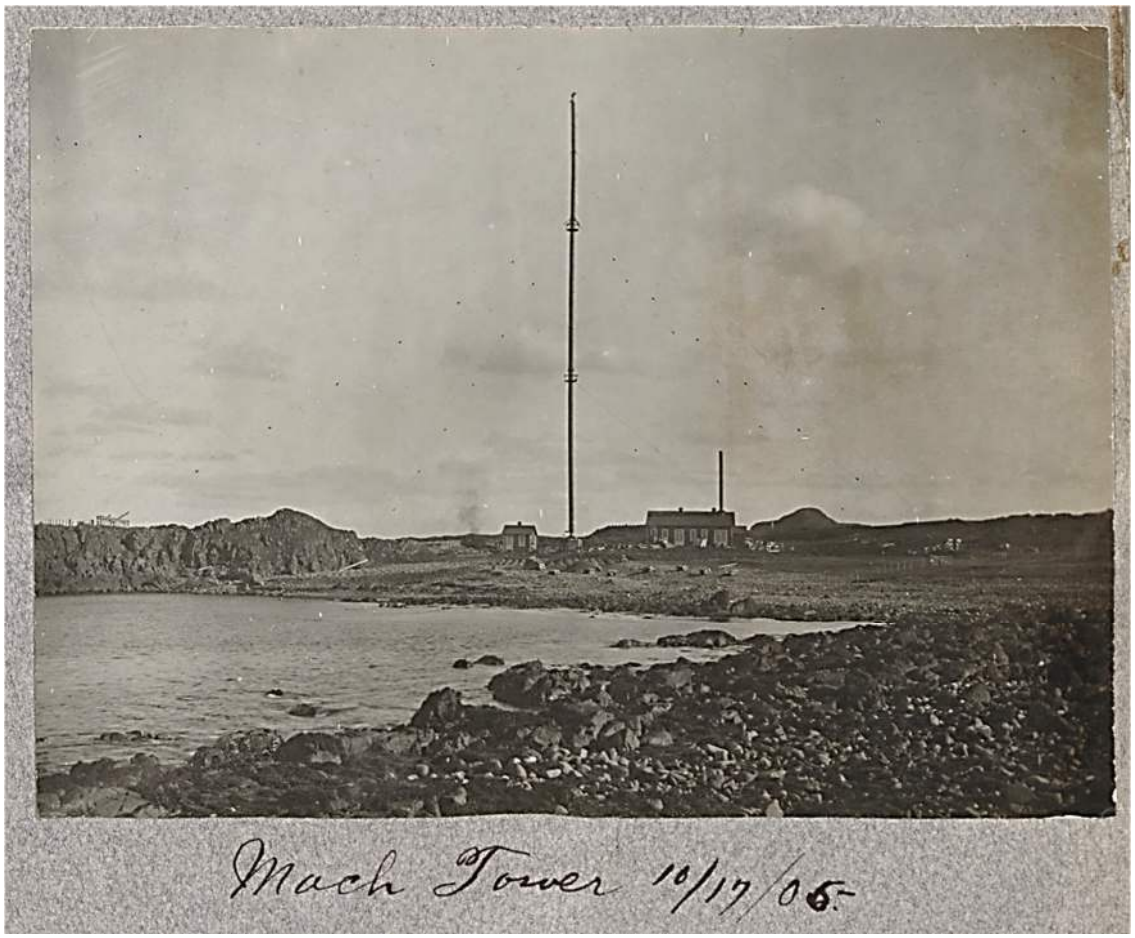


Figure 48. the Machrihanish tower and radio station in 1905 (courtesy Fessenden Archive, North Carolina State Archive)

A little piece of historic infrastructure in the form of a cast iron water drinking fountain on the seafront at Machrihanish (SCAPE ID: 16961) is a reminder of the historical importance of the village as a popular tourist destination in the late 19th and early 20th centuries. This was made possible by the Campbeltown Machrihanish railway line, which took passengers from the boats in Campbeltown to the west coast. The line originated as the light coal railway constructed to take coal from mines in Drumlemble to Campbeltown in 1876 (The Road to Drumleman, 2017, 5). According to local information, the fountain was installed for passengers disembarking at the nearby station to walk down to the coast. Unfortunately, due to saltwater ingress, the fountain went out of use and has been filled with concrete.

Figure 49. Drinking fountain on the sea front at Machrihanish (SCAPE ID: 16961).

4.2.4. Settlement & Agriculture - Boundaries

Settlement and agricultural boundaries were the second most common site type recorded during the survey, accounting for 28% of the new sites recorded. Of these, the majority were recorded in West Loch Tarbert and are associated with the historic farms and estates of the area. Kilchamaig farm at the northern end of the survey area, first appears in the record in 1481 when the Lords of the Isles received lands here (Thomson & Balfour 1984). Kilchamaig alongside settlements at Gartnagrenach, Leamnamuic, Loop and Ronachan all appear on Blaeu's Atlas of 1654, which is based on Pont's map, made between 1583-96 showing that these farms and townships were established by the 16th century. All these sites, as well as the farm at Corran, also appear on William Roy's map of 1747-52, which gives us some clue as to the ways in which the landscape was organised, in the period just before the land improvements of the late 18th century. This is particularly the case of Kilchamaig, which on Roy's map can be seen to be enclosed by a substantial boundary (Figure 50). Several field boundaries were recorded around Kilchamaig, including two that Mr Mundell, the current farmer, identified as being the original extent of the farm. The northmost field boundary (SCAPE ID: 16929, Figure 51), which is no longer in use, as the farm was extended north in the mid-20th century, is defined by a tumbled dry-stone wall, incorporating a bedrock outcrop and standing about 1m in height, extending for 50m into the intertidal zone. The southern boundary is defined by a significant field boundary (SCAPE ID: 16981), consisting of boulders stacked up to three courses high and 4m wide, extending some 60m into the intertidal zone. This boundary is still in use with an electric fence running along its length. It is possible that these field boundaries are the ones that

are marked on Roy's map and could be of at least mid-18th century date. None of the other coastal farms or townships are enclosed in the same way on Roy's map indicating a different form or status of settlement.

Figure 50. William Roy's map of 1747-52 of Kilchamaig (British Library (CC-BY (BL))

Figure 51. The northmost field boundary at Kilchamaig (SCAPE ID: 16929)

The majority of all the other intertidal extensions of field boundaries, some of which are very finely constructed (e.g. SCAPE ID: 16829, Figure 52), recorded during the survey are associated with animal husbandry and may relate to land improvement and enclosure in the late 18th and 19th centuries. All these sites appear to be relatively stable and in areas of

little predicted coastal erosion however, given their ephemeral nature and their intertidal location, then they are all, to a greater or lesser extent vulnerable to erosion.

Figure 52. Aerial shot of field boundary (SCAPE ID: 16829) north to the top of the picture.

4.2.5. Religious, Ritual & Funerary

Three sites recorded during the survey related to funerary and religious activity. A Bronze Age cairn at Uisaed (SCAPE ID: 16771; SM3679) which is a Scheduled Monument lies adjacent to the University of Stirling marine research centre. The circular mound measures 13.7m in diameter and is covered in grass, but several of the kerb stones can be seen around its southern edge. While not threatened by coastal erosion its proximity to the research centre may pose a risk of unintentional damage or disturbance.

The “Rat Stane” (SCAPE ID: 16786, Figure 53) is a carved stone basin located close to the coast edge below Pennyseorach farm. It is well-known as a focus of local tradition where people place either money, quartz pebbles, or metal objects into it for good luck. This practice supposedly reflects an older tradition where tenants of Pennyseorach farm would place a metal pin into the font in the hope that the fields and cattle would be fertile in the coming year. Writing in the Kintyre magazine, Baird (1998, 15) suggests that as this traditionally took place in February it may have associations with the Celtic festival of Imbolc and the related St Bride’s day, which is associated with the end of winter and fertility.

The Canmore entry for the Rat Stane gives it a ‘Font’ site type, and it is true that the stone is located in an area rich in early Christian history. Pennyseorach once belonged to the ‘Lands of Saint Ninian’ and the Priory of Whithorn and lies just to the west of Kilmashenachan farm, the placename of which signifies *Cill mo Sheanchain*/ 'Church of Saint Senchan'. There is no trace of a church in this area and it has been suggested that as

the farm is "*is about the nearest point on the mainland of Kintyre to the island of Sanda, and the chapel there … it is likely … that this farm provided revenue for the support of the chapel and chaplain on Sanda*." (Saints in Scottish Place Names, Kilmashenachan, settlement, SOE (Kintyre), 2024). This idea requires further research, but it is possible that the stone has its origins in a medieval chapel, either at Kilmashenachan, or elsewhere in the area.

Interestingly, the records are silent about the Rat Stane until the 1977 Ordnance Survey, who visited and mapped the stone following information from a local resident and author Angus MacVicar (CANMORE: 38684). Other similar stones recorded in Kintyre include one at the church at Killean (CANMORE: 38555), on the west coast of the peninsula, as well as one found at the site of St Covin's Chapel, at Macharioch Farm (CANMORE: 38692), which is now in Campbeltown Museum. This stone was reinterpreted as a knocking stone by RCHAMS (1971, 147). It is not unreasonable to suggest that the Rat Stane may also have originated as a knocking stone which has since become the focus for more symbolic practice.

The stone itself measures around 0.6m cubed with a hollow font-like depression on top and it appears to sit on top of another stone. When we visited the site there were several quartz pebbles and coins within the hollow. The stone sits just above the shore, next to a small burn or drain in a very overgrown area. This section of coast has seen some erosion since 1900 and so there is a slight risk of long-term vulnerability to coastal erosion.

Figure 53. "The Rat Stane" (SCAPE ID: 16786)

A well-known and unusual religious site is to be found within a cave on the southern shore of Island Davaar where local artist Archibald MacKinnon painted the Crucifixion on the cave wall in 1887 (SCAPE ID: 17005, Figure 54). The site is well visited by tourists and has become a place of pilgrimage. The painting has been restored several times, including twice by the original artist, and most recently in 2006 after it was badly vandalised. While

there are currently no issues to the site from coastal erosion, the painting is vulnerable to deterioration caused by the coastal cave environment while the continued threat of vandalism remains.

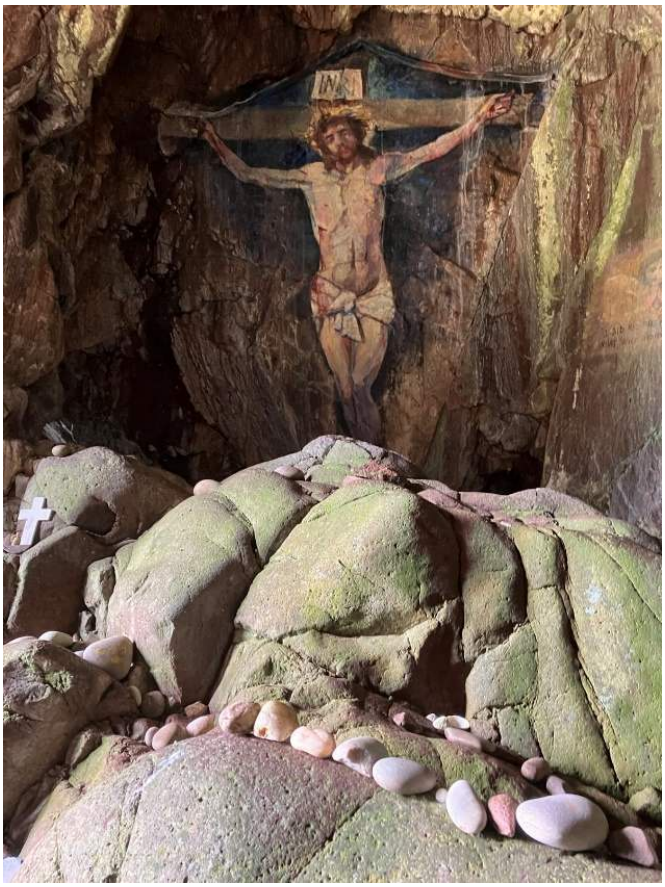


Figure 54. Island Davaar cave painting (SCAPE ID: 17005)

4.2.6. Defended Buildings, Castles and Forts

Three duns were visited during the survey, one at Ronachan Bay and two at either end of Macharioch Bay in the south of the peninsula at Dun Dubh and Dun na h-Oighe. The Dun at Ronachan Bay, which is a Scheduled Monument (SCAPE ID: 16798; SM3185; Figure 55) sits on top of a small, isolated knoll above the shore, and the wall that defines it can be made out in the higher vegetation and grass that covers the site, defining an oval area 24m x 18m in extent. Dun Dubh (SCAPE ID: 16788) is almost completely obscured by gorse bushes, and its outline, measuring 12m x 9m, is only discernible in the higher vegetation compared to the centre and outside slope of the site. A monument to the 8th Duke of Argyll occupies the middle of the site. Dun na h-Oighe (SCAPE ID: 16787, Figure 56) is a natural rocky headland, the summit some 18.0m long and 5.5m wide. There is no trace of walling around it, but a gradually shelving area on the northwest and north side gives the impression of turf-covered banking, which may or may not be artificial. If artificial there is a slight possibility that it formed a dun outwork, with the dun based on the top. None of these sites are being affected by coastal erosion, but dense vegetation hinders their understanding.

Figure 55. Aerial Shot of the dun at Ronachan Bay (SCAPE ID: 16798; SM3185), highlighted in red. North to the top right of the photo.

Figure 56. Dun Na H-Oighe looking south (SCPAE ID: 16787)

The site of Dunaverty Castle (SCAPE ID: 16762; SM3041; Figure 57), which occupies the summit of a precipitous headland between Dunaverty Bay and Brunerican Bay was also visited during the survey. No trace of the castle was seen, apart from the rock-cut stairway that leads to the summit of the site, but records do describe some traces of mortared masonry. While the site is exposed to the full force of the Atlantic, it appears relatively stable and is not being affected by coastal erosion.

Figure 57. Aerial shot of Dunaverty Castle (SCAPE ID: 16762; SM3041). North the right of the picture.

4.2.7. Military

Most of Kintyre's wartime military activity centred on Campbeltown and Machrihanish and lay outside the coastal survey area. However, a World War 2 and later Royal Observer Corps (ROC) observation post (SCAPE: 16816, Figure 58) was recorded at Uisaed, comprising a small brick building with two compartments. The south compartment was probably roofed with corrugated iron sheeting as suggested by the impression of sheeting on the wall head on the south elevation. The north compartment contained the observation equipment with the entrance in the northeast corner. The post was established at this location in July 1942 and remained in use as an observation post for the nearby Machrihanish Airbase, until 1960. Three large concrete tethering blocks (SCAPE ID: 16973) recorded in the intertidal zone to the east of the Doirlinn, between the mainland and Island Davaar, may also have had a military function.

Figure 58. The WWII observation post (SCAPE: 16816)

An earlier military site which probably dates from the period of the fear of a French invasion in the mid 19th-century is the slight earthwork remains of a gun platform at the north end of Dunskeig Bay (SCAPE ID: 16995). This rectangular earthwork is covered in grass, defining a sunken area 8m in length and 6m in width aligned SW-NE. The site is depicted as an unroofed rectangular structure on the first edition Ordnance Survey map of 1869 as "Gun Platform (Artillery Volunteers)". According to Martin the platform is associated with 4th Argyll Artillery Volunteers and that "War Office approval was granted in 1866-67 for the location of a battery at Ronachan … which was formed in 1860 at West Tarbert" (Matin 2014, 19). Coastal Erosion is predicted to accelerate here, and the coast has retreated by up to 10m since 1900 meaning the gun platform is likely to be at risk in the coming years.

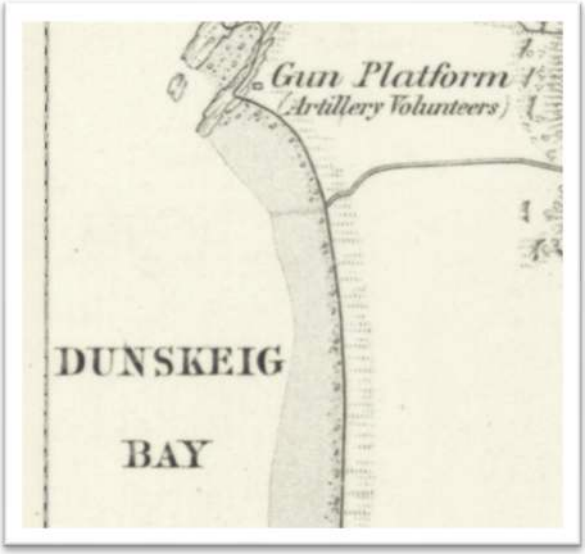


Figure 59. Dunskeig Bay Gun Platform. Argyllshire, Sheet CCXII Survey date: 1867, Publication date: 1873 (Reproduced with the permission of the National Library of Scotland).

4.2.8. Miscellaneous

Nine sites recorded during the CZAS were classed as miscellaneous.

On the side of a historic track from Clachan to the ferry at Portachoillan are two stone benches (SCPAE ID: 16949 & 16950, Figure 60) known locally as the Skye Men seats after the men from Skye who built the track in the 19th century. Worn initials are carved into them and they must have provided a welcome resting place on the long walk between the ferry and the village.

Figure 60. Stone Bench (SCAPE ID: 16949) looking north.

One of the main reasons tourists came to Machrihanish was for golf, with Machrihanish Golf Course, partly designed by the legendary golf course designer Tom Morris, opening in 1876. As the popularity of golf increased the Machrihanish Ladies Golf Club was formed in 1890 and at first, played on its own 9-hole course. This led to the building of what is thought to be the earliest purpose-built Ladies' golf clubhouse in Scotland, designed by H E Clifford, in 1893. The building (SCAPE ID: 16828; LB52262; Figure 61) which is a Category B listed building, is currently unoccupied and is falling into disrepair but local information suggests that it is going to be refurbished in the future.

Figure 61. The Ladies Clubhouse (SCAPE ID: 16828; LB52262).

One site that may be related to fishing or marine exploitation was an intertidal rectangular stone structure in Gartnagrenach Bay measuring approximately 11 x 7m, located at the end of a linear arrangement of stones of approximately 45m in length (SCAPE ID: 16827). The feature was identified from aerial photographs but was unfortunately not visible during the survey due to the unusual tidal conditions of West Loch Tarbert. This is possibly a 'keep pond' for shellfish or bait but has been classified as miscellaneous until it can be visited.

Figure 62. Aerial view of the structures in Gartnagrenach Bay, looking NW (SCPAE ID: 16827).

5. Priority sites and recommendations

Six sites have been assigned a priority status based on their vulnerability and potential archaeological significance (Figure 63). Of these five have been assigned a priority three status and one has been assigned priority two status. Three of the sites have existing Canmore or HER records associated with them (Table 3). It is recommended that all are monitored at three-to-five-year intervals or following extreme weather events.

We have assigned a priority 2 status to the remains of what appears to be a harbour in the intertidal zone at Tayinloan (SCAPE ID: 16821). This site is of historical significance, potentially of early modern date, and is at risk from coastal erosion. It would benefit from detailed recording and further historical and archaeological research to find out more about its age and period of use.

The extractive landscape around Ronachan Bay and Ronachan Point has been assigned a priority 3 status, grouped together into a master record based on the Ronachan Point quarries (SCAPE ID 16939). Together they form a cohesive collection of sites and features relating to 19th and 20th century limestone quarrying and its related maritime infrastructure. These elements comprise:

- The lime kiln (SCAPE ID: 16992), the separate winch (SCAPE ID: 16937), the cleared slipway at Ronachan Bay (SCAPE ID: 16936), the harbour and boat house at Ronachan Bay (SCAPE ID 16989), limestone quarries at Ronachan Point (SCAPE ID: 16939), and the associated jetty and tramway (SCAPE ID: 16940).

The site is a good example of an historic coastal industrial landscape and would benefit from historical research and a detailed site survey.

Dunskeig Bay, just to the north of Ronachan is a good example of an historic rural harbour and coal depot and has been assigned a priority 3 status. This collection of elements includes a boathouse and coal sheds, a harbour, winches, mooring rings and a landing place (SCAPE ID: 16993). The site would benefit from a detailed survey and historical research.

We have given a priority 3 status to Fessenden's Machrihanish Wireless Station (SCAPE ID: 16832). This is a site of potential international significance for its part in the first transatlantic radio communication, along with a now lost sister site in Brant Rock Massachusetts, in the USA in 1906. While it is in a coastal location the main threat to the site is from structural decay and encroaching development of the nearby marine laboratory facility. This site is important for the history of global communication and is unique in Scotland. We recommend the site be assessed as a possible candidate for designation as a Scheduled Monument.

The Rat Stane (SCAPE ID: 16786) is a possible medieval font that lies close to Pennyseorach and Kilmashenachan farms and the island of Sanda, which was the location of a medieval chapel, and which once formed part of the 'Lands of Saint Ninian', belonging to the Priory at Whithorn. The stone is linked to a local tradition of placing offerings to ensure the fertility of the land. It has been assigned a priority 3 status because of its historic and local significance and its vulnerable location in very overgrown conditions near the coast edge which puts it a risk of inadvertent damage by being knocked over as

well as damage during extreme weather from waves and high tides. The site should be regularly monitored.

The earthwork remains of the mid-19th century gun emplacement at Dunskeig Bay (SCAPE ID: 16995) has also been assigned a priority 3 status because of its vulnerability to coastal erosion at the north end of the bay.

Although not assigned a priority, two additional places have a recommendation for further survey and investigation due to their archaeological and historic interest.

The maritime landscape of West Loch Tarbert was barely documented prior to the survey which looked at the southern shore. It would be interesting to survey the north shore to achieve a more complete picture and deeper understanding of the nature of maritime use of the loch. One site (SCAPE ID: 16827) that was not visible during the survey due to the unusual nature of the tide was a square structure in the intertidal zone in Gartnagrenach Bay, which may be associated with shellfish exploitation or fishing. This site is unusual in the area and would benefit from a site visit.

The second area is the harbour at Machrihanish (SCAPE: 16959). The harbour is close to the site of the historic salt pans, which gave their name to the original settlement of Marypans and was a busy port in the 18th century. Although the harbour is still in use and has been heavily modified in recent years, it appears to retain some original features including landing places and cleared slipways. There may even be some fragments of surviving evidence of the pan houses and bucket pots within the harbour area. An archaeological survey of the area would contribute to a better understanding of the site, and research in local archives for references to the salt making activities could be worthwhile.

In each case where there is a recommendation for further investigation, we support action being undertaken as community research and archaeology projects or with very strong community involvement.

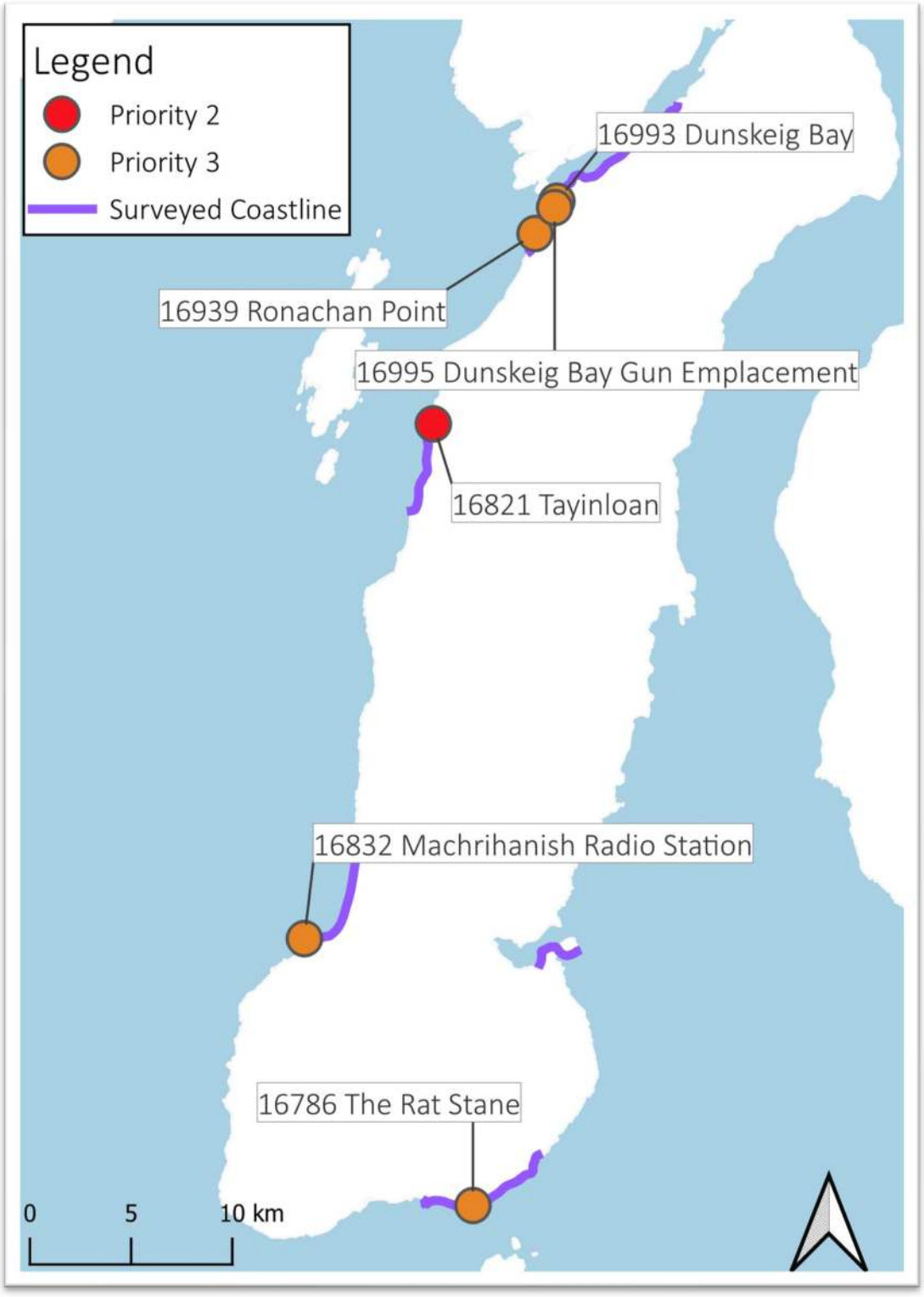


Figure 63. Distribution of Priority Sites

Table 3: Summary of Priority Sites

Scape ID	Canmore ID	Site Name	Site Type	Summary of vulnerability	Recommended Action
Maritime – Harbours & Landing Places					
16821	316108	Tayinloan	Pier	Coastal erosion	Record, historical research, monitor
16993	-	Dunskeig	Boathouse, Harbour, Winch, Cleared Slipway	Coastal erosion and structural decay.	Record, historical research and monitor. Potential site for a community project.
Industry – Extractive					
16939 16936; 16937; 16940; 16989; 16992.	-	Ronachan Point	Quarry Cleared slipway Winch Jetty, Tramway Boathouse, Jetty Limekiln	Coastal erosion, structural decay.	Master Record for the area around Ronachan Bay and Point. Record, historical research and monitor. Potential for a community project.
Religious, Ritual & Funerary					
16786	38684	Pennyseorach farm, 'the Rat Stane'	Font	Damage, coastal erosion	Monitor
Military					
16995	-	Dunskeig Bay	Gun Emplacement	Coastal erosion	Monitor
Miscellaneous					
16832	348773	Uisaed, Machrihanish Radio Station	Radio Station	Structural decay and erosion of site integrity due to proposed development.	Monitor. Assess significance for possible designation.

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Appendix 1. Known sites visited on 2024 survey

SCAPE ID	Site name	Site type	Periods	Easting	Northing	Canmore ID
Maritime – Harbours & Landing Places						
16820	Tayinloan Jetty	Jetty (Period Unassigned)	Period Unknown	169290	646630	316107
16821	Tayinloan	Pier (Period Unassigned)	Period Unknown	169210	646130	316108
16825	Portachoillan Pier	Pier (Period Unassigned)	Period Unknown	175820	657980	316352
16826 & 16917	Killean	Harbour (Period Unassigned)	Period Unknown	168903	644714	317284
16830	Gartnagrenach Bay	Slipway (Period Unassigned)	Period Unknown	179241	660092	348060
16963	Campbeltown, Dalintober Pier	Jetty	Period Unknown	172274	620800	38827
Maritime – Safety and Navigation						
16806	Dunaverty, Former Lifeboat Station and Slipway	Lifeboat Station (19th Century) - (20th Century), Slipway (Period Unassigned)	Modern	168814	607551	150424
16814	Dunaverty, The Boathouse	Boathouse (Period Unassigned)	Modern	168808	607565	245113
16822	Campbeltown Loch, South Beacon	Beacon (Period Unassigned)	Modern	174514.9	620096.3	305469
Industry – Process and works						
16803	Saltpans	Salt Works (Period Unassigned), Village (Period Unassigned)	Period Unknown	163437.6	620776.9	83065
Transport, Infrastructure, Communications and Engineering						
16832	Uisaed, Machrihanish Radio Station	Radio Station (20th Century)	Modern	162836	620692	348773
Settlement & Agriculture - Boundaries						
16988	Corran, West Loch Tarbert	Field Boundary	Period Unknown	180695	661447	348059
Religious, Ritual & Funerary						
16771	Uisaed	Cairn (Bronze Age)	Prehistoric (Bronze Age)	162860	620850	38431

SCAPE ID	Site name	Site type	Periods	Easting	Northing	Canmore ID
16785	A' Chleit, Killean and Kilchenzie Parish Church	Church (18th Century) (1787), War Memorial(S) (20th Century)	Post-Medieval	168125	641806	38584
16786	Pennyseorach Farm, 'the Rat Stane'	Font (Period Unassigned) (Possible)	Medieval (possible Early Medieval)	171170	607440	38684
17005	Island Davaar, Cave	Cave	Modern	176002.6	619895.9	269728
Defended Buildings, Castles and Forts						
16762	Dunaverty Castle	Castle (Medieval)	Medieval	168810	607480	38302
16788	Macharioch	Dun (Period Unassigned)	Prehistoric (Iron Age)	173480	608790	38696
16787	Dun Na H-Oighe	Dun (Period Unassigned) (Possible)	Dun (Period Unassigned)	174100	609000	38687
16798	Ronachan Bay	Dun (Prehistoric)	Prehistoric (Iron Age)	174070	654790	38964
Military – WW2						
16816	Uisaed, Royal Observer Corp Post	Observation Post (Second World War)	Modern	162870.3	620723	348770
Miscellaneous						
16783	Cnocan A' Chrochadaire	Gallows Mound (Post Medieval) (Possible), Human Remains (Period Unknown)	Period Unknown	168620	642810	38574
16796	Portachoillan, Armorial Stone	Armorial Panel (Period Unknown)	Period Unknown	175800	657900	38933
16827	Gartnagrenach Bay, West Loch Tarbert	Structure(S) (Period Unassigned)	Period Unknown	179589	660275	317286
16828	Machrihanish, Ladies Golf Club, Clubhouse	Clubhouse (19th Century) - (20th Century) (1896), Golf Club (Period Unassigned)	Modern	163944	620681	320165

Appendix 2. New sites visited on 2024 survey

SCAPE ID	Site name	Site type	Periods	Easting	Northing
Maritime – Fishing					
16917	Killean	Boathouse	Period Unknown	168955.78	644700.51
Maritime – Harbours & Landing Places					
16913	Craig Ruadh	Coal Depot, Landing Place	Period Unknown	169005	644054
16915	Cleit Dhubh	Landing place	Period Unknown	168525	643092
16917	Killean	Boathouse	Period Unknown	168956	644701
16924	West Loch Tarbert, Corran	Jetty	Period Unknown	176969	658358
16926	West Loch Tarbert, Loup	Jetty	Period Unknown	177144	658354
16927	West Loch Tarbert, Loup	Jetty	Period Unknown	177944	659080
16930	West Loch Tarbert, Leamnamuic	Cleared Slipway	Period Unknown	178492	659416
16933	West Loch Tarbert, Kilchamaig	Jetty, Cleared Slipway	Period Unknown	180017	661026
16935	West Loch Tarbert, Kilchamaig	Jetty	Period Unknown	179752	660425
16936	Ronachan Bay	Cleared Slipway	Period Unknown	174183	655044
16937	Ronachan Bay	Winch	Period Unknown	174316	655157
16940	Ronachan Point	Slipway, tramway	Period Unknown	174260	655608
16957	Port Uisaed	Landing place	Period Unknown	162762	620886
16959	Machrihanish	Slipway, Harbour	Period Unknown	163437	620802
16960	Machrihanish	Mooring Stage	Period Unknown	163588	620734
16962	Campbeltown	Slipway	Modern	173007	620759
16968	Corran, West Loch Tarbert	Jetty, Cleared Slipway	Period Unknown	176557	658407
16974	Kildalloig	Cleared Slipway, Harbour	Period Unknown	175594	618671
16975	A' Chleit	Cleared Slipway	Period Unknown	168110	641855
16976	Craigruadh	Cleared Slipway	Period Unknown	168840	643709
16978	Whitehouse Burn, West Loch Tarbert	Building	Period Unknown	181316	661849
16980	Kilchamaig, West Loch Tarbert	Jetty, Cleared Slipway, Harbour, Building	Period Unknown	180100	661229
16983	Leamnamuic, West Loch Tarbert	Cleared Slipway	Period Unknown	178839	659725
16985	Leamnamuic, West Loch Tarbert	Cleared Slipway	Period Unknown	178709	659608

SCAPE ID	Site name	Site type	Periods	Easting	Northing
16987	Loup, West Loch Tarbert	Jetty	Period Unknown	177089	658361
16989	Ronachan Bay	Boathouse, Jetty	Period Unknown	174237	655215
16991	Ronachan Point	Boathouse, Building, Harbour, Jetty, Cleared Slipway	Period Unknown	174338	655560
16993	Dunskeig	Boathouse, Harbour, Winch, Cleared Slipway	Period Unknown	175321	657158
16996	Brunerican Bay	Building, Boathouse	Period Unknown	169035	607645
16998	Cove Point, Kilmashenachan	Cleared Slipway	Period Unknown	171829	607671
16999	Carrick Caban, Machrihanish	Jetty	Period Unknown	163832	620829
Maritime – Safety and Navigation					
17000	Uisaed	Lifeboat Station	Modern	162948.5	620765.6
Industry – Process and works					
16958	Machrihanish, Saltpans	STRUCTURE	Period Unknown	163413	620776.2
16992	Ronachan Bay	Lime Kiln	19th Century	174221	654927.8
Industry - Extractive					
16939	Ronachan Point	Quarry	Period Unknown	174243.1	655562.4
16955	Brunerican Bay, Dun Duirn	Millstone Quarry	Period Unknown	169943.3	607556.6
16956	Brunerican Bay	Millstone Quarry	Period Unknown	170084.3	607527.4
16970	Island Davaar	Quarry	Period Unknown	175501.4	620072.5
Transport, Infrastructure, Communications & Engineering					
16961	Machrihanish	Drinking Fountain	19th/20th Century	163774.6	620724.3
Settlement & Agriculture - Domestic					
16952	Kilmashenachan	Cottage	Period Unknown	171835	607772.9
16969	Island Davaar	Structure	Period Unknown	175406.3	620152
Settlement & Agriculture - Domestic					
16972	Island Davaar	Building, Sheepfold	Period Unknown	175616.15	619916.63
Settlement & Agriculture - Boundaries					
16829	Eilean Nan Craobh	Field Boundary	Period Unknown	168917	643755
16916	Tayinloan, Eileen Buidhe	Boundary	Period Unknown	180399	661342
16918	Killean	Boundary	Period Unknown	180765	661385
16920	Craigruadh	Boundary	Period Unknown	168950	645494
16921	Craigruadh	Boundary	Period Unknown	169127	645868

SCAPE ID	Site name	Site type	Periods	Easting	Northing
16922	Glenbarr, Dalkeith	Field Boundary, Track	Period Unknown	176056	658156
16923	West Loch Tarbert, Corran	Field Boundary	Period Unknown	175685	657663
16925	West Loch Tarbert, Loop	Field Boundary	Period Unknown	177421	658557
16928	West Loch Tarbert, Loup	Field Boundary	Period Unknown	176803	658315
16929	Kilchamaig Bay, West Loch Tarbert	Boundary	Period Unknown	177787	658937
16932	West Loch Tarbert, Kilchamaig	Field Boundary	Period Unknown	179782	660490
16934	West Loch Tarbert, Leamnamuic	Field Boundary	Period Unknown	179360	660160
16951	Southend, Dun Duirn	Boundary	Period Unknown	175522	620013
16954	Kilmashenachan	Boundary	Period Unknown	178446	659363
16971	Island Davaar	Field Boundary	Period Unknown	177121	658362
16979	Kilchamaig, West Loch Tarbert	Field Boundary	Period Unknown	180926	661617
16981	Gartnagrenach Bay, West Loch Tarbert	Field boundary	Period Unknown	168865	643663
16982	Gartnagrenach Bay, West Loch Tarbert	Field Boundary	Period Unknown	166005	636556
16984	Leamnamuic, West Loch Tarbert	Field Boundary	Period Unknown	178773	659644
16986	Loup, West Loch Tarbert	Field Boundary	Period Unknown	169946	607552
16994	Portachoillan	Field Boundary	Period Unknown	171687	607551
Military – Other					
16973	Kildalloig Bay	Concrete Block	WWII (Possible) Modern	174728.4	619596.9
16995	Dunskeig Bay	Gun Emplacement	18th/19th century	175210.3	656848.3
Miscellaneous					
16949	Dunskeig	Seat	Period Unknown	175610.7	657461.8
16950	Dunskeig	Seat	Period Unknown	175604.1	657440.9
16977	Tayinloan	Groyne	Nil Antiquity	169259.1	646390
16997	The Spout, Pennyseorach	Track	Period Unknown	170761.1	607495.8
17001	Uisaed	Seabird observatory	Nil Antiquity	162831.1	620897.3
17004	Uisaed	Triangulation Pillar	Modern	162758.3	620804.2