

Dalkey Islands Conservation Plan

2014-2024

Produced by a Steering Committee consisting of:

Tim Carey, Heritage Officer, DLR Co Co, Chair
Pamela O'Connor, Senior Architect DLR Co Co
Julie Craig, Conservation Officer, DLR Co Co
Mary Toomey, Biodiversity Officer, DLR Co Co
Jim Ellis, District Supervisor, DLR Co Co
Margaret Dunne, Dalkey Castle and Heritage Centre
Maurice Eakin, National Parks and Wildlife Service
Beatrice Kelly, the Heritage Council
Chris Corlett, Regional Archaeologist, National Monuments
Ana Dolan, Senior Architect, Office of Public Works
David Nash (Botanist)
Kevin Glynn, Ark Vetcare

Jason Bolton provided conservation advice and produced the text of the Conservation Plan.

Dalkey Islands Conservation Plan 2014-2024 Published in June, 2014
by Dún Laoghaire-Rathdown County Council, County Hall, Marine
Road, Dún Laoghaire, County Dublin.

Permission to use or reprint any of this publication must be obtained
directly from Dún Laoghaire-Rathdown County Council.

ISBN 978-0-9557829-9-2

© Dún Laoghaire-Rathdown County Council.

Contents

PART ONE: BACKGROUND AND PROCESS

1.1	Introduction	5
1.2	Description of the islands	6
1.3	Current management	8
1.4	The significance of Dalkey Islands	9
1.5	Vision of the Conservation Plan	9
1.6	Aims and objectives of the Conservation Plan	10
1.7	Statutory policy and protection	10
	Natural heritage site designations	
	Archaeological and built heritage designations	
1.8	Implications of the various site designations	15
1.9	Process	16

PART TWO: UNDERSTANDING THE PLACE

2.1	Summary description of the Dalkey Islands	18
2.2	History and archaeology	18
	Prehistory	
	Early medieval	
	Late medieval	
	Dalkey haven	
	Post-medieval	
	1800-1913	
2.3	Natural heritage	28
	Habitats	
	Flora	
	Birds	
	Mammals	
	Marine life	
2.4	Geological heritage	39
2.5	Archaeological and built heritage	41
	Middens	
	Promontory fort	
	Saint Begnet's Church and burial ground	
	Field system	

	<ul style="list-style-type: none"> 'Scurvy' well Lamb Island structure Martello tower Gun battery Boat harbour Potential for buried archaeological sites, features & deposits Underwater Archaeology Bullaun stone 	
2.6	Public engagement	60
PART THREE: STATEMENT OF SIGNIFICANCE		
3.1	Assessment of significance	62
	<ul style="list-style-type: none"> A wild and isolated place An island of green and grey A living island Uses and associations The church and the tower Port and seaway Social memories of the islands 	
PART FOUR: CURRENT VULNERABILITIES		
4.1	Vulnerability of cultural heritage	67
	<ul style="list-style-type: none"> Middens Promontory fort Saint Begnet's Church and burial ground Field system Lamb Island structure Martello tower Gun battery Buried archaeological features Underwater archaeological heritage 	
4.2	Vulnerability of natural heritage	70
	<ul style="list-style-type: none"> Flora Terns and other birds Goats Intertidal area Marine mammals 	
4.3	General vulnerabilities	72
	<ul style="list-style-type: none"> Sense of isolation Lack of information Climate change 	

PART 5: SUMMARY OF THE CURRENT STATE OF THE ISLANDS

5.1	Archaeology and built structures	74
5.2	Natural heritage and wildlife	74
5.3	Access	75
5.4	Management	75

PART SIX : CONSERVATION PLAN POLICIES

6.1	Vision for the islands	76
6.2	Heritage policies	76
6.3	Management policies	77
6.4	Education and research policies	77

PART SEVEN: MANAGEMENT ACTIONS

7.1	Heritage actions	78
7.2	Management actions	82
7.3	Education and research actions	83

	Bibliography	85
--	--------------	----

	Appendix I: Significance and vulnerability matrix	87
--	---	----

	Appendix II: Dalkey Island shipwrecks	90
--	---------------------------------------	----

	Endnotes	93
--	----------	----

PART ONE

BACKGROUND AND PROCESS

1.1 Introduction

Conservation, at its most basic, involves handing on to future generations what we value. Conservation advisors are not there to stand in the way of change, but to negotiate the transition from the past to the present in ways that minimize the damage that change can cause, and maximize the benefits.

Kate Clarke ¹

This Conservation Plan for the Dalkey Islands has been prepared by Dún Laoghaire-Rathdown County Council, in conjunction with a steering committee comprising of a variety of stakeholders.



Above: Dalkey Islands, forming one of the sixteen parks of Dún Laoghaire-Rathdown County Council

1.2 Description of the islands

Dalkey Islands are under the ownership and management of Dún Laoghaire-Rathdown County Council, and officially form one of the Council's sixteen public parks.

Dalkey Islands comprise the uninhabited islands of Dalkey Island, Lamb Island, and Maidens' Rock. They are located 53° 16' 15' (N. Lat.) and 6° 5' 20' (W. Long.) and form the boundary to the south-eastern extremity of Dublin Bay. The islands are approximately 300m offshore from Dalkey, separated from the mainland by Dalkey Sound.



Above: View of the north-west of Dalkey Island showing St. Begnet's Church and the boat harbour, with Lamb Island and Maiden Rock in the background.

Dalkey Islands form a multi-layered heritage site which has significant and important ecological, archaeological, architectural, and cultural heritage. The relative isolation of the islands has helped to preserve and protect this heritage. Their location on the doorstep of the capital city, their current state of preservation, and the value and variety of their heritage assets make Dalkey Islands of considerable importance not only in a local, but also a national context.

Dalkey Island is the main island of the Dalkey Islands group. It is 11.2 hectares in area and is humpbacked in shape with the highest point on the island being just over 24 metres above sea level. The underlying rock is granite. The landscape is characterised by rough terrain with rock outcrops, semi-natural grasslands, dense bracken framed by a rocky shoreline with low granite cliffs. There is one designated landing place on the western side of the island.

Lamb Island is located north-west of the main island. It is a small flat-topped granite islet with shallow soil and semi-natural grassland with small rocky outcrops and low granite cliffs on all sides. Lamb Island can be accessed on foot at low tides from the main island.



Above: Lamb Island at mid-tide.

Maidens' Rock is a low granite islet at the western extremity of the islands. Maidens' Rock is composed almost entirely of granite with little or no vegetation. The only access to Maidens' Rock is by sea.

1.3 Current management

Heritage is what we inherit. It includes things we do, and do not, want to keep as well as things we want to modify and develop further.

James Semple Kerr²

Dalkey Islands are in the ownership and management of Dún Laoghaire-Rathdown County Council. However, Saint Begnet's Church is in the care of the Office of Public Works. The islands are zoned 'G' in the 2010-2016 Dun Laoghaire-Rathdown County Development Plan with the zoning objective: 'To protect and improve high amenity areas'.

The islands were first taken over by the local authority (then Dalkey Urban District Council in 1913). Since then they have been transferred first to Dún Laoghaire Borough Council and then to Dún Laoghaire-Rathdown County Council.

Although designated as one of the Council's sixteen local parks, historically the islands have not been managed as a park. They have been left largely undisturbed by a regime of limited maintenance and largely informal supervision. Council staff has accessed the islands by engaging various private boat operators.

The Council's Heritage Sites and Assets Committee, which is charged with improving appropriate access to the Council's heritage sites, has identified the need to carry out a number of works to the islands' Martello tower and gun battery as well as the landing pier and a proposal for modifications to the landing pier was approved by DLR County Council in 2013. Works are currently taking place.

1.4 The significance of Dalkey Islands

At a site as complex as Dalkey Islands, articulating significance is not always easy as the different cultural and ecological values reflect the views of many different people and interests, and can also change with increased knowledge and understanding. The ways in which, and the reasons why, the islands are a significant place are many and multi-layered, and spring from aspects of: its ecology, history; its architecture; its archaeology; its physical, social and cultural relationships to the mainland and to Dublin Bay; and not least to its historic uses and its presence as a public space under local authority ownership for the past century. At the same time these various aspects of the islands' heritage are interconnected in relationships that are often straightforward but sometimes complex.

The significances of Dalkey Islands have so far been identified under the following broad headings:

- A wild and isolated place
- An island of green and grey
- A living island
- Uses and associations
- The church and the tower
- Port and seaway
- Social memories of the islands

1.5 Vision of the Conservation Plan

Dun Laoghaire-Rathdown County Council will manage the islands as a unique heritage asset in the County. It will endeavour to safeguard, preserve, maintain and promote awareness of, and try to facilitate appropriate access to, the cultural and natural heritage of the Dalkey Islands. The islands will be managed under the guiding principles of minimal intervention, acknowledging

that the islands are subject to ongoing natural processes which form part of the character of the place.

1.6 Aims and objectives of the Conservation Plan

The Conservation Plan is a process that seeks to guide the future development of a place through an understanding of its significance

James Semple Kerr³

In accordance with the principles of the Australian ICOMOS charter for the Conservation of places of cultural significance (the Burra Charter) as revised 1988, and subsequent guidance documents, this conservation plan intends to:

- Understand the significance of the Dalkey Islands
- Identify issues which threaten that significance
- Agree appropriate policies to guide the management of the heritage of the islands
- Agree a series of management actions to achieve the objectives of the Conservation Plan and its agreed policies

1.7 Statutory policy and protection

The islands are covered by a range of legislation, policies and designations which protect the natural, archaeological and architectural heritage of the islands. These set the context to the policies and actions contained within this Conservation Plan.

Natural heritage site designations

Following a period of public consultation by the National Parks and Wildlife Service, Dalkey Islands were designated a Special Protection Area (SPA) under the EU Birds Directive in April 2010 'to maintain or restore the favourable conservation condition of the bird species listed as Special

Conservation Interests for this SPA'. Of special conservation interest are the roseate tern, common tern and arctic tern. The conservation objective of the site designation is to maintain or restore the favourable conservation condition of these bird species.



Above: Extent of the Special Area of Protection specified in the STATUTORY INSTRUMENTS. S.I. No. 238 of 2010. EUROPEAN COMMUNITIES (CONSERVATION OF WILD BIRDS (DALKEY ISLANDS SPECIAL PROTECTION AREA 004172)) REGULATIONS 2010.

The regulations include a schedule of activities and operations which require consent from the Minister.

Operations and activities on Dalkey Island requiring consent of the Minister specified in the STATUTORY INSTRUMENTS. S.I. No. 238 of 2010. EUROPEAN COMMUNITIES (CONSERVATION OF WILD BIRDS (DALKEY ISLANDS SPECIAL PROTECTION AREA 004172)) REGULATIONS 2010.

1. Any activity that involves the deliberate killing or capture of any species of naturally occurring bird in the wild state, save where a specific derogation

within the meaning of Article 9 of the Directive is in place.

2. The destruction, damage or removal of nests or eggs or any disturbance, particularly during periods of breeding or rearing, save where a specific derogation within the meaning of Article 9 of the Directive is in place.

3. The rearing or keeping of birds, the hunting and capture of which is prohibited, save where a specific derogation within the meaning of Article 7 of the Directive is in place.

4. Burning areas of vegetation.

5. Developing, operating or allowing leisure or sporting activities liable to cause significant disturbance to those birds listed in Schedule 3 of these Regulations or damage to their habitats.

6. Construction or alteration of tracks, paths, roads, embankments, car parks or access routes, or using or permitting the use of land for car parking.

7. Dumping, burning or disposal of any materials.

8. Planting of trees.

9. Reclamation or infilling.

10. Removal of soil, mud, sand, gravel, rock or minerals.

11. Introduction (or re-introduction) into the wild of plants or animals not currently found in the area.

12. Grazing of livestock above a recommended density and period as defined in approved farm plans.

13. Any activity which destroys habitat, except normal maintenance activities as defined in approved farm plans.

14. Reclaiming land for agricultural purposes, including spraying or burning vegetation, clearing scrub and rough vegetation, draining or moving soil, ploughing, harrowing or reseeding.

15. Any other activity of which notice may be given by the Minister from time to time.

On November 30, 2012 the Department of Arts, Heritage and the Gaelteacht announced its intention to designate the area between 'Rockabill and Dalkey Island' as Special Area of Conservation (SAC). The site is to be designated

because it is a key habitat for the Annex II species harbour porpoise within the Irish Sea. The entirety of Dalkey Islands is within the proposed SAC. Under the SAC regulations there is a large list of activities requiring consent from the Minister.

Dalkey Islands form part of the Dalkey and Killiney Hill Coastal Zone proposed Natural Heritage Area, as designated in the Dún Laoghaire-Rathdown County Development Plan 2010-2016.

The natural heritage of the islands is also afforded protection under the following legislation:

- Wildlife Act, 1976
- The Wildlife (Amendment) Act, 2000
- EC Directive on the Conservation of Wild Birds (79/409/EEC)
- EC Directive on the Conservation of Natural Habitats and of Wild Life fauna and Flora (92/ 43/ EEC)
- Bern Convention on the Conservation of European Wildlife and Natural Habitats.
- Bonn Convention on the Conservation of Migratory Species of Wild Animals

The relevant Dún Laoghaire-Rathdown County Development Plan policies are:

- *Policy LHB5 Heritage and Protection of the Environment:* It is Council policy to protect and conserve the environment including, in particular the architectural, archaeological and natural heritage of the county and, in particular, to conserve, manage and protect nationally important and EU designated sites including Special Protection Areas and proposed NHAs.
- *Policy LHB8 Special Protection Area (Birds), Proposed Natural Heritage Areas and Candidate Special Areas of Conservation:* It is Council policy to protect and preserve areas designated as Proposed Natural Heritage Areas, Proposed Candidate Special Areas of Conservation and Special Protection Areas.

Archaeological and built heritage designations

The entire area of Dalkey Island has been designated a Zone of Archaeological Potential by the National Monuments Service of the Department of the Arts, Heritage, and the Gaelteacht to protect their significant archaeological heritage. There are a number of known archaeological sites on the main island and these are listed on the Record of Monuments and Place (RMP). The church is a National Monument in the ownership of the Minister for the Arts, Heritage and the Gaelteacht and is managed by the Office of Public Works.

Monument	RMP No.
Archaeological complex	DU023-029
Promontory fort	DU023-029001
Midden	DU023-029002
Church	DU023-029003
Ritual site/holy well	DU023-029004
Cross-inscribed stone	DU023-029005
Burial ground	DU023-029006
Field system	DU023-029007
Martello tower	DU023-029009
Battery	DU023-029011
Cross-inscribed stone	DU023-029012

There are two protected structures on the island that are protected under the Planning Act: the Martello tower and its associated gun battery.

The fresh water well found on the western side of the island is known as the 'Scurvy Well' and is designated a site of geological importance.

The protection afforded to the built heritage of the islands by national legislation and designations is supported by various policies in the Dún Laoghaire-Rathdown County Council Development Plan. The relevant Dún Laoghaire-Rathdown County Development Plan policies are:

- *Policy AH1 Archaeological Protection:* It is Council policy to protect archaeological sites, National Monuments (and their setting), which have been identified in the Record of Monuments and Places (RMP), whilst at the same time reviewing and assessing the feasibility of improving public accessibility to sites and monuments under the direct ownership or control of the Council or of the State.
- *Policy AH4 Designation of Archaeological Landscapes:* It is Council policy to identify, designate and protect Archaeological Landscapes in co-operation with relevant Government Departments.
- *Policy AH6 Underwater Archaeology:* It is Council policy for all developments which have the potential to impact on riverine, inter-tidal and subtidal environments to require an archaeological assessment prior to works being carried out.
- *Policy AR4 Protection of Buildings in Council Ownership:* It is Council policy to carry out an audit and assess the condition of all Protected Structures within the Council's ownership/control and to devise a prioritised management/maintenance plan for these structures.
- *Policy AR7 Protection of Coastline Heritage:* It is Council policy to promote the retention of features of the County's coastal heritage where these contribute to the character of the area.

1.8 Implications of the various site designations

Such a matrix of site designations has the potential to create conflict between the various aspects of the islands' heritage. The designations for natural and built heritage are not necessarily incompatible, but the new SPA status of the islands is potentially sensitive. A key issue in the islands' management is how to facilitate the appreciation of the heritage of the islands by the public without compromising or adversely affecting the built

and natural heritage, or undermining the sense of isolation traditionally enjoyed while on the island.

1.9 Process

This Conservation Plan has been informed by a Draft Heritage Management Plan for Dalkey Islands (2005) commissioned by Dún Laoghaire-Rathdown County Council with the support of the Heritage Council.

With the overall objective of ensuring the long-term conservation, preservation and presentation of Dalkey Islands, a Conservation Plan Steering Committee was established to assist the Council in the production of the Conservation Plan. The steering committee made recommendations, provided information, and will subsequently meet to review the implementation of the plan.

The members of the steering committee are:

Tim Carey, Heritage Officer, DLR Co Co
Pamela O'Connor, Senior Architect DLR Co Co
Julie Craig, Conservation Officer, DLR Co Co
Mary Toomey, Biodiversity Officer, DLR Co Co
Jim Ellis, District Supervisor, DLR Co Co
Margaret Dunne, Dalkey Castle and Heritage Centre
Maurice Eakin, National Parks and Wildlife Service
Beatrice Kelly, the Heritage Council
Chris Corlett, Regional Archaeologist, National Monuments
Ana Dolan, Senior Architect, Office of Public Works
David Nash (Botanist)
Kevin Glynn, Ark Vetcare

The composition of this steering committee will change over time. However, the various interests and bodies on the original steering committee will continue to be represented, where possible.

PART TWO

UNDERSTANDING THE PLACE

2.1 Summary description of the Dalkey Islands

Dalkey Islands comprise Dalkey Island, Lamb Island and Maidens' Rock, the foreshore, and the submerged area immediately surrounding the islands.

Historical and archaeological studies provide evidence of different periods of significant activity on the islands from the Mesolithic to the nineteenth century. The islands contain significant archaeology as well as buildings, structures and features from these periods of activity. In addition, buried archaeological sites, features and deposits have been uncovered during past archaeological excavations of very small areas of the island, indicating significant potential for further buried evidence elsewhere on the islands. The historical evidence for Dalkey as a medieval port and haven also suggests that there may be significant archaeological evidence in the waters surrounding the islands.

2.2 History and archaeology

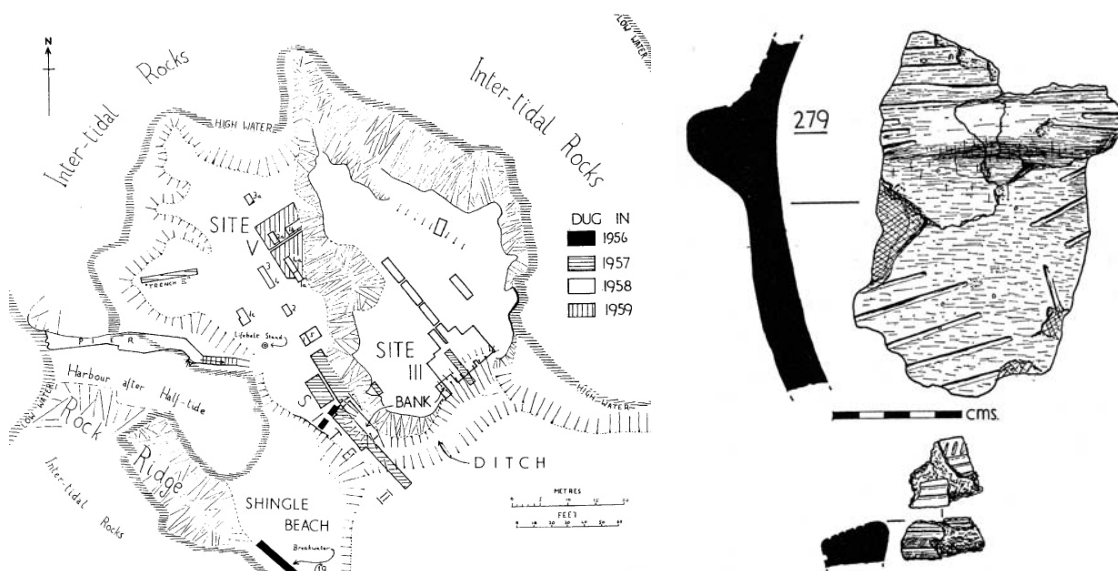
Prehistory

In the Mesolithic period (7500 BC-4000 BC), sea levels were a number of metres lower than today, and Dalkey and Lamb Island were probably linked except during the highest spring tides. The coastline of Dublin Bay was in use by Mesolithic peoples, as evidenced by the discovery of a fish trap dating to 6100-5720 BC in the north quay area of Dublin city – the first known Mesolithic structure in Ireland.⁴

The Mesolithic potential of Dalkey is significant, as evidenced by excavations in the 1950s by David Liversage (1968), who argued that the earliest settlement on the island belonged to the 'Larnian Culture'. Two shell middens

were sealed by an extensive black layer in which archaeological material from the Neolithic to the Early Christian period were intermixed, including Bell Beaker pottery from the later Neolithic.

Liversage considered that settlement appears to have ebbed away during the Iron Age, a trend that can be observed throughout Ireland. In an alternative interpretation, Leon (2005) argued that the evidence did not indicate permanent or semi-permanent settlement in earlier prehistory, and suggested instead that the Dalkey Islands were a focal point for 'religious or ceremonial activities and depositional practices involving stone tools' and may have been linked with 'other ritual activities in the contemporary landscape', like cairns on numerous hilltops.⁵



Above: Extent of archaeological excavations by David Liversage 1956-9 at the promontory fort of Dalkey Island.

Human activity on the islands should be considered in the context of the relationship of the island with the mainland, as well as with coastal seafaring and other maritime activity from the Mesolithic to the present day. Apart from the wreck of the *Flying Hawk* (wrecked in 1887) at the base of Maidens' Rock, there is no known surviving physical evidence of the range of boats and ships which would have been associated with Dalkey Islands in the past. However, the two main types of prehistoric watercraft in north-western

Europe were log boats and skin boats.⁶ Assessments of the available technological skill suggest that skin craft were probably used from the Palaeolithic era.

Dalkey Island has been suggested as a site where the importation of goods took place.⁷ The range and quantity of imported small finds suggest that Dalkey Island may have been a convenient landfall or temporary base for prehistoric and early medieval seaborne traders, but is unlikely to have been a high status settlement site.

Early Medieval

The promontory fort is the key site reflecting activity on Dalkey Island from the late Iron Age into the early medieval period. The promontory fort forms the western extremity of Dalkey Island overlooking the modern landing pier. Liversage suggests that settlement of Dalkey Island resumed during the Roman occupation of Britain, from which there are Roman glass fragments and Samian pottery, and intensified after the end of the Roman period.⁸ After a time, the settlement was fortified by the construction of a large ditch, cutting it off from the rest of the island, and a poorly constructed dwelling nestled behind the bank. Previous evaluation of the finds suggests an early medieval construction date.⁹

The diffusion of Christianity in early medieval Ireland is reflected on Dalkey Island by its church, crosses, burials and holy well. In the first few centuries of the early medieval period, Dalkey Islands formed part of the area of the Uí Briúin Chualann who controlled a territory including the seaborne side of north Wicklow, Killiney Head and Dalkey Islands.¹⁰

Within this area, two churches dedicated to Saint Begnet, a relatively obscure Irish saint, were founded – one on Dalkey Island and the other in what is now Dalkey town. While the surviving stone church of Saint Begnet's in Dalkey town appears of a later design than the church on Dalkey Island,

previous authors have argued for a seventh- or eighth-century foundation date for Saint Begnet's of Dalkey town.¹¹ Edel Bhreathnach (2012) has argued that the foundation of the two churches should be seen as intimately linked, and that both churches were probably founded under the patronage of the Uí Briúin Chualann.¹²



Above: St. Begnet's church overlooking Lamb Island and Maidens' Rock.

In the late eighth and ninth century, the Irish annals record the arrival of Vikings, initially raiding ecclesiastical sites along the coast then penetrating further inland. Some of the ship-camps or 'longphorts' of the Viking raiders developed into permanent settlements, arguably the most important of which was Dublin, which absorbed the ecclesiastical site of Duiblinn, but also took Dalkey Islands within its sphere of control – the existing tenth-century stone church of Saint Begnet's dates to this period of Scandinavian lordship.

During the ninth century, the Scandinavian settlers of Dublin are believed to have controlled a territorial area from Lusk to Dalkey, and probably also controlled a significant maritime hinterland including all the Dublin islands.¹³

The immediate Hiberno-Norse association is with the name Dalkey, suggested as a Norse translation of the Irish name 'Deilginis' or thorn/dagger island, possibly referring to the island's shape rather than any vegetation.¹⁴

Historical references include an entry for 938 in the *Annals of the Four Masters* record in 938 that:

Coibhdeanach, Abbot of Cill-achaidh, was drowned in the sea of Delginis-cualann while fleeing from the foreigners.

Dublin functioned as an important centre for slave trading (Oftedal 1976), and Dalkey Islands were part of the Dublin Hiberno-Norse kingdom of Dyflinaskiri. In addition to the use of Dalkey for holding slaves in the tenth century, the island also functioned as a refuge. The *Annals of the Four Masters* note in an entry for 942 the destruction of the settlement at Ath-Cliath and a small number of foreigners who escaped and 'fled in a few ships, and reached Deilginis'. However, nothing is known about the physical extent or location of any permanent or semi-permanent settlement on Dalkey Island during the Viking Age.

Medieval

Circumstances in the Dublin region changed considerably in the decades following the arrival of the Anglo-Normans in 1170. In general, the lands surrounding Dublin City, including those of Dalkey, were substantially adopted by the newcomers though ecclesiastical landowners retained ownership of their holdings.¹⁵ Ownership of the lands surrounding Dublin was initially apportioned by Richard de Clare (Strongbow), King Henry II and Hugh de Lacy. The charter granted by John, King of England 1199-1216, suggests that the lands of Dalkey had been held by archbishop of Dublin prior to 1170.¹⁶ Dalkey now formed part of the Manor of Shankill, itself part of the considerable landholding of the largest individual landowner across the Dublin region – the archbishop of Dublin. The Manor of Shankill included Dalkey, Shankill, Rathmichael, Stagonnil (Powerscourt) and Kilmacberne (Glen of the Downs) in north Wicklow.

Dalkey haven

The 'port of Dalkey' is one of the most well-known aspects of the history of the Dalkey area and led to the development of the town of Dalkey and its seven castles as ships moored in Dalkey Sound unloaded their cargo and stored it at Dalkey before transporting by land to Dublin city. The port prospered between the late fourteenth and the sixteenth century as one of the ports of entry to the city of Dublin. However, the extent and nature of the port of Dalkey remains unclear, as does any relationship it had with Dalkey Island.



Above: This wedge-shaped opening in the granite foreshore is a landing place for Dalkey Island, and this area of Dalkey Sound is marked as 'boat harbour' on historic maps.

The extent and nature of the 'port of Dalkey' is unclear. There are a number of fourteenth-century historical references indicating Dalkey as a safe and convenient landfall. Dalkey was also used as a staging post for the assembly of ships and supplies Edward I's campaign to Scotland in 1302-3. Smith noted that a small medieval port at Dalkey would not have required physical infrastructure in the form of quays, warehouses, cranes etc. Ships were

probably met by small boats which either conveyed goods directly to Dublin city, or they were unloaded onto the shoreline at Dalkey to be transported by pack animals and carts.¹⁷ While Dalkey town prospered due to maritime trade for a period, the nearby harbour of Bullock, which was ecclesiastically owned and managed, appears as a distinct and separate settlement.¹⁸

As the Dalkey Islands remained in the possession of the archbishop of Dublin throughout the medieval period, it is open to question whether the islands were used in any commercial manner for Dalkey port. However, the islands afford natural shelter to parts of Dalkey Sound, which can be subject to relatively strong tidal streams and large standing waves, making it unsuitable for anchoring. The safest anchorage in the sound is adjacent to Maiden Rock and the northern part of Dalkey Island, an area noted as boat anchorage on later maps. However, in the absence of physical evidence, the extent of 'Dalkey port' and haven remains open to debate.

While Dalkey Islands may have been peripheral to trading activity in the later medieval period, it was used as a refuge in 1575 when it 'was covered with the tents of the refugees' from an outbreak of the plague as many retreated to the isolation provided by Dalkey Island.

Post-medieval

While there may have been regular activity in the waters around Dalkey Islands, the islands themselves appear to have been isolated and uninhabited. Under the stewardship of the archbishop of Dublin, they appear to have played an insignificant role within the archiepiscopal manor. Other coastal lands held by the archbishop also remained in use only for cattle grazing, and the Dalkey Islands appear to have followed this pattern of use as in 1673, de Gomme's map of Dublin bay marks Dalkey as ' Saint Bennett's Ysle' that was 'destitute of inhabitants and used for grazing cattle'.

1800-1913

While Dalkey Sound continued as a known harbour, it was discounted as a feasible option for shipping at the outset of the nineteenth century. Captain William Bligh, formerly of HMS *Bounty*, prepared a chart of Dublin Bay between October 1800 and January 1801, together with a final report dated 12 January 1801 considered Dalkey Sound too exposed to act as a harbour, though he suggested the construction of breakwater extending from Dalkey Island for pilot and fishing vessels.¹⁹

Dalkey Islands were still owned by the archbishop of Dublin when Benjamin Fisher RE surveyed the island in 1804 with a view to building a Martello tower and battery as part of plans to construct a 'chain' of coastal defences from Balbriggan to Bray. The Martello tower and associated gun battery were constructed c.1804-5, and the ownership of the island passed from the archbishop of Dublin to the Board of Ordnance who maintained the island as a military base throughout the nineteenth century, though cattle grazing rights continued to be granted.²⁰

The main island was described in the *Dublin Penny Journal* in 1834:

The Island of Dalkey ... is divided from the mainland by a channel called Dalkey Sound, in which ships may safely ride at anchor in eight fathoms of water, sheltered by the island from the north-east wind, to which every other part of Dublin Bay lies exposed. The island is said to contain eighteen acres, and, although covered with rocks, is esteemed an excellent pasturage for cattle of all kinds. It is curious to see the people conveying black cattle hither from the mainland. They tie one end of a rope around the beast's horns, and then tie the other end to the stern of a boat, which is pulled with oars in the direction of the island. By this means they drag the animal into the sea, and force it to swim after the boat across the sound, a distance of about a quarter of a mile. Besides good pasturage, Dalkey island produces some medicinal plants, and there is a ruin on it, said to be that of a church, but (the belfry excepted) no lineament survives that would induce a person to suppose it the remains of a place of worship. I much doubt its having ever been used for one. The side of the structure where some traces of an altar might be sought for, presents no such

*appearance; but on the contrary, a fire-place and chimney are to be seen where the altar should stand, had the building been for ecclesiastical uses ... Dalkey Island is uninhabited, save by the military stationed in the batteries.*²¹



Above: The battery at the south of Dalkey Island commanding views over Killiney Bay and the seaward approaches to Dublin from the south.

The islands and aspects of their cultural history were described in the *Irish Penny Journal* in 1840:

This channel [the Sound] was anciently considered a tolerably sage and convenient harbour, and was the principal anchorage for ships frequenting the little castellated seaport of Dalkey, from which merchandise was transferred to Dublin, as well by boats as by cars...another the Maiden Rock, an appellation derived from a tradition said to be of twelve hundred years' antiquity, that twelve young maidens from Bullock and Dalkey having gone over to this rock to gather duilisk, they were overtaken by a sudden storm so violent as to prohibit assistance from the larger island, and all miserably perished...the annual ceremony of the coronation of the Dalkey king .. We can recollect that the green island figured in our woodcut, as well as the common, presented one mass of living beings, gaily dressed and arranged into groups of happy parties, each with its own musicians ... A large marquee was erected about the centre of the island for the use of his Majesty and attendant nobles, and a cordon drawn around it, within which none others were permitted to enter.

There was a military band in attendance upon the royal party; and while the noblemen and ladies of the court danced upon the sod within the bounds, to the music of the state minstrels, the subjects of the monarch danced outside ... At an early hour the monarch with his court proceeded in ludicrously solemn procession from the palace to the church – the roofless ruin figured in our cut-in which the ceremony was performed with a mock gravity ... During this august and imposing ceremony, the church was not only crowded to excess, and its ruined walls covered with human beings, but it was also surrounded by a dense mass of anxious listeners ...²²

In 1913 the islands were purchased by Dalkey Urban District Council. Since then they have remained largely undisturbed. However, from their strong visual presence and due to public access, primarily by private boat but also by unofficial commercial operators, the islands are rooted in the identity of the area.



Above: The interior of the battery overlooking Killiney Bay, showing the defensive granite walls which protected the gun emplacements, guard houses, ammunition store and furnace.

2.3 Natural heritage

Habitats



Above: Dense bracken covering the northern side of Dalkey Island.

The main habitats found on Dalkey Islands are semi-natural grasslands (Yorkshire-fog grassland and short-turf maritime grassland); dense bracken; granite outcrop; rocky shores and granite cliffs; and some disturbed ground around the buildings.

Habitat	Description
Yorkshire-fog grassland	The most obvious grassland on the island, covering all but the edges and promontories, is dominated by <i>Holcus lanatus</i> (Yorkshire-fog grass), with few other species such as <i>Agrostis capillaris</i> (common bent grass), <i>Rumex acetosa</i> (common sorrel), <i>Potentilla reptans</i> (creeping cinquefoil), <i>Ranunculus repens</i> (creeping buttercup), <i>Urtica dioica</i> (common nettle) and, in places, <i>Carduus tenuiflorus</i> (slender thistle).

Dense Bracken	<p>The larger of the two areas with dense stands of <i>Pteridium aquilinum</i> (bracken) is on the east side of the island, and the smaller area lies between the Martello tower and the battery. Both areas are surrounded by grasslands. Nettles and the grass <i>Holcus lanatus</i> grow among it. On Dalkey Island bracken only reaches about 1m, whereas it can grow to more than 3m in height on the mainland.</p>
Short-turf maritime grassland	<p>Compared to the lack of plant diversity in the Yorkshire-fog grassland, more plant species are to be found in the short-turf maritime grassland on the seaward margins and particularly on the promontories to the north and east of the island as well as between the battery and Martello tower, and among outcrop (e.g. near the church).</p> <p>In the shallowest soils, the main plant species are <i>Aira praecox</i> (early hair-grass), <i>Plantago coronopus</i> (buck's-horn plantain), <i>Rumex acetosella</i> (sheep's sorrel), <i>Sedum anglicum</i> (english stonecrop), <i>Sagina procumbens</i> (procumbent pearlwort) and <i>Cerastium diffusum</i> (sea mouse-ear). This grades into grassland on slightly deeper soil where <i>Festuca rubra</i> (red fescue) is the dominant grass, with a greater variety of accompanying species, for example, <i>Lotus corniculatus</i> (common bird's-foot-trefoil), <i>Galium verum</i> (lady's bedstraw), <i>Plantago coronopus</i> (buck's-horn plantain), <i>Tripleurospermum maritimum</i> (sea mayweed), <i>Trifolium repens</i> (white clover), <i>Cerastium fontanum</i> (common mouse-ear), <i>Cerastium diffusum</i> (sea mouse-ear), <i>Rumex acetosella</i> (sheep's sorrel), and in places also <i>Silene uniflora</i> (sea campion) and <i>Armeria maritima</i> (thrift). No doubt grazing helps keep this grassland short.</p>

It is in this kind of short-turf grassland that three rare Clovers have been recorded very recently: *Trifolium occidentale* (western clover) near the landing slip, *Trifolium scabrum* (rough clover) near the landing slip, at the battery, and around the Martello tower (and on its top floor), and *Trifolium ornithopodioides* (bird's-foot clover) about 40m east-south-east of Saint Begnet's Church (Reynolds and Nash 2010). All three species of clover are rare in Ireland as a whole (Preston *et al.* 2002).

Another plant characteristic of this habitat and gone over by early summer is the blue-flowered *Scilla verna* (spring squill).

Somewhat different vegetation is found on the north-eastern promontory (grid reference O 278 264). *Puccinellia maritima* (common saltmarsh-grass) is the dominant grass, growing between granite outcrop with *Tripleurospermum maritimum* (sea mayweed) and numerous plants of *Spergularia rupicola* (rock sea-spurrey), *Spergularia marina* (lesser sea-spurrey) and *Sagina maritima* (sea pearlwort). Of particular interest was the discovery here of the hybrid between the two sea-spurreys, only the second Irish record for this hybrid.

Granite outcrop

Granite outcrop is a conspicuous feature on the island and the cracks in the rocks contain some of the same species as are found in the short-turf maritime grassland, such as *Sedum anglicum* (English stonecrop), *Aira praecox* (early hair-grass), *Silene uniflora* (sea campion), *Armeria maritima* (thrift) as well as *Festuca ovina* (sheep fescue).

Rocky shore & granite cliffs Characteristic maritime plants grow on cliffs and among large granite boulders which are on and above the shore, including *Silene uniflora* (sea campion), *Erodium maritimum* (sea stork's-bill), *Atriplex prostrata* (spear-leaved orache), *Rumex crispus* (curled dock), *Armeria maritima* (thrift), *Cochlearia officinalis* (common scurvygrass), *Cochlearia danica* (Danish scurvygrass, now gone over) and *Tripleurospermum maritimum* (sea mayweed). *Spergularia rupicola* (rock sea-spurrey) is abundant in places. *Atriplex patula* (common orache), often found near sea bird colonies, was also present. *Beta vulgaris* subsp. *maritima* (sea beet) was seen on the east side, as were *Glaux maritima* (sea-milkwort) and *Anagallis arvensis* (scarlet pimpernel) among rocks there. *Agrostis stolonifera* (creeping bent grass) grows where there is some seepage and *Carex distans* (distant sedge) was only found by the well on the west side of the island.

Disturbed ground & buildings Mainly due to the activities of people and animals, the ground around the battery, the Martello tower and Saint Begnet's Church is disturbed and contain some weedy species such as *Stellaria media* (common chickweed), *Sisymbrium officinale* (hedge mustard) and *Urtica dioica* (common nettle). *Carduus tenuiflorus* (slender thistle) grows around the buildings as well as at the edge of the Yorkshire-fog grassland.

Inside the battery, the only shrub seen on the island, *Sambucus nigra* (elder) was growing with *Tripleurospermum maritimum* (sea mayweed), *Malva sylvestris* (common mallow), *Sonchus asper* (prickly sow-

thistle), *Galium aparine* (cleavers), *Urtica dioica* (common nettle), *Urtica urens* (small nettle) etc. The granite coping had various grassland plants growing on it, including *Galium verum* (lady's bedstraw) and *Plantago lanceolata* (ribwort plantain).

A small area of good short-turf grassland surrounds the Martello tower, where one of the rare clovers mentioned above (*Trifolium scabrum*) has been known for nearly a hundred years. The grass *Catapodium marinum* (sea fern-grass) was found on rocks by the steps to the tower. Another maritime plant, *Erodium maritimum* (sea storks-bill), was growing with *Urtica urens* (small nettle) in Saint Begnet's Church.

Inter-tidal & submerged zones

The inter-tidal (marine littoral) and underwater (marine sub-littoral) zones contain a number of distinct habitats which contribute to the natural heritage value of the Dalkey Islands, and which are also areas of high archaeological potential. The majority of the foreshore and inter-tidal areas are composed of moderately exposed rocky shores. The jetty at the boat harbour is an artificial structure, but the plant and animal communities that have developed are similar to those of the adjacent natural rocky substrata. The littoral granite typically extends from the supra-littoral, or spray zone, to the sub-littoral with distinct zonation patterns that relate to the length of time a particular area is immersed or exposed by the tide. The granite foreshore is dominated by lichens, with a band of black lichen (*Verrucaria maura*) at the bottom of the lichen zone. The inter-tidal zone contains ephemeral green

seaweeds, kelps and fucoids in distinct horizontal bands, and communities of *Patella* spp. (limpets), *Mytilus edulis* (common mussel) and *Semibarlanus balanoides*, *Chthamalus* spp. (barnacles). The boat harbour and landing place at the north-west end of Dalkey Island contain small areas of sand, shingle and gravel.

The sub-littoral extends seaward from the mean low water spring tide mark and is permanently submerged by water, and features sublittoral granite rock extending across to the Muglins, with infralittoral muddy sands found in deeper areas such as Dalkey Sound and at the south end of Dalkey Island.

Flora

Ecological surveys of the islands have found over 100 plant species present. None of those recorded are non-native which makes the islands quite unique in the Dublin context. A rare plant survey carried out on Dalkey Island in 2010 confirmed the presence of three scarce clovers – bird's-foot (*Trifolium ornithopodioides*), western clover (*Trifolium occidentale*) and rough clover (*Trifolium scabrum*) – amongst the approximately 80 higher plant species previously reported. In an all-Ireland context these clovers are known only in 10 or less 10-km squares on the east and south coasts of Ireland.

Western clover is a plant with habitat on cliff slopes and rock outcrop with thin or nutrient poor soils. The other two species are 'winter annuals' of acid ground and short turf, sometimes in disturbed or trampled ground.²³ They will tolerate, or perhaps require, a considerable degree of trampling and disturbance and so benefit from grazing by rabbits and goats. Four sites of importance have been identified on the island.²⁴

- 1 *Site 1*, in the area near the slipway and promontory fort, contains both western and rough cover in areas of habitat with short turf with granite outcrop.
- 2 *Site 2*, around the Martello tower, contains small amounts of the same two plant species. Formerly rough clover was reported on an upper floor of the tower, but access was not feasible in 2010.
- 3 *Site 3*, the battery and its environs, is the stronghold on the island for rough clover. Specifically it is present in profusion in its habitat on the tops of the east- and south-facing outer walls and on the tops of several of the internal walls. This site would be very vulnerable to 'unsympathetic' restoration/repair work on the Battery.
- 4 *Site 4* is an area *c.*6x3 square metres east-south-east of Saint Begnet's Church. This is the sole known location for bird's-foot clover on the island in a community of at least half a dozen other low growing plant species. The habitat is tightly grazed by rabbits (with some rabbit holes) and is surrounded by extensive and more vigorous plants, chiefly grasses, between the south-east corner of the church and a granite outcrop on slightly higher ground. There are records of this area for almost a century.



Birds

Ireland boasts one of the largest roseate tern populations in Europe, a species protected by national legislation, European legislation and European convention. In 1990, the Irish colony represented 24% of the European roseate tern population (Whilde, 1993), and by 2000 this had risen to 31-39% (Newton 2004). In 2005, 670 pairs nest at the islet of Rockabill (off Skerries, in north County Dublin), and up to 74 pairs at Lady's Island Lake, County Wexford, (Newton, 2005). The European tern population is in need of conservation action as the population is well below levels recorded in the 1960s and 1970s. The presence of breeding terns at Maidens' Rock is regarded by the NPWS as being of great significance. The potential for Dalkey Islands to host a sustainable third roseate tern colony in the country helps to strengthen and safeguard the sustainability of this species in Ireland.



Above: Some of the tern colony and members of Birdwatch Ireland and the nesting boxes on Maidens' Rock.

In recent years, changes in weather pattern have resulted in summer easterly gales adversely impacting on the tern colony on Maidens' Rock. In light of this, Birdwatch Ireland is considering moving their efforts to maintain a tern colony to Lamb Island which has a higher elevation and is thus less susceptible to overtopping by waves. However, this has been tried, to an extent, in the past and the result were not greatly encouraging.

The islands also form an important habitat for a number of other bird species including common and Arctic terns, and herring gull also breed on the Dalkey Islands. Herring gull populations have declined dramatically in recent years and have been proposed for endangered Red-list status. Common and Arctic terns are included in the Amber-list of birds of medium conservation concern. Cormorant, shag, shelduck, mallard, oystercatcher, great black-backed and lesser black-backed gull and Brent geese can also be found on the islands – generally the main island.



Above: Fledgling gull and gull in flight on the south-east quadrant of Dalkey Island.



Left: Brent Geese and a feral goat

Mammals

Land mammals that are currently found on Dalkey Island have no special ecological value. There is a small feral goat herd that usually numbers between six and twelve. These goats have a social value through a recently formed tradition of goats on the island. They also contribute to the wild character of the island as well as playing an important role in maintaining the ecological balance of the islands. Rabbits are also present on the island and, depending on their numbers, can cause significant disturbance.

Though not significant *per se*, both the goats and rabbits contribute to the ecological balance and character of the islands through grazing, which in turn impacts on the range and extent of habitats found. The herd is monitored for the Council by a veterinary surgeon. Interventions should be kept to a minimum due to the desirability of retaining the feral nature of the herd.

However, there are two important issues regarding these mammals. Non-feral goats have been brought onto the island by unknown person in the past

but have died shortly afterwards. In addition the 'dumping' of pet rabbits onto the island can lead to unwanted and damaging population increases.

Rats are also found on the island though the numbers are unknown.²⁵

A wide range of marine mammals are found in the waters surrounding the islands. According to the Irish Whale and Dolphin Group, these include common (harbour) seals (*Phoca vitulina*), grey seals (*Halichoerus grypus*), harbour porpoises (*Phocaena phocaena*), the common dolphin (*Delfinus delphis*) and bottle-nosed dolphins (*Tursios truncates*).

The three species that regularly occur in the vicinity are harbour porpoise, grey seal and bottle-nosed dolphin. Seals are protected species in Ireland under Annex II and V of the EU Habitats Directive and harbour porpoise and dolphin species are protected under Annex II and IV of the same directive. Grey seals regularly haul out in the inter-tidal area around Dalkey Island.



Above: Grey seal hauled out on the granite foreshore of Dalkey Island.

Marine life

In addition to the marine mammals noted above, the Dalkey Islands support a range of marine habitats and biotopes. A 2010 ecological survey of the boat harbour recorded nine biotopes during a littoral and sub-littoral survey.²⁶ However, knowledge of these is currently limited.

2.4 Geological heritage

The islands form part of the Leinster granite pluton. The rock which makes up the island and which was extracted for use in its built heritage is Type 2p Leinster Granite (microcline porphyritic granite with microcline phenocrysts). The Dalkey area is renowned for its association with granite quarrying, and Dalkey Island retains a number of small historic quarries, opened for the construction of the Martello tower and battery c.1804-5.²⁷



Above: Quarried rock faces can be seen below the Martello tower and the battery.



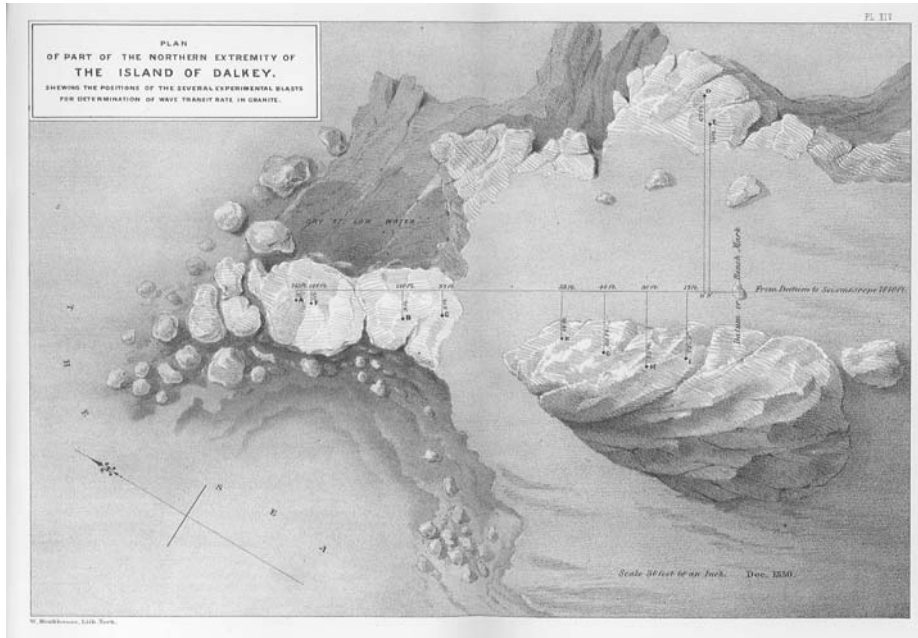
Above: A photograph of the quarry beside the Martello Tower from the late nineteenth century by the photographer Robert French survives in the Laurence Collection held by the National Library of Ireland.



Above: Contemporary view of the quarry adjacent to the Martello tower showing a levelled quarry bed (left) retaining tool marks and blast holes in the rock face (right).

In 1850 Dalkey Island was the site of one of two pioneering experiments by Robert Mallet, regarded as the father of the science of seismology.²⁸ The experiment consisted of the blowing up of a buried barrel of gun powder and measuring the speed of the shock wave through the granite – a similar experiment on Killiney Beach the previous year measured the shock waves

through sand. These experiments provided the basis for the scientific study of earthquakes. Little is currently known about the site of the experiment on the island.



Above: Map of the area where Mallet's experiment took place in 1850.

2.5 Archaeological and built heritage

Dalkey Islands are a multi-period archaeological complex, and retain a number of archaeological field monuments and historic buildings and structures extending from prehistory to the modern period.

Middens

Shell middens are deposits of marine faunal remains, usually edible molluscs which were collected from the local environment by humans from the Mesolithic period to the present day.²⁹ Excavations of the promontory fort by David Liversage (c.1956-9) discovered evidence for three shell middens, though it has been suggested that shell middens on Dalkey Island may arise from multiple short phases of activity rather than periods of prolonged settlement.³⁰

A site adjacent to the ditch of the promontory fort, was associated with an early medieval hut site, and finds also included imported late-Roman and post-Roman pottery and animal bones.³¹

The second midden was located within the western lower platform of the promontory and was up to 0.15m thick and c.18m² in area. This was composed mainly of limpet shells and a variety of flaked stone artefacts including Bann flakes, scrapers, parallel-sided blades, leaf-shaped flakes, cores, hammer stones and 'limpet scoops'.³²

A third midden, composed mainly of limpet shells, was also discovered within the western lower platform of the promontory. It covered an area of c.60m² and associated finds included stone tools, c.36 sherds of Neolithic pottery³³ and the remains of domesticated cattle and sheep and fish, bird and seal bones.³⁴ This shell midden also sealed (i.e. formed above) a human burial, radiocarbon dated to 3350-2700BC, where the skull had been filled with periwinkle shells.

Promontory fort

The north-west part of Dalkey Island contains a coastal promontory fort. Promontory forts were situated on naturally defended positions including sea promontories, inland cliffs and coastal cliffs where the construction of defences were only necessary on the landward side. The defences normally consisted of combinations of ramparts, fosses (sometimes cut from the bedrock) or stone walls isolating the fort with a minimum defensive line. These forts are usually unapproachable or difficult to approach from the seaward or cliff side. The internal arrangement of the fort is usually determined by the nature of the promontory exploited. Over two hundred examples of this fort survive in Ireland dating from the late Bronze Age to the post-medieval period, with notable examples along the coastline of Dublin including the promontory forts at Howth, Lambay Island and Drumanagh.³⁵



Above: General views of the promontory fort showing the external ditch and 'upper' level.

The Dalkey Island promontory fort consists of a small headland bounded by a low internal bank and a partly backfilled external ditch enclosing an area of c.0.25 hectares.³⁶ The granite promontory is divided into two levels by a low cliff, which were described by Liversage as 'upper' and 'lower' levels during his excavations of the fort in the 1950s.³⁷ Finds of late-Roman and post-Roman imported pottery recovered during archaeological excavations suggested that the fort was constructed during the early medieval period. Excavations at the promontory also found evidence of earlier occupation, including a midden, Neolithic pottery, burials and large quantities of flaked stone tools ranging from the Mesolithic to the Bronze Age.³⁸

Saint Begnet's Church and burial ground

Saint Begnet's Church and its associated burial ground³⁹ occupy a prominent position overlooking Dalkey Sound. The church, like that in the town of Dalkey, is dedicated to Saint Begnet (also referred to as Begh or Bee) and is associated with Saint Bea's Head in Cumberland and Killibeas in Scotland. Saint Begnet's is a single chamber two-storey church, with the walls standing to full height and having steeply pitched gables. The church was partially remodelled in the early nineteenth century to house workmen engaged in the construction of the Martello tower and battery, which led to the alteration of window openings and the insertion of a fireplace.



Above: Saint Begnet's Church, Dalkey Island, Co. Dublin.

The church retains a number of interesting features, including deep antae (c.0.37m). Con Manning has argued that pre-Romanesque stone churches can be categorised typologically and chronologically into three types based on the presence and appearance of the antae at the east and west gables.⁴⁰ The earliest stone churches, dating to the tenth century, are those with deep antae, where their depth is more than half their width. Three other churches in the wider region also have walls in antae suggesting a tenth- or early eleventh-century construction date – Kill of the Grange, Tully and Kilcronea in Co. Wicklow. Following Manning's typology, a tenth century date is suggested for the construction of Saint Begnet's church.⁴¹

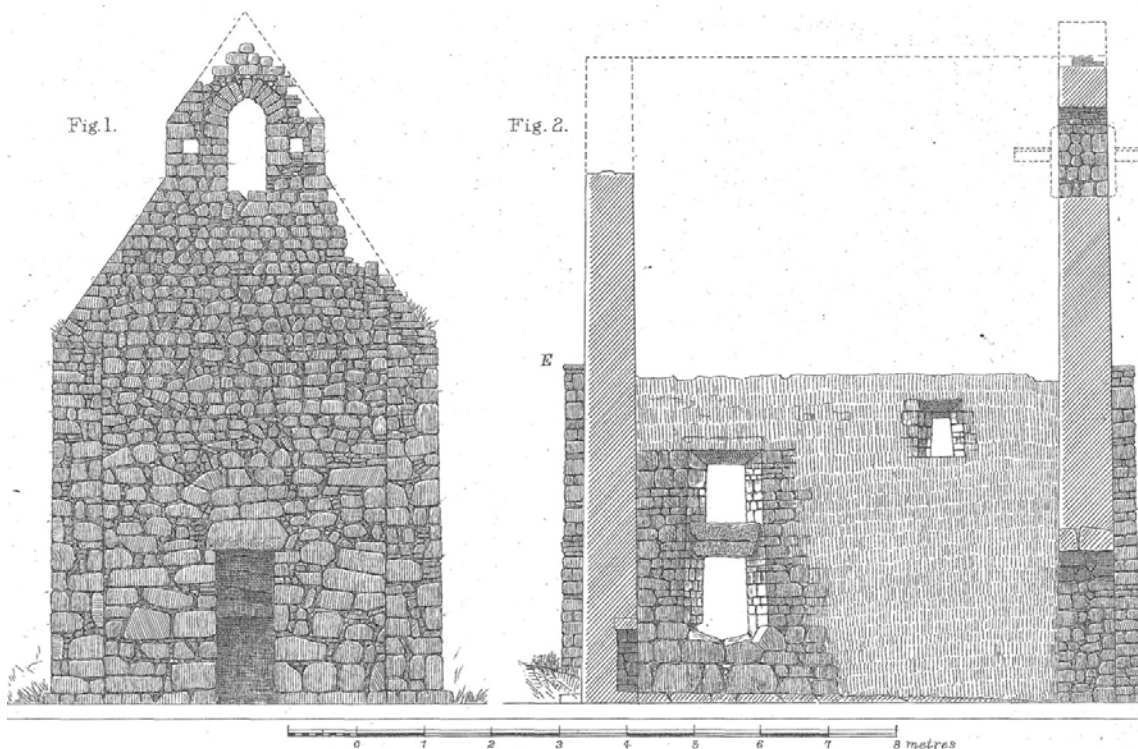


Above: Late nineteenth photographs of Saint Begnet's Church by Robert French, Laurence Collection, National Library of Ireland.

During this period, Dalkey Island would have fallen within Dyflinarskiri, a zone of Norse lordship in the hinterland of Dublin which expanded to include

a considerable territory extending from along the coast from Skerries to Wicklow town, and inland to include parts of Kildare and Meath.⁴² Within the area under Scandinavian control or influence, there are a large number of ecclesiastical sites with buildings and decorated stones which date broadly to the period of the Scandinavian lordship of Dublin. Of the 105 early church sites identified in Dyflinarskiri by Patrick Healy, only a handful of pre-Romanesque mortared stone churches survive.⁴³

Today, the church appears as a unicameral rectangular building with walls in antae, with a single trabeate west doorway with a massive granite lintel and slightly converging jambs. The interior of the church features traces of internal lime plaster, a fireplace at the east gable, and two probably nineteenth century openings in the east end of the south wall.⁴⁴ The bellcote over the west gable contains a weathered granite cross which was not depicted in JP O'Reillys drawings of the church published in 1904, and appear to be a twentieth century insertion.⁴⁵ The rubble masonry walls are built predominantly with granite, with schist used occasionally as pinnings. Waterman (1970) records slate and 'a piece of Dundry stone, probably part of a window dressing, was found during recent excavations in the graveyard north of the church'.⁴⁶ The building was repointed in the 1950s.⁴⁷



Above: The west gable and a cross section of Saint Begnet's by J.P. O'Reilly, as part of a complete stone-by-stone survey of the church published in 1904.⁴⁸



Above: Granite is the predominant stone type found at St Begnet's Church, seen here at the west door and adjacent antae. Stones at the base of the wall are sometimes 'edge-bedded' in a pseudo-cyclopean masonry style.⁴⁹

Field system

The land surrounding Saint Begnet's Church shows evidence of enclosure. A field system composed of low partially buried drystone granite masonry walls

survives on Dalkey Island west of the church. The remains are visible on the ground, on aerial photographs and historic photographs of the island and are partly recorded on OS maps, indicating that the island sustained agricultural activity in the past. Other buried walls and earthen banks are located north of the church, enclosing the area between two ridges of granite. There is a possibility that some of the walls may represent a buried building rather than field walls. Dalkey Island is of limited geographic extent, and modern soil cover is thin with a significant amount of bare granite outcrop suggesting that any past animal husbandry or crop cultivation on the island would have been limited. The date of construction of these field system are unknown, and may range anywhere between the early medieval and post-medieval periods.



Above: General view of the field system south of Saint Begnet's church overlooking Dalkey Sound and Killiney Bay.

Crosses

Two crosses are incised onto the natural granite bedrock outcrop west of Saint Begnet's Church. The first cross was recorded by Wakeman in 1891, with a drawing published by O'Reilly in 1904.⁵⁰ Scantlebury described the cross 'on a rock facing the west end of the church is incised a cross with slightly splayed arms, enclosed in a circle and having raised pellets in the quadrants'.⁵¹



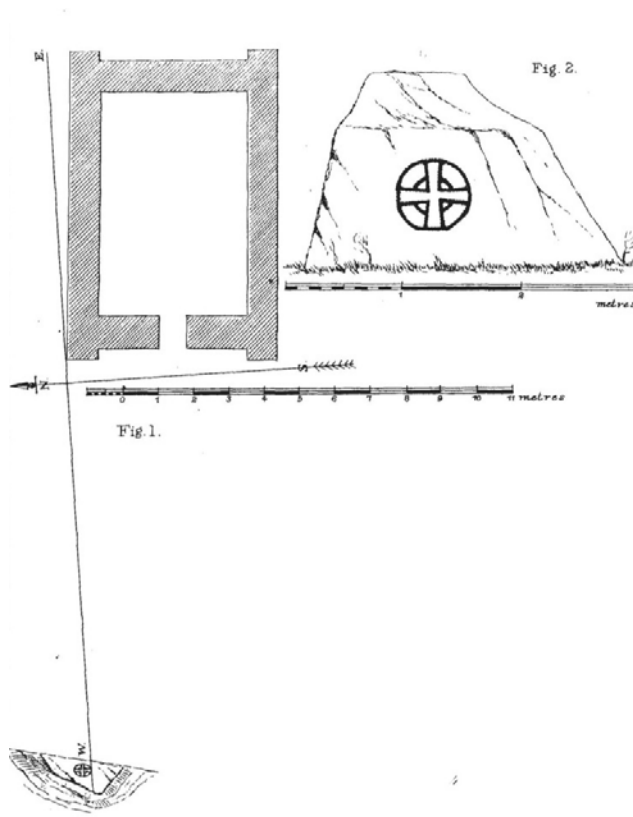
Above: Incised rock-cut cross on a granite outcrop, facing the doorway of Saint Begnet's church, Dalkey Island.

A second rock-cut cross was recognised during archaeological excavations on the island in the 1950s. This second cross is also inscribed onto bedrock outcrop west of Saint Begnet's Church, and was first recorded by Liversage.⁵² The incised Greek cross has expanding arms, while a small incised circle enclosing sub-triangular recesses occupies the angles.



Above: Incised cross on granite outcrop west of Saint Begnet's church, Dalkey Island.

Crosses and cross-inscribed grave-slabs are the most numerous stone artefact surviving from the early medieval period in Ireland.⁵³ It is not clear when stone crosses and grave-slabs began to appear in Ireland and consequently the two incised crosses are difficult to date precisely, and their original function or functions remain unclear.



Above: Drawing of Cross 1 showing its position in relation to Saint Begnet's Church, from O'Reilly 1904.⁵⁴

'Scurvy' well

The 'scurvy' well is protected as a holy well. The veneration of holy wells is one of the oldest Irish Christian practices, known from the seventh century onwards, but the practice is widely considered to have its origins in pre-Christian practice. Many wells are dedicated to locally significant saints and most were considered to have curative powers, the list of cures including those for infertility, warts, sore eyes, backache and, in this case, scurvy (a disease resulting from vitamin C deficiency, common among seafarers).⁵⁵ Many holy wells had local traditions such as pattern days (visiting the well and performing rounds (or patterns) and saying prayers), leaving tokens (religious medals and pictures, ribbons, rosary beads, pieces of cloth etc). Many also had warning traditions, threatening misfortune on persons who would attempt to block or cover them, or misuse the waters by using them for profane everyday activity such as washing or cooking. Many holy wells fell into disuse in the nineteenth and twentieth centuries, and the local traditions forgotten. The well on the island was monumentalised in the twentieth century with the construction of a mass concrete surround.

As the well on Dalkey Island is formed of granite (which is impermeable) and there is thin soil cover, the origin of the 'scurvy' well is unclear.

Lamb Island structure



Above: Lamb Island with the rectangular structure occupying the highest point of the island.

The top of Lamb Island is enclosed by a low coursed rubble wall which follows the topography of the islet, not previously noted in the RMP or by previous work on Dalkey Island. The topography, slope and aspect of the island gives natural defensive features similar to that seen at the adjacent promontory fort of the main island, but lacking a fresh water source. The wall is notable in that it was not built using the granite available in the inter-tidal zone or as bedrock, but was instead constructed of schist. Schist is a less durable stone type than granite, but much easier to work and can be hewn into flags suitable for walling. The closest source for schist is the sea cliffs of Hawk Cliff and Whiterock on the south face of Killiney Head, approximately two kilometres to the south-west. The interior of the enclosure shows a build-up of soil deposits, and rabbit activity has uncovered worked bone fragments on the top of the islet.

Martello tower

The Martello tower on Dalkey Island is one of the most recognizable landmarks on the Dublin coastline. Built on a high point of the island, and intended to work in tandem with the battery built at the south end of the island to command the approaches to Dublin Bay and the anchorage of Dalkey Sound. The order to build these two fortifications on 30 June 1804 stated that they were intended: 'For the Defence of the Sound, and passage between the Muglins, to keep an Enemy's boats & vessels at a Distance and oblige them to work up to fetch the South Bull'.



Above: The Martello Tower of Dalkey Island, with a doorway inserted by the Commissioners of Irish Lights in the early twentieth century.

The tower is large; one of three 'double towers' built in Dublin intended to mount two cannons on the roof. Once constructed, the tower and battery were originally armed with 18-pounder cannons. However, these were soon upgraded to 24-pounders, making Dalkey Island the most heavily armed position in the new chain of coastal fortifications. It was one of the last of the Dublin towers to be disarmed.

The Martello tower on Dalkey Island is a unique design, as it is the only Martello tower known anywhere in the world to have been built without a doorway. Because the doorways of Martello towers were a vulnerable point and ships could sail entirely around Dalkey Island, the tower on the island was accessed via a ladder secured to two metal fittings on the parapet of the roof.

The ladder is recorded in a historic photograph held in the National Library of Ireland taken between 1860 and 1883, an image which also shows two cannon mounted on the roof of the tower. In an 1874 War Department 'return' it was stated that the tower was 'armed and manned'.

Dalkey Island was evacuated of military personnel in 1886, and the tower was abandoned, though it continued to function as a store and for navigation purposes. In 1888, a vertical black-and-white stripe was painted down the east side to allow the Martello tower to be used as a 'position-fixing' station (a similar mark was also made on Tower No. 10 Bartra Rock). Dalkey Island remained in military ownership.

On 18 April 1913 Dalkey Urban District Council bought Dalkey Island and Lamb Island for £575. The Commissioners of Irish Lights continued to store explosives in the tower until June 1933.

Today, the Martello tower remains in local authority ownership and is currently locked up with no public access – however, the lock on the door is sometimes broken and the tower accessed.

The tower looks very similar to how it must have appeared when first completed. The fittings for the ladder are still in place on the sloping roof parapet. However, the new first floor entrance looks slightly incongruous in its position in the wall. The interior of the tower is in disrepair and the first

floor level has collapsed. The rooftop gun platform is in very good condition. The central iron pivot for the traversing platform and all the iron rings set into the parapet wall (which allowed the cannons to be manoeuvred) survive, and the stonework is in good condition. The rooftop has three openings set into the parapet wall – a shot furnace, the winding stairs, and the passage through the parapet roof from the former ladder access.

Gun battery

The battery at the south end of Dalkey Island was a key feature in the defence of the approaches to Dublin Bay. It was expanded and altered over time. The earliest phase consisted of 'No. 9 Battery Dalkey Island – An enclosed bank having two loop holed guard houses in the [illegible] constructed for 3 – 24 pdrs. For the defence of Dalkey Island and Sound'. The battery was in near-continuous use and 'returns' show constant small repairs. In 1829 a detailed description is given:

The floor of the Store room is rotten – the trap door is quite rotten and broken – the blinds of the loop holes deficient – Door of Privy rotten – Barrack rooms require whitewash. A few slates have been blown down in the last week. Ordnance Mounted 2 – 24 Pounders ... not in a sound state but may stand 40 or 50 shocks – No. 2 gun Carriage and Traversing platform serviceable ... Ordnance Dismounted – One 24 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin.



Above: View of Dalkey Island showing the relationship between the gun battery and the Martello Tower, with Killiney and Dalkey Hills in the background.

The battery was expanded to the north sometime between 1843 and 1852 and a detailed 1862 War Department plan of the site shows the additions to the rear of the battery, including a privy beside the munitions store, and a new roofed rectangular enclosure attached to the rear of the site. The artillerymen who manned Dalkey Island were housed in the battery until the site was evacuated by military personnel in 1886, and the battery gradually fell into ruin.



Above: Detail showing the semi-circular emplacements which housed the guns, with a shot furnace attached to the inside of the battery wall..

Today, the battery appears as an irregular granite ashlar-walled fortification, entered by the original doorway at the west end of the north wall of the original battery, flanked by loop holes set through the granite masonry wall of the battery to defend the approach to the battery. Inside, the three gun emplacements are still *in situ*, retaining not only the iron pivot, but also the iron runners which allowed the cannons to be moved. Against the south wall of the battery stand the remains of a brick-arched shot furnace. The original guard room is ruined, but retains the defensive loop holes, which were constructed in brick with timber slats (a rare survival in any archaeological

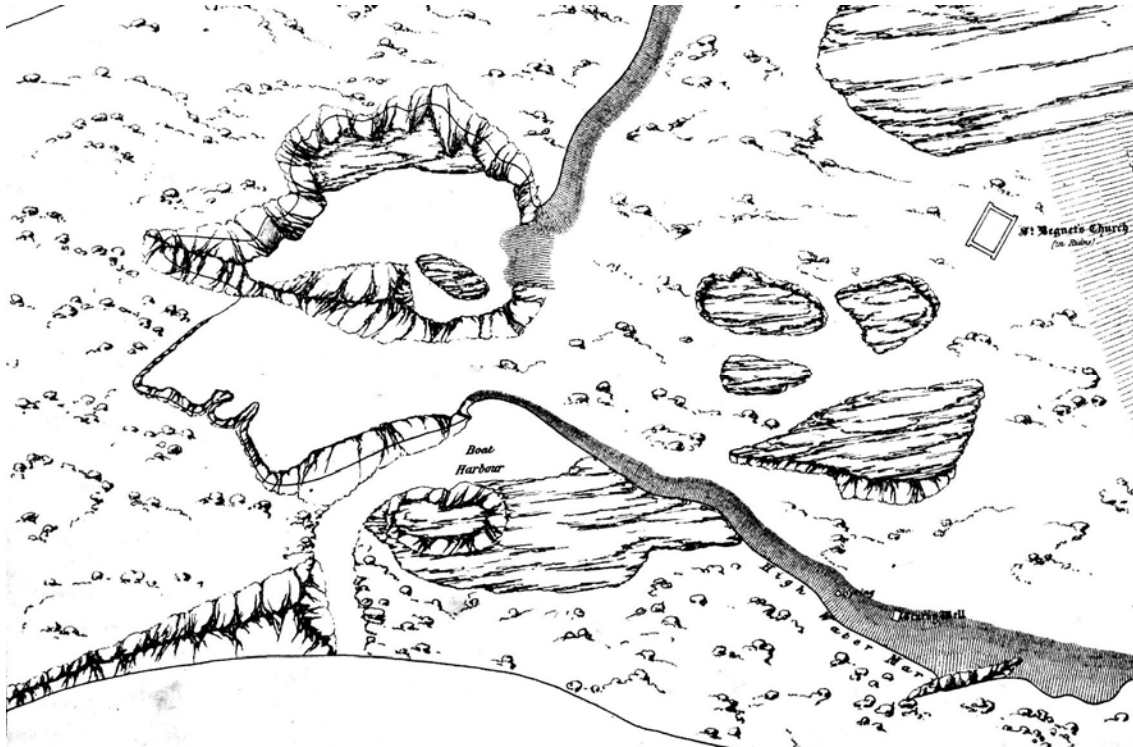
monument) above and below. The original munitions store survives as a partly-collapsed brick barrel vault within a granite rectangular ashlar masonry building, and is very similar in design to the surviving ammunition store at No. 5 Loughlinstown Battery. The privy is a small annex, set against the east wall of the battery, and accessed by a small passage which leads to the northern extension to the battery. This extension, currently used as winter shelter by the goats which inhabit Dalkey Island, contains one surviving building, and areas of collapse to three sides, contained within the high rectangular enclosure wall. A build up of drystone granite masonry around the powder room may have been intentional to protect it from weapons fire.

Boat harbour

[Currently the slip way is being made safe and modified] The original landing place for Dalkey Island is a shallow, shelving sandy beach found between Dalkey Island and Lamb Island that was cleared of granite boulders. Accessing Dalkey Island across Dalkey Sound is problematic and was the key reason why Saint Begnet's Church was turned into accommodation for the workmen who built the tower and gun battery. Subsequent to that the Board of Ordnance needed to have regular access to the site and provision was made in 1805 for 'the forming of the small harbours for the protection of the Boats in bad weather, one at Bullock, the other on Dalkey Island'.

The Board of Ordnance quarried a new channel through a rocky ridge on the north-west side of Dalkey Island to form the boat harbour. This is still the location of the main landing place on the island today. The channel entrance is formed by cut vertical faces of rock, while the line of the rocky ridge on the east (Dalkey Sound) side was formalised by setting massive slabs of granite on edge, cutting into the rock outcrop to form harbour walls, and erecting a curved drystone harbour wall to form the southern end of the harbour. On the west side of the harbour, where men and equipment were to be unloaded, a series of rock cut steps were cut into the angled face of the

granite bedrock. The new 'boat harbour' is marked on all maps from the first edition Ordnance Survey map c.1838 onwards.

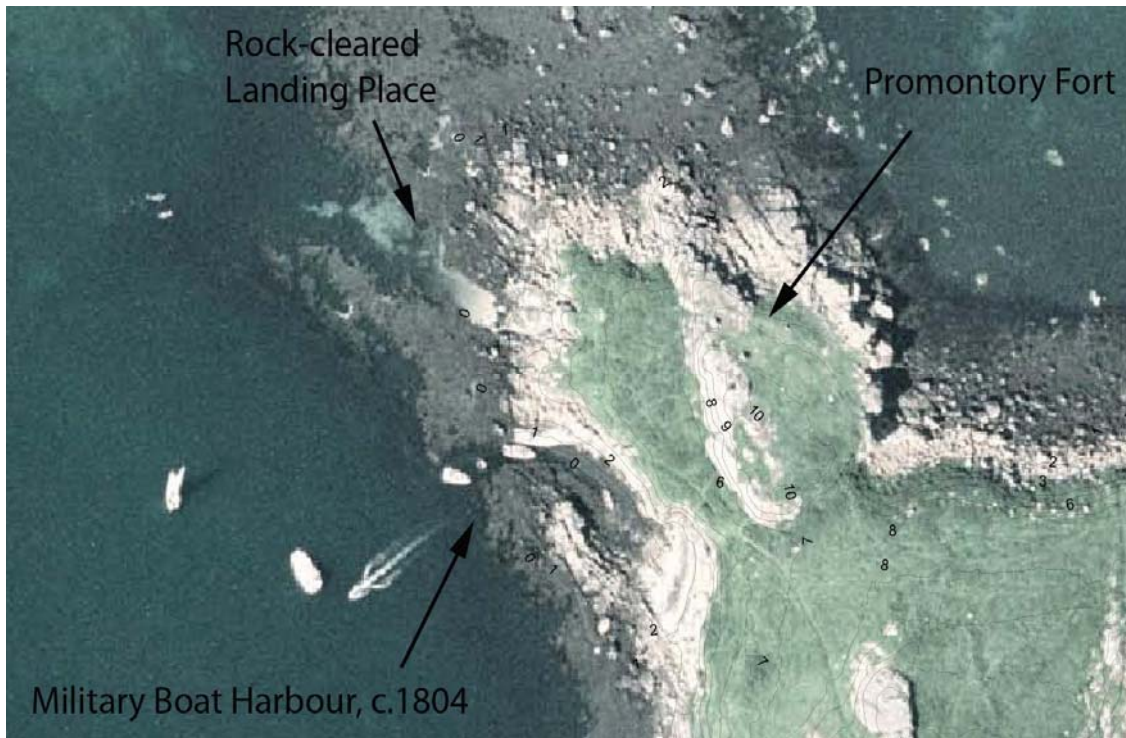


Above: Detail of the 1862 War Department plan of Dalkey Island showing the boat harbour and its relationship with the promontory fort and Saint Begnet's church.



Above: General view of the boat harbour showing the quarried vertical faces of the harbour, and massive upright granite orthostats used to line the east side of the harbour.

Prior to current construction works the northern side of the harbour has a twentieth-century quay consisting of mass concrete with iron fixtures laid on top of granite bedrock within the rocky inter-tidal zone. It is currently in poor repair.



Above: Position of the rock-cleared landing place in relation to the promontory fort and the boat harbour constructed to service the Martello tower and battery.

Potential for buried archaeological sites, features and deposits

There is very high potential for buried archaeological sites, features and deposits below ground on Dalkey and Lamb islands. Excavations since the 1950s uncovered artefacts, features and deposits from the Mesolithic to the early medieval period, and included shell middens, burials, and a wide range of stone tools, pottery and other artefacts.⁵⁶ The presence of Saint Begnet's church, historical references to the island in medieval sources, and the military presence on Dalkey Island in the nineteenth century indicate very high potential for archaeological remains surviving.

Underwater Archaeology

Archaeological traces of activity at the Dalkey Islands from the Mesolithic period to the nineteenth century attest to a long history of seaborne access to the site, finds of late-Roman and post-Roman artefacts uncovered during archaeological excavations of the site coupled with the well-known history of Dalkey Sound as an entry port serving Dublin city in the later medieval period suggests that there is very high potential for submerged archaeological remains around Dalkey Island. A full list of known shipwrecks in local waters is given in the appendix.

Bullaun stone

A bullaun stone within a possible enclosure can be seen at the northern end of the granite ridge which passes to the north (behind) Saint Begnet's Church. Bullaun stones are oval or round hollows cut into boulders or rock outcrop, and are often found at early medieval ecclesiastical sites such as Glendalough. They may have been used for religious purposes or for grinding or crushing food or dyes.



Above: Bullaun stone, Dalkey Island.

2.6 Public Engagement

From 1804 until the second decade of the twentieth century the islands effectively acted as a military base. Therefore, though this was a period of increasing public use of the sea and the coast for bathing and leisure activities, there was little public access to the islands. However, parts of the island were let out for grazing and the 1830 Board of Ordnance 'return' recorded 'The land on Dalkey Island amounting to 21 acres of poor Pasture, is let to Mr Onley'. Cattle grazing was also referred to Samuel Lewis in 1837 and again later in the century when a mock military battle scheduled for the islands had to be cancelled because the owners of the cattle had failed to remove them.

The islands were a familiar subject for nineteenth century artists, including a watercolour painting of the island by William Westall in 1810, a pencil drawing by Samuel Frederick Brocas sometime between 1812 and 1847, and an engraving by Bartlett in 1842. However, interestingly, surviving painting and illustrations show the islands from the mainland, not from the perspective of the islands (probably illustrative of the limitations there were on public access). By the end of the nineteenth century, this changes with a small series of photographs of Saint Begnet's church taken by the photographer Robert French showing that there was at least some access.⁵⁷

The situation changed in the twentieth century when the island passed into local authority ownership. In the 1930s the island once again became a focus for the crowning of the mock-King of Dalkey:

DALKEY ISLAND CEREMONY CROWNING OF THOMAS THE FIRST, Cheers were raised for Thomas the First upon landing and, to the music of pipes, he proceeded with his attending dignitaries, to the dais beside the Martello Tower... The Irish Times, 5 August 1935.

King Thomas the First of Dalkey solemnly abdicated yesterday in the presence of nearly two thousand of his liege subjects assembled in the capital of the historic kingdom – on the high ground near the Martello Tower ... The Irish Times, 2 August 1937

The tradition of public access was revived when public access and engagement to the islands was facilitated by the presence of the popular Dalkey Island Hotel on Coliemore Road, beside the harbour. The second half of the twentieth century saw the islands develop as a recreational resource in the area for boating enthusiasts, snorkelers and day trippers.

During recent decades an informal ferry service had operated between Coliemore Harbour and the islands. This service was unregulated and operated outside of the control of the local authority. The service was the source of some anti-social activity and also allowed an indeterminate number of people to visit the island at any one time. Despite the problems associated with this service it did offer many people an opportunity of visiting the island that they otherwise would not have had. This helped to root the island in the local consciousness. In 2010 this unregulated service ended and at the same time the island's landing pier was deemed to be unsafe. The existing twentieth century concrete landing is of poor construction, with a low deck level, corroding mooring rings and handrails, and narrow access channel for small boats. Proposals to improve the slip way and make it safe have recently been approved by the Council, with works commencing in Spring 2014.

Shortly after the ending of the service from Coliemore Harbour there have been many calls from local individual and groups for a reinstatement of a ferry service from this harbour. It should be noted that this particular issue falls outside of the scope of the Conservation Plan as the management of the Islands and its heritage is not contingent on the particular departure point of visitors to the islands. The sound between the Islands and the mainland can be difficult to navigate due to strong currents. In addition to issues associated with this the Dún Laoghaire Coastguard receives calls each year relating to Dalkey Islands and the waters surrounding it.

PART THREE

STATEMENT OF SIGNIFICANCE

3.1 Assessment of significance

The assessment of significance is an essential part of the Conservation Plan process, and reflects the cultural and ecological aspects of the Dalkey Islands as a whole. The 1988 ICOMOS Charter for the Conservation of Places of Cultural Significance (the *Burra Charter*) defines cultural significance as: 'the aesthetic, historic, scientific or social values for past, present or future generations'.

At a site as complex as Dalkey Islands, articulating significance is not always easy as the different cultural and ecological values reflect the views of many different people and interests, and can also change with increased knowledge and understanding. The ways in which, and the reasons why, the islands are a significant place are many and multi-layered, and spring from aspects of: its ecology, history, architecture, archaeology and its physical, social and cultural relationships to the mainland and Dublin Bay. Not least it is related to its historic uses and its presence as a public space under local authority ownership for the past century. At the same time these various aspects of the islands' heritage are interconnected in relationships that, while often straightforward, are sometimes complex.

The significances of Dalkey Islands have so far been identified under the following broad headings:

- A wild and isolated place
- An island of green and grey
- A living island
- Uses and associations
- The church and the tower
- Port and seaway
- Social memories of the islands

A wild and isolated place

Dalkey Islands have paradoxically remained accessible yet also retained a sense of wildness and isolation throughout living memory. Visitors are often struck at how the place 'feels' akin to an island on the west coast despite its proximity to a capital city, while scholars similarly refer to the islands as a 'liminal place' that is apart from, yet intimately connected with, life on the mainland. This wild and isolated character is particularly significant. While it is by no means unique in Ireland, it is unusual in its location on the shores of a major city and the fact that it is a public space, rather than private property.

A living island

Inseparable from its wild and isolated character, the habitats provided by the islands have allowed the establishment of a nationally important tern colony, and a nesting ground for a wide range of other important bird species. The flora of the islands is entirely composed of native species, including a number of rare plants. The islands have become home to a small herd of feral goats, who help maintain the low vegetation and floral diversity, and which have also become associated with the character of the islands.

The waters surrounding the islands are home to large marine mammals including seals, dolphins and porpoise, and occasional larger visitors to Dublin Bay include basking shark and humpback whale. The kelp forests below the rocky shorelines support rich marine communities which contribute to biodiversity.

An island of green and grey

The grey rocky outcrop and green vegetation cover, balanced with the lack of modern intervention, forms an important aspect of the islands' character. The islands support a number of habitats and plant species. It is significant that no non-native species are found on the islands. Lichens are found colonising the natural granite outcrop and soil cover, but also exploit the

granite masonry of the church, tower and fort necessitating a careful balance between maintaining the stone monuments and protecting the biodiversity of the islands. While this mixture of native plants and historic buildings in a wild, isolated and untouched setting is not unique in Ireland. In the context of Dublin city it is exceptional.

Uses and associations

The historic uses of the island as prehistoric trading post, ecclesiastical site, military base and public amenity are strongly connected with the character of the islands. Archaeological excavations on the island have revealed rich finds from Mesolithic and Neolithic activity, through to the importation of goods from Britain and mainland Europe in the early medieval period. These excavations also revealed aspects of later uses of the site, including eleven burials beside the church, and artefacts associated with the conversion and occupation of Saint Begnet's church as a workmen's house for the masons engaged in the construction of the tower and battery. The buildings, archaeological finds and known historical references do not suggest intensive continual occupation, but distinct periods of activity broken by long gaps. An important aspect of the cultural significance of the site is that these distinct historical periods are 'frozen in time', yet identifiable and understandable due to generally low levels of activity on the islands in recent decades.

The church and the tower

The tenth century Saint Begnet's Church is an important example of the earliest stone architecture in Ireland, and is linked with a founding saint sharing another namesake church in Dalkey town. The building marks the ecclesiastical centre of the island, and is associated with rock-cut crosses, burials and other archaeological features. The church was built during the most intensive period of church building in early medieval Ireland, linking it with other early medieval stone churches in the county at Kill of the Grange and Tully. Saint Begnet's became a small part of the vast manor estates of the Archbishop of Dublin from at least the twelfth to the nineteenth century,

and this ecclesiastical ownership both protected the building and prevented any other development on the islands.



Above: The church and the tower of Dalkey Island

The Martello tower and gun battery were built 1804-5 as part of a 'chain' of coastal fortifications that were constructed between Balbriggan and Bray to defend the coast of Dublin from the threat of Napoleonic invasion. The chain of towers and batteries acted as Dublin's primary defence during the Napoleonic Wars. The Dalkey Island defences acted as a keystone in the defence of Dublin for much of the nineteenth century. The tower on Dalkey Island is unique in its design as it was originally constructed without a door. Today, the Dalkey Island defences stand as one of the best and most intact and unaltered surviving Martello tower complexes in Ireland. At the same time the setting for the Dalkey Island Martello tower and gun battery has been largely unaltered since the tower was abandoned by the military in the late nineteenth century.

While these towers have a shared heritage with the other Martello towers built around the world between 1796 and 1916 the Dublin towers were the only cohesive network of Martello towers built in the world to defend a city. They were the first defences built for Dublin city since the city walls that were built in the late medieval period.

Port and seaway

The sound formed between the Dalkey Islands and the mainland is most strongly associated with its medieval use as one of the ports of Dublin city. The small fortified town of Dalkey prospered between the late fourteenth and

the sixteenth century as ships moored in Dalkey Sound, unloading their cargo at Dalkey for transport to Dublin city to avoid the hazardous approach to the River Liffey. The port of Dalkey is unusual in that the tangible goods which passed through here formed a relationship between Dalkey Island, the sound and the heritage town of Dalkey, but the port itself is invisible leaving no warehouses or other infrastructure in its wake. The location, extent and nature of the port are intangible and have not, and possibly cannot be securely defined and delimited. While the islands provided physical shelter, it is unclear whether any other significant use of the islands was made during the heyday of the port.

The continuing importance of the sound as a seaway and anchorage in the post-medieval period is indicated by the battery fort and Martello tower built to defend it in 1804-5.

Social memories of the islands

When the islands passed into local authority ownership in the early twentieth century, they became a well-known local public amenity. An informal small boat ferry service developed between Coliemore Harbour and the boat harbour on Dalkey Island. This remained in operation until recently. The islands have also been accessible to private boat owners, sporting clubs and associations, snorkelers and kayakers. Relatively low visitor numbers have been a long-standing characteristic of the islands, though historically very large crowds took part in the annual crowning of the mock 'King of Dalkey' in the eighteenth and again in the twentieth centuries. Dalkey Islands have played an important role in the social and cultural life of people in the county, and while in recent times this role has been somewhat interrupted, the islands form a repository of social memory of people visiting, using and having access to the islands.

PART FOUR

CURRENT VULNERABILITIES

[A matrix showing the significance and vulnerabilities of each aspect of the islands heritage is produced in the appendices.]

4.1 Vulnerability of cultural heritage

The cultural heritage of the Dalkey Islands includes buildings, structures, buried archaeological sites, features and deposits and submerged heritage, each of which experiences a different spectrum of vulnerabilities and stresses depending on the nature of the heritage, and its position on the island, specifically whether it is submerged, located in the inter-tidal zone, or positioned above the high water mark. In addition, all buildings on the island are currently ruined or abandoned structures. The vulnerability of the key buildings, structures and sites of archaeological and architectural significance are considered separately below.

Middens

The known middens are located in the area of the promontory fort, and are normally concealed below ground level, apart from a section of midden exposed at the western edge of the ditch overlooking the boat harbour. The middens are vulnerable to disturbance through animal activity (e.g. burrowing animals such as rabbits), coastal erosion (especially at the head of the boat harbour) and other physical disturbances.

Promontory fort

The promontory fort is composed of granite bedrock and buried archaeological deposits. Excavations in the 1950s opened up parts (but not all) of the upper and lower platforms of the fort, as well as its defensive ditch. The buried archaeological heritage within the fort are vulnerable to disturbance through animal activity (e.g. burrowing animals such as rabbits), coastal erosion (especially at the head of the boat harbour), any

development of bracken (whose root systems disturb archaeological stratigraphy) and any other physical disturbance.

Saint Begnet's Church and burial ground

Saint Begnet's church is currently in need of minor conservation works, principally removal of existing OPC mortars, re-pointing and the consolidation of structural cracks forming on the west face, and other minor repairs. The north elevation and the upper sections of the building show a well-developed biofilm - it is unclear whether this is acting as bioprotection. The church is principally vulnerable to inappropriate human activity such as lighting fires and using the church as a toilet.

Crosses

The two rock-cut crosses are incised onto the face of a natural granite outcrop facing the entrance to Saint Begnet's church. The crosses show a lichen-rich biofilm which partially conceals some of the incised detail. The crosses are vulnerable to natural weathering.



Above: Lichen on the incised cross facing the doorway of St. Begnet's Church.

Field system

The medieval field system is largely buried beneath soil cover, though exposed upper sections of the masonry walls show that they are likely to have been built predominately of granite. The field system was much more clearly defined in the past, and has become obscured over time. Weathering, lack of awareness of its heritage value, animal activity (principally burrowing animals such as rabbit) and human activity are the main vulnerabilities.

'Scurvy' well

The well is enclosed by a twentieth century concrete structure. The main vulnerabilities are lack of knowledge as to source of water for the well and potential human health issues relating to unknown quality of the water.

Lamb Island structure

The remains of the structure on Lamb Island are vulnerable to ongoing rabbit activity, natural weathering, coastal erosion and slippage. The erection of a small fence may have disturbed archaeological deposits. The archaeology is vulnerable to any further similar interventions. The structure on Lamb Island currently has no archaeological designation.

Martello tower

Externally the building is generally in reasonable repair but dry joints are allowing moisture ingress. Currently the building is not safe for public access. Internally it is in a state of disrepair – there is a corroding iron I-beam, the main floor has collapsed, there is a build up of masonry in the basement area. There has been a general build-up of pigeon guano internally and the external steps do not have a railing. The building is vulnerable to anti-social behaviour with the chain and lock securing the building periodically broken and the building entered. The Martello tower is vulnerable due to lack of ongoing maintenance and vandalism.

Gun battery

The greater part of the battery is currently unroofed and shows deterioration including displaced walls, dry jointing, biological colonisation, and weathering of stone, brick and mortar materials. Dislodged stones and wall tops, lack of clear access and lack of maintenance of the monument poses some minor risk to visitors. The gun battery is vulnerable due to lack of ongoing maintenance.

Buried archaeological features

It is likely that there is significant buried archaeology on the islands. This archaeology is vulnerable to disturbance, principally from animal activity (attested to by the presence of rabbit burrows on the islands), coastal erosion, spread of bracken and other physical disturbances.

Underwater archaeological heritage

The key vulnerability is that the extent of resource is unknown – the nature and extent of the medieval 'port' is not established and the condition of *Flying Hawk* shipwreck at the base of Maidens' Rock has not been established.

4.2 Vulnerability of natural heritage

Flora

The rare flora of the islands are vulnerable to lack of public knowledge about the locations of important plants which may result in accidental damage. Absence of restrictions on visitor movement in sensitive areas is a threat to these plants. The floral balance of the island is susceptible to any changes in the grazing regime. Lack of a whole island vegetation survey may result in important species or areas not being adequately taken into account of. Plans for work on the island 'structures' should especially take into account the existing scarce plants and lichens. Significant increase in visitor numbers in

specific areas may lead to excessive trampling. The island is susceptible to the introduction of invasive or non-native species.

Terns and other birds

Climate change resulting in increased frequency of easterly gales in summer and wetter summers are threatening the tern colony on Maidens' Rock as well as other bird species. Disturbance caused by people landing on Maidens' Rock is a threat to the bird population. Lamb Island, being more accessible, is more vulnerable to human interference as well as predation by gulls and rats and disturbance by goats.

Goats

Any closure or further damage to the gun battery would result in denial of vital shelter to the resident goat population. Lack of resources during extreme weather conditions is sometimes an issue for the herd. Public concern for the goats, while well-intentioned, is a vulnerability as the more human intervention demanded the less feral the herd will become. In turn this could affect the long-term viability of the herd on the island. Illness becoming endemic in the herd due to lack of genetic diversity and small numbers is always a danger. Significant increases in visitor numbers and inappropriate behaviour of those visitors is a threat to the goats.

Intertidal area

There is a general lack of knowledge about the intertidal area of the islands.

Marine mammals

All marine mammals in the vicinity are potentially vulnerable to disturbance by boating traffic, particularly if boats come too close to them on a regular basis, or if they are seen as an attraction and pursued, both of which could result in stress and/ or displacement of individuals.

Grey seals using haul-out sites are potentially vulnerable to disturbance from increased visitor numbers to the islands, particularly if people try to access the inter-tidal areas that the seals are using.

4.3 General vulnerabilities

Sense of isolation



Above: The grey granite and low green vegetation contribute to the sense of isolation experienced on Dalkey Island.

The sense of isolation experienced by people visiting the islands is a defining, but somewhat intangible, characteristic of the islands. There is also a paradox at play here because to experience this sense of isolation one must visit the islands. Therefore this sense of isolation is a product of a balance between providing access, but having that access limited. It is therefore vulnerable to significant increases in visitor numbers. In addition it is also vulnerable to any changes to the islands to accommodate visitors. The views

to the east from the islands are vulnerable to any developments in the Irish Sea.

Lack of information

While there has been a great deal of research carried out on the islands' heritage there is relatively little of that publicly available. This has led to the under-appreciation of the heritage of the islands, which is a key vulnerability. There is also a lack of methodical management and inspection of the islands. Currently there is insufficient knowledge about the degree and nature of visitor activity on the islands.

Climate change

According to a recent report commissioned by the Heritage Council and Fáilte Ireland sea levels will rise, storms will become more frequent resulting in more widespread coastal erosion, rain patterns will move to 'long duration, high intensity' while average temperatures could rise by up to 2 degrees Celsius by the 2080s. The wildlife of Dalkey Islands and its surrounding waters thrive there precisely because the local climate suits them. They have adapted to our current patterns of temperature and rainfall. As this changes so too will the ecological balance of the islands.

PART FIVE

SUMMARY OF THE CURRENT STATE OF THE ISLANDS

5.1 Archaeology and built structures

- Underground archaeology susceptible to burrowing animals and coastal erosion
- Church is publicly accessible and currently requires some conservation work
- Church suffers from negative human activities
- Martello tower currently unsafe for general public access
- Battery is partly accessible (gun emplacements and original guardhouse), but has some trip hazards and later extension is not suitable
- Field system becoming indistinct

5.2 Natural heritage and wildlife

- General lack of knowledge about the designations of the islands' heritage – in particular its status as an SPA since April 2010 and the most recent proposal to designate it an SAC
- Island's flora currently doing well, including 3 rare clover species; no non-native species recorded
- Roseate tern colony is currently of some concern due insecurity of Maidens' Rock during easterly gales events and disturbance by humans
- Grey seals regularly haul-out in inter-tidal areas around the islands
- Lack of knowledge about wildlife in waters around the islands
- Goat herd an ongoing issue, but 'hands off' approach favoured
- Rabbits still present on the island and their numbers and burrowing periodically cause problems
- Unknown number of rats on the islands

5.3 Access

- Currently the only regulation of access of individual visitors to the islands is the relative difficulty of landing at the pier, the small size of the pier and the tidal movements
- Existing slipway unsafe and has limitations as to number and size of boats – a proposal for an improvement to the pier resulting in a slight increase in accessibility has been approved by DLR County Council and work is currently being carried out
- General public access curtailed since end of informal ferry service in 2010. This situation represents what can be regarded as anomaly in recent decades
- Irregular access is mainly by individuals and small groups (mainly private boat owners, kayakers, snorkelers, surf-skiers, etc) who mainly depart from Bullock Harbour
- General lack of knowledge among the public and many of those who visit the islands about the history and heritage of the islands
- No provision of information on the islands or generally elsewhere – nothing in local library, Council web site, but section of exhibition at Dalkey Castle and Heritage Centre deals with the islands
- Informal path running from landing pier to gun battery indicates main route of public movement on the main island
- Island currently unsuitable for universal access
- Local campaign for re-instatement of boat service from Coliemore Harbour to Dalkey Islands – this campaign is specifically for access from Coliemore Harbour

5.4 Management

- Currently no active management plan or policy for the islands
- Currently no budget for the management of the islands
- Sections of community act as eyes of the Council and report any problems
- Currently the islands are not included in the Council's bye-laws

PART SIX

CONSERVATION PLAN POLICIES

6.1 Vision for the islands

Dun Laoghaire-Rathdown County Council will manage the islands as a unique heritage asset in the County. It will endeavour to safeguard, preserve, maintain and promote awareness of, and try to facilitate appropriate access to the cultural and natural heritage of Dalkey Islands. The islands will be managed under the guiding principles of minimal intervention, acknowledging that the islands are subject to ongoing natural processes which form part of the character of the place.

6.2 Heritage policies

Policy 1: DLR to recognise and comply with the various designations for the islands' Heritage.

Policy 2: Birdwatch and NPWS, in association with DLR, to seek to maintain and if possible enhance the Conservation Status of the Tern Population, and of other Notable Bird Species.

Policy 3: DLR and the Department of Arts, Heritage and the Gaelteacht and the Office of Public Works, to seek to preserve and maintain the Archaeological Heritage of the Islands, including Archaeological Monuments, Buried Sites, Features and Deposits and Submerged Cultural Heritage.

Policy 4: DLR to seek to conserve and if possible enhance the built heritage of the islands.

Policy 5: DLR to seek to conserve and if possible enhance the conservation status of notable plant species on Dalkey Islands.

Policy 6: DLR to help protect marine mammals, and conserve grey seal haul-out sites and inter-tidal species.

Policy 7: DLR to seek to conserve the ecological value of all natural and semi-natural habitats and features of the islands.

Policy 8: DLR to acknowledge that the islands' heritage is composed of multiple strands and that different components of its heritage may have competing or conflicting needs.

Policy 9: Acknowledge that human understanding, desires and aspirations for the present and future of the islands arise from social engagement with the islands and that the islands contribute to the quality of life of those who live in, work as well as visit the area.

6.3 Management policies

Policy 1: The Islands will come under the remit of the Heritage Office of DLR with support from Parks staff. External contractors may be required for various works including maintenance, monitoring and surveys. An annual budget will be allocated to achieve the objectives of the Conservation Plan.

6.4 Education and research policies

Policy 1: DLR to facilitate the sustainable use of the Dalkey Islands as a heritage site for recreational and educational use insofar as this complements the over-riding priority of heritage conservation.

Policy 2: All stakeholders including DLR, the Office of Public Works, the Department of Arts Heritage and the Gaelteacht, Dalkey Castle & Heritage Centre, National Parks and Wildlife Service and Birdwatch Ireland to help promote public awareness and understanding of the built, archaeological, natural and cultural heritage of the islands.

PART SEVEN

MANAGEMENT ACTIONS

7.1 Heritage actions

Heritage Policy 1: DLR to recognise and comply with the various designations for Dalkey Islands heritage.

Action H1.1 DLR to liaise and consult on an ongoing basis with the National Parks and Wildlife Service, the National Monuments Service, the Geological Survey of Ireland, the Office of Public Works and relevant sections of Dún Laoghaire-Rathdown County Council regarding the management of the islands.

Action H1.2 DLR to carry out Appropriate Assessment screening on all actions and policies related to the Islands.

Heritage Policy 2: Birdwatch and NPWS, in association with DLR, to seek to maintain and if possible enhance the conservation status of the tern population, and of other notable bird species.

Action H2.1 Birdwatch, in association with DLR and the NPWS, to continue the Tern nesting project:

Action H2.2 Birdwatch to produce annual report on the tern nesting project.

Action H2.3 Birdwatch in conjunction with the NPWS and DLR to investigate alternative tern nesting sites on the islands and take action as appropriate.

Action H2.4 DLR to investigate restricting goats and rabbits on Lamb Island.

Action H2.5 DLR to provide appropriate signage to inform people that visitor access to certain areas is prohibited during tern breeding season.

Action H2.6 DLR, in association with Birdwatch, to carry out annual monitoring of the notable bird species on the islands.

Action H2.7 DLR to investigate methods of controlling rat population.

Heritage Policy 3: DLR and the Department of Arts, Heritage and the Gaelteacht and the Office of Public Works, to seek to preserve and maintain the archaeological heritage of Dalkey Islands, including archaeological monuments, buried sites, features and deposits and submerged cultural heritage.

Action H3.1 OPW to carry out essential conservation and repair works to Saint Begnet's Church and prevent deterioration of the church remains.

Action H3.2 DLR to investigate suitable methods of excluding rabbits from the Promontory Fort area.

Action H3.3 OPW to allow reasonably safe access to the church for the general public.

Action H3.4 DLR to conserve the buried archaeological heritage of the islands by preservation in situ.

Heritage Policy 4: DLR to seek to conserve and if possible enhance the built heritage of Dalkey Islands.

Action H4.1 DLR, in conjunction with the OPW and the Department of Arts, Heritage and the Gaelteacht to create a schedule of conservation and repair works for restoration/preservation (as appropriate) on each of the island's structures based on principles of minimum intervention, the repair of elements rather than replacement and replace elements beyond repair on a like for like basis. Record the state of the structure before and after all repair works and develop a repository for reports commissioned on repair methods, techniques, materials and treatments to be used to guide future works.

Action H4.2 DLR to make Martello tower safe and accessible.

Action H4.3 DLR to facilitate supervised access to the Martello tower where possible.

Action H4.4 DLR to carry out conservation works on the gun battery in order to make the battery safe and accessible.

Heritage Policy 5: DLR to conserve and if possible enhance the conservation status of notable plant species on Dalkey Islands.

Action H5.1 DLR to follow a regime of minimalist intervention in the management of the island's vegetation.

Action H5.2 DLR to carry out full botanical survey and prepare a vegetation map for the islands to provide baseline data. Subsequently to carry out annual monitoring of any notable flora identified and a full botanical survey every five years.

Action H5.3 Prior to any conservation works to the built structures/archaeology carry out detailed flora assessments to assess any impacts on notable species and populations.

Heritage Policy 6: DLR to seek to protect marine mammals and inter-tidal species.

Action H6.1 DLR will seek to undertake a marine mammal survey every 3 years to monitor species and numbers around the islands and to monitor the use haul-out/ breeding sites by grey seals.

Heritage Policy 7: DLR to seek to conserve the ecological value of all natural and semi-natural habitats and features of Dalkey Islands.

Action H7.1 Apart from exceptional cases Biocides and herbicides will not be used.

Action H7.2 DLR will seek to ensure that there will be no introduced plant species. It will not reseed grass or wild flowers.

Action H7.3 DLR will not removed or modify short-turf grassland in the vicinity of the rare clovers.

Action H7.4 DLR will maintain the Islands' grazing regime through the retention of a herd of feral goats.

Action H7.5 The Goat herd to be treated as a feral herd with a policy of minimal intervention.

Action H7.6 DLR will engage a fully qualified veterinary surgeon to periodically monitor the Goat herd.

Action H7.7 DLR to monitor annually the extent of Bracken on the main island with action to be taken to control bracken, if required.

Action H7.8: DLR to monitor the extent and condition of the short-turf maritime grassland which supports the more diverse plant communities and rare plants.

Heritage Policy 8: Acknowledge that Dalkey Islands' heritage is composed of multiple strands and that different components of its heritage may have competing or conflicting needs.

Action H8.1 DLR to seek to achieve the best balance between the ongoing needs of the different forms of heritage on the islands.

Action H8.2 DLR will consider and taken into account when planning any works, maintenance or instigate changes in management of the Islands potential impacts on all aspects of the Islands' heritage.

Action H8.3 Where DLR identifies potential conflicts between the needs of different aspects of the Islands' heritage the Conservation Plan Steering Committee will be asked to find a resolution and provide advice to the Council.

Heritage Policy 9: Acknowledge that human understanding, desires and aspirations for the present and future of the islands arise from social engagement with the islands and that the islands contribute to the quality of life of those who live in, work as well as visit the area.

Action H9.1 DLR to continue to facilitate individual visits to the main Island while restricting public access to Lamb Island during the bird breeding season.

Action H9.2 DLR through a licensing system to facilitate a limited number of low capacity commercial boat operators between April and

October who submit satisfactory proposals to the Council giving details of how their operation would be compatible with the objectives and policies of the Conservation Plan.

Action H9.3 DLR to provide discrete and appropriate information panel at the landing pier on Dalkey Island outlining the Islands' significance and heritage. A map should be provided showing the key points of interest on the Island and areas that the public should avoid.

Action H.9.4 Create a Code of Conduct for visitors to the Islands.

Action H9.5 The facilitation of visitors to the island should not be achieved at the unreasonable expense of undermining, or taking away from, the aesthetic qualities of the islands.

Action H9.6 To encourage both continued community involvement in monitoring activity on the islands and community assistance in achieving the objectives of the Conservation Plan.

7.2 Management actions

Management Policy 1: DLR to set in place a sustainable management structure for Dalkey Islands.

Action M1.1 DLR Co Co to designate staff with direct responsibility for monitoring and co-ordinating activities relevant to the islands.

Action M1.2 DLR Co Co will seek to provide annual budget for its management of the Islands.

Action M1.3 Dalkey Islands Steering Committee to meet once a year to review actions and progress of the previous year, to advise on actions for the coming year and to ensure that the ongoing management of the islands is consistent with the Conservation Plan objectives and policies.

Action M1.4 DLR to bring Dalkey Islands to be brought under its Bye-laws. Bye-Laws to include prohibition on visitor access to Maidens' Rock and Lamb Island during the breeding season, prohibition of domestic animal access (i.e. dogs, rabbits, etc.) being brought onto

the Islands, prohibition of littering, barbecues and fireworks on the Islands.

Action M1.5 DLR to monitor periodically the number of visitors to the islands and their behaviour and to make management changes as appropriate within the overall objectives and policies of the Conservation Plan.

7.3 Education and research actions

Policy 1: DLR to Facilitate the Sustainable use of the Dalkey Islands as a heritage site for recreational and educational use insofar as this complements the over-riding priority of heritage conservation.

Action ER1.1 DLR to establish a research framework to facilitate research of the Islands' heritage.

Action ER1.2 DLR to seek to carry out an underwater archaeology survey of the area around the islands.

Action ER1.3 All stakeholders to continue to add to the body of knowledge of the heritage of Dalkey Islands.

Action ER1.4 DLR to carry out an analysis of the water in the 'Scurvy Well'.

Action ER1.5 DLR, where possible, make all reports on the Islands' heritage available to the public.

Action ER1.5 All stakeholders to supply copies of research, reports, surveys, etc to DLR.

Policy 2: All stakeholders including DLR, the Office of Public Works, the Department of Arts Heritage and the Gaelteacht, Dalkey Castle & Heritage Centre, National Parks and Wildlife Service and Birdwatch Ireland to help promote public awareness and understanding of the built, archaeological, natural and cultural heritage of Dalkey Islands.

Action ER2.1 DLR in association with all stakeholders to seek to establish a programme of interpretation and promotion for the Islands. These may include talks, publications, web site, etc., and the programme to be aimed at a wide audience to include the local population, visitors and primary and secondary schools.

Bibliography

- Anon (1834) 'Dalkey, County of Dublin', *The Dublin Penny Journal*, Vol.2, No. 85 (Feb 15, 1834), pp.257-8.
- Anon, (1840) 'The Sound and Island of Dalkey, County of Dublin', *The Irish Penny Journal*, Vol. 1, No.21 (Nov.21, 1840), pp.161-4.
- Bolton, J. (2012) 'Ever Decreasing Circles: the implications of climate change and the deterioration of coastal stone monuments in the Republic of Ireland', *IKUWA 3 Beyond Boundaries. Proceedings of the 3rd International Congress on Underwater Archaeology*, Dr. Rudolf Habelt GmbH – Bonn, pp.143-150.
- Bolton, J., Carey, T., Goodbody, R. & Clabby, G. (2012) *Martello Towers of Dublin* Dun Laoghaire-Rathdown & Fingal County Council.
- Bradley, J. (1995) 'Scandinavian rural settlement in Ireland', *Archaeology Ireland*, 9:3, pp. 10-12.
- Brady, N. (2009) 'Dublin's maritime setting and the archaeology of its medieval harbours', Valante, M. (2009) 'Viking kings and Irish fleets during Dublin's Viking Age', in Bradley, J., Fletcher, A.J. & Simms, A. [eds] *Dublin in the medieval world*. Dublin, Four Courts Press, pp.295-315.
- Clarke, H.B. (2000) 'Conversion, church and cathedral: the diocese of Dublin to 1152', in Kelly, J. & Keogh, D.[eds] *History of the Catholic diocese of Dublin*. Dublin, Four Courts Press, pp. 1-50.
- Clarke, C.M. (2001) *Informed conservation: understanding historic buildings and their landscapes for conservation*. London. English Heritage.
- Condit, T.; Cooney, G. (1998) Dalkey island - an island on the tides of time. Archaeology Ireland Heritage Guide No. 16. Bray. Archaeology Ireland.
- Corlett, C. (1999) *Antiquities of Old Rathdown*. Bray. Wordwell.
- Doyle, I. (1998) 'The Early Medieval Activity at Dalkey Island, Co. Dublin: A Re-Assessment', *Journal of Irish Archaeology*, Vol. 9 (1998), pp. 89-103
- Goodbody, R. (2010) *The Metals: from Dalkey to Dún Laoghaire*. Dún Laoghaire-Rathdown County Council.
- Grogan, E., and Kilfeather, A. (1997) *Archaeological Inventory of County Wicklow*. Dublin, Government of Ireland.
- Healy, P. (2009) *Pre-Norman grave-slabs and cross-inscribed stones in the Dublin region*. 2009 edition of an NUIG MA thesis prepared in 1985, edited by Swords, K. Tallaght, Dublin. Local Studies Section, South Dublin Library.
- Holm, P. (1986) 'The slave trade of Dublin, ninth to twelfth centuries' in Peritia, V.
- Kerr, J.S. (1999) 'Opening address: the conservation plan', in Clarke, K. [ed] *Conservation plans in action, Proceedings of the Oxford Conference*. London. English Heritage.
- Kerr, J.S. (1996) *The Conservation Plan: a guide to the preparation of Conservation Plans for places of European cultural significance*, 4th ed., The National Trust of Australia (NSW), Sydney.
- Leon, B. (2005) 'Mesolithic and Neolithic Activity on Dalkey Island—A Reassessment', *Journal of Irish Archaeology*, Vol. 14 (2005), pp. 1-21.
- Lind, James (1753). *A Treatise on the Scurvy*. London: A. Millar.
- Liversage, G.D. (1968) 'Excavations at Dalkey Island, Co. Dublin, 1956-59', *Proceedings of the Royal Irish Academy* 66C, pp. 53-233.

- Mallet, R. (1853) 'On the Experimental Determination of the Limits of the Transit Rate of the Propagation of Waves or Pulses, Analogous to Those of Earthquakes through Solid Materials', *Proceedings of the Royal Irish Academy* (1836-1869), Vol. 5 (1850 - 1853), pp. 143-145.
- Manning, C. (2009) 'A suggested typology for pre-Romanesque stone churches in Ireland', in Edwards, N. [ed] *The Archaeology of the Early Medieval Celtic Church*. Leeds, Maney, pp. 265-280.
- McGrail, S. (2004) *Boats of the world: from the Stone age to medieval times*. Oxford. Oxford University Press.
- McQuade, M. (2005) 'Mesolithic fishtrap' in *Archaeology Ireland*, Vo. 19, No. 2, Issue 72, p.6.
- Murphy, M. & Potterton, M. (2010) *The Dublin Region in the Middle Ages: Settlement, Land-use and Economy*. Dublin. Four Courts Press.
- Mytum, H. (1992) *The origins of early Christian Ireland*. London. Routledge.
- O'Brien, E. (1988) 'Churches in south-east County Dublin, 7th to 12th century' in Keimelia: studies in medieval archaeology and history in memory of Tom Delaney, pp 504-524.
- Oftedal, M. (1976) 'Scandinavian place-names in Ireland', in Almqvist B. & Greene, D. [eds] *Proceedings of the seventh Viking Congress*, London. Viking Society for Northern Research, pp. 125-33.
- O'Reilly, J.P. (1904) 'Orientations and Certain Architectural Details of the Old Churches of Dalkey Town and Dalkey Island' *Proceedings of the Royal Irish Academy*. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature, Vol. 24 (1902 - 1904), pp. 195-226.
- O'Sullivan, A. and Sheehan, J. (1996) *The Iveragh Peninsula: an Archaeological Survey of South Kerry*. Cork. Cork University Press.
- Scantlebury, Rev. C. (1960) 'A tale of two islands (Dalkey Island and Inis Padraig' *Dublin Historical Record*, Vol. XV, No. 4, pp.122-128.
- Smith, C.V. (1996) *Dalkey – Society and economy in a small medieval Irish town*. Dublin. Irish Academic Press.
- Swan, L. (1983) 'Enclosed ecclesiastical settlement sites and their relevance to settlement patterns of the first millennium AD', in Reeves-Smyth, T. & Hamond, F., [eds] *Landscape archaeology in Ireland*, Oxford. British Archaeological Reports, pp.269-94.
- Valante, M. (2009) 'Viking kings and Irish fleets during Dublin's Viking Age', in Bradley, J., Fletcher, A.J. & Simms, A. [eds] *Dublin in the medieval world*. Dublin, Four Courts Press, pp.73-82.
- Valante, M. (2008) *The Vikings in Ireland: trade, settlement and urbanization*. Dublin, Four Courts Press.
- Wakeman, W. (1896) 'Descriptive sketch of places visited, Dalkey etc.', *Journal of the Royal Society of Antiquaries of Ireland*, 6, pp 403-418
- Wakeman, W.F. (1891) 'Primitive churches in County Dublin', *Journal of the Royal Society of Antiquaries of Ireland*, Vol. 21 (1891), pp.697-702.
- Waterman, D.M. (1970) 'Somersetshire and other Foreign Building Stone in Medieval Ireland c.1175-1400'. *Ulster Journal of Archaeology*, 33, pp. 63-75.

Appendix I: Significance and vulnerability matrix

Significance

Vulnerability

Cultural Heritage

Middens: Known middens are located at the promontory fort, and are normally concealed below ground level, apart from a section of midden exposed at the western edge of the ditch overlooking the boat harbour. Promontory Fort: The fort is composed of granite bedrock and buried archaeological deposits, and sections have been previously excavated.

Saint Begnet's Church: 10th century church with walls in antae, with 19th alterations to form a workmen's house during construction of the Martello tower and battery.

Field Systems: A field system can be traced west of Saint Begnet's church, with another to the north, both largely buried beneath soil cover.

Crosses: Two rock-cut crosses incised onto the face of a natural granite outcrop facing the entrance to Saint Begnet's church.

Scurvy well: holy well within twentieth century enclosure.

Lamb Island Structure: foundations of a structure

Martello Tower: Coastal fortification built c.1804 as part of the Dublin defences, with early 20th century alterations. Unique example of its type.

Battery: Coastal fortification built c.1804 as part of the Dublin defences, with a mid-19th century extension to rear.

Vulnerable to disturbance through animal activity (e.g. burrowing animals such as rabbits), coastal erosion (especially at the head of the boat harbour) and other physical disturbances.

Vulnerable to disturbance through animal activity (e.g. burrowing animals such as rabbits), coastal erosion (especially at the head of the boat harbour), any development of bracken (whose root systems disturb archaeological stratigraphy) and any other physical disturbance.

Vulnerable primarily to structural cracks and dry joints and the presence of OPC mortars used as past repairs.

Weathering, lack of awareness of its heritage value, animal activity (principally burrowing animals such as rabbit) and human activity are the main vulnerabilities.

Lack of awareness & natural weathering

Lack of knowledge & potential human health issues.

Lack of awareness, burrowing animals, coastal erosion & natural weathering

Dilapidated but stable condition, unsafe for public access and vulnerable to lack of ongoing maintenance and vandalism.

Dilapidated condition and requiring small-scale repairs and ongoing maintenance.

Buried archaeological features: high potential for buried remains dating from Mesolithic to the present day.

Vulnerable to disturbance, principally from animal activity (attested to by the presence of rabbit burrows on the islands), coastal erosion, spread of bracken and other physical disturbances.

Underwater Archaeological Heritage: A number of shipwrecks and inter-tidal features are known.

Lack of awareness & natural weathering

Natural Heritage

Legislative protection

General lack of knowledge about the designations of the islands' heritage– in particular its status as an SPA since April 2010 and the most recent proposal to designate it an SAC.

Flora

Vulnerable to lack of knowledge about the locations of important plants which may result in accidental damage. The floral balance of the island is susceptible to any changes in the grazing regime. The island is susceptible to the introduction of invasive or non-native species.

Terns and other birds: The island hosts a nationally important colony of terns, as well as other protected species.

Human disturbance, climate change, animal disturbance & predation. Roseate Tern colony is currently of some concern due insecurity of Maidens' rock during easterly gales events.

Inter-tidal zone

Lack of knowledge about the inter-tidal area of the islands.

Marine mammals: including seals, porpoise and dolphins.

Human disturbance. Lack knowledge about wildlife in waters around the islands.

General Vulnerabilities

Sense of isolation: The sense of isolation experienced by people visiting the islands is a defining, but somewhat intangible, characteristic of the islands.

Significance increase in visitor numbers. Views to the east are vulnerable to any developments in the Irish Sea.

Lack of Information on the heritage significance of the islands.

Under-appreciation of the islands. Lack of methodical management and inspection of the islands.

Climate Change

Ecological balance of the islands will change as environmental conditions change.

Access:

Lack of knowledge of the degree and nature of visitor activity. Currently unsuitable for universal access.

Management

Management

Currently no management plan or policies for the islands.
Currently no budget for the management of the islands.
Currently no guaranteed access for Council staff to the islands.
Community act as eyes of the Council and report any problems.
Currently the islands are not included in the Park's bye-laws.

Appendix II: Dalkey Island shipwrecks

Ship	Date Lost	Place of Loss	Description
Unknown	1 st July 1308	Dalkey	Of Conway, en route to England, owned by Robert Fot of Conway. Wreck during a violent storm. Cargo, valued at £12 19s 2d, washed up on lands of district of Bray. Geoffrey de Belynges and Simon de Colbrok found guilty of robbing cargo that washed ashore.
Unknown	1537	Dalkey	Lost sailing between Dalkey and Dublin
Unknown	1570	Dalkey, north of	700 ton Flemish hulk
<i>Cheefman</i>	15/3/1762	Dublin	Unknown
<i>Penelope</i>	22/10/1768	Dalkey	200-ton, 9-year-old, American-built vessel. Owned by Campbell and Co., master was John Ashe. Wrecked en route from South Carolina to Liverpool, cargo of pitch. Crew survived, part of cargo saved.
Perdgee	25/10/1768	Dalkey, near	200-ton vessel, en route from South Carolina to Liverpool, cargo of pitch and tar. Master was John Ashe. Encountered strong gale, driven onto rocks, became wrecked. Master, crew saved.
Mayflower	04/08/1780	Slobbersludge/ Slobberslush Bay, near Dalkey	Workington vessel, laden with iron ore. Captured by lugger privateer Mayflower mid-channel en route from Dublin to Chepstow. Captain was kept prisoner. Passing packet reported incident to frigate Aurora. Frigate Aurora chased the Mayflower, firing guns. Mayflower ran ashore, 25 crew (French and Irish) took to their boats, got ashore. Four men from Rush were captured, secure in Newgate. Captain of the privateer was Pat Dowling. Three privateers later captured in a house in Bishops Street.
Unknown	13/9/1786	Dalkey	Sloop en route from Wexford to Dublin, cargo of butter. Driven onto rocks, went to pieces. Crew and most of the cargo saved.
<i>Anna Maria</i> <i>Ann</i>	1/4/ 1788	Dalkey, south of	Sailing Ship

Unknown	18/12/1798	Dalkey Island, near	Yawl overset. Crew of hour men and a boy swam ashore.
<i>Mayflower</i>	26/01/1803	Dalkey Island	Of Wexford. Captain was Esmond. Sank, crew saved.
<i>Mary Elizabeth</i>	& 6 th April 1804	Dalkey, south of	Unknown
Unknown	18/09/1828	Dalkey Island, near	Schooner struck rocks en route from Bristol to Dublin, sank. Four crew saved.
Unknown	18/09/1828	Dalkey Island, near	Bristol schooner en route to Dublin struck a wreck (above), sank near Dalkey Island. Four crew saved.
<i>Duke</i>	14/8/1829	Dalkey	Unknown
<i>Essy</i>	07/12/1834	Dalkey Island	Of Wicklow. Struck rocks, became stranded en route to Dublin. Not expected to get off.
<i>Sarah Jane</i>	13/02/1852	Corig Rocks, Dalkey Sound	59-ton, 24-year-old schooner of Wexford. Owned by R. Devereux of Wexford, master was Lt. Butler. En route from Wexford to Dublin, in ballast, six crew. Encountered NNW force 5-6 wind, ran aground. Vessel bilged, went to pieces, became a total wreck. Estimated loss on vessel, £200; not insured.
<i>Victoria</i>	03/02/1855	Dalkey Island, abreast of the Muglins	75-ton Glasgow schooner en route from Lisbon to Dublin to Glasgow, six crew, cargo of pig iron. Driven ashore during ESE force 10 wind, became a total wreck. Mater Brown and one other man drowned. Some cargo was recovered. Wreckage, possibly off the Victoria, lies between the Muglins and Dalkey Island, including anchors and a windlass at the south end of the Muglins.
Unknown	1857	Dalkey, south of	Sailing Ship
Unknown	09/02/1861	Dalkey Sound	Brig sank, coastguards saved crew.
Unknown	09/02/1861	Dalkey Sound	Brig sank, crew perished.
Unknown	09/02/1861	Dalkey Sound	One of two small craft that sank. Crews perished.
Unknown	09/02/1861	Dalkey Sound	One of two small craft that sank. Crews perished.
Unknown	09/02/1861	Dalkey Island	Went ashore.
<i>Adonis</i>	4/1/ 1862	Dalkey Island	458-ton Adonis of Waterford struck the Muglins. Ship was 199-foot long with three masts schooner-rigged and

<i>Favourite Unknown Annie Elizabeth</i>	20/31875 1876 27/10/1880	Dalkey Island The Muglins Dalkey, near Loreto Convent	powered by 100 horsepower engines. Ship drifted off the Muglins and sank around Greystones. Schooner Unknown Presumed Norwegian barque of around 80 tonnes. Wrecked 20 yards offshore in 4 fathoms of water. Efforts to save the crew failed, no survivors. Wreckage washed ashore between Colliemore and Killiney.
<i>Flying Hawk</i>	27/10/1887	Maiden Rock	Clyde Co. Steam Tug, 80-foot iron-built twin-screw vessel, struck Maiden Rock. Wreck lies in 6-10 metres on south side of Maiden Rock.
<i>Lighter 42B</i>	06/12/1887	Dalkey Sound	75-ton, unregistered wooden lighter. Owned by M.L. Moore of Dublin, master was T. Larkin. En route from Kingstown to Dalkey, foundered in WNW force 7 gale while working on wreck of tugboat Flying Hawk. No lives lost
Challenger	17/07/1897	Dalkey Island	26-ton, 51-year-old wooden yacht (cutter) of Waterford. Single-masted, 42ft in length, built in Middlesex. Owned by L. Creery of Dublin, master was D. Doyle/owner, master was Thomas Barnes of Waterford City. En route to Bray to Kingstown, two crew, seven passengers. Became stranded in calm conditions. All on board survived.

ENDNOTES

-
- ¹ Clarke, C.M. (2001) *Informed conservation: understanding historic buildings and their landscapes for conservation*. London. English Heritage.
- ² Kerr, J.S. (1999) 'Opening address: the conservation plan', in Clarke, K. [ed] *Conservation plans in action, Proceedings of the Oxford Conference*. London. English Heritage, P.11
- ³ Kerr, J.S. (1996) *The Conservation Plan: a guide to the preparation of Conservation Plans for places of European cultural significance*, 4th ed., The National Trust of Australia (NSW), Sydney.
- ⁴ McQuade 2005.
- ⁵ Leon, 2005.
- ⁶ McGrail 2004.
- ⁷ Hodges 1989, Mytum 1992.
- ⁸ David Liversage [pers. comm.]
- ⁹ Doyle 1998.
- ¹⁰ Smyth, 1994, p.49.
- ¹¹ Wakeman, 1896, 413; O'Brien 1983, 521; Swan, 1983, Pp. 269-94; Smith 1996, 16.
- ¹² During a presentation on 'St Begnet and Dalkey's early Christian heritage' at the Dalkey Island Forum, 24 November 2012.
- ¹³ Bradley, 1995.
- ¹⁴ Oftedal, 1976.
- ¹⁵ Land ownership in the Dublin region is discussed in detail by Murphy & Potterton, 2010, P.73ff.
- ¹⁶ McNeill, 1950, pp.24-5.
- ¹⁷ Smith *ibid.* p.47-9.
- ¹⁸ Dalkey town and Bullock appear as distinct separate settlements on Gibson's 1750 'The Bay and Harbour of Dublin'.
- ¹⁹ Daly, 1991, 31.
- ²⁰ The history of the tower and battery are recounted in Bolton *et al* 2012.
- ²¹ Anon (1834) 'Dalkey, County of Dublin', *The Dublin Penny Journal*, Vol.2, No. 85 (Feb 15, 1834), pp.257-8.
- ²² Anon, (1840) 'The Sound and Island of Dalkey, County of Dublin', *The Irish Penny Journal*, Vol. 1, No.21 (Nov.21, 1840), pp.161-4.
- ²³ Preston *et al* 2002.
- ²⁴ Report by Reynolds & Nash, 2010.
- ²⁵ Brown rats have no special ecological value and can even be considered as a pest due to the fact that they carry diseases and are scavengers. Rats are serious predators of nesting seabirds and tern eggs have been found broken near rat burrows on Lamb Island in the past (BirdWatch 2005). The presence of ship/black rat is at present unknown. Ship rat is listed as threatened species in the Irish Red Data Book 2, which recommends further survey be carried out on this animal population (Whilde 1993). It is interesting to note that a colony of black rats was located on Lambay Island in the late 1980's, but its current status is unknown (Hayden and Harrington 2000).
- ²⁶ Ecoserve (2010) Marine Ecological Survey Dalkey Island slipway, June 2010. Unpublished report prepared for Dún Laoghaire-Rathdown County Council.
- ²⁷ Goodbody, R. (2010) *The Metals: from Dalkey to Dún Laoghaire*. Dún Laoghaire-Rathdown County Council
- ²⁸ Mallet, R. (1853) 'On the Experimental Determination of the Limits of the Transit Rate of the Propagation of Waves or Pulses, Analogous to Those of Earthquakes through Solid Materials', *Proceedings of the Royal Irish Academy* (1836-1869), Vol. 5 (1850 - 1853), pp. 143-145.
- ²⁹ For example, in Kerry, Mesolithic shell middens are found at Ferriter's Cove on the Dingle peninsula, with Iron Age middens on Beginish Island, while middens at Rossbehy on the Iveragh peninsula may be of 19th century origin. O'Sullivan and Sheehan, 1996, p.18.
- ³⁰ Leon, 2005, 10.
- ³¹ Liversage 1968, 121; Doyle, 1998.

-
- ³² Liversage *ibid.* 96-8.
- ³³ Liversage *ibid.* 103-4, 118-20.
- ³⁴ Hatting, 1968, 172-3, McCarthy *et al*, 1997.
- ³⁵ Grogan & Kilfeather 1996.
- ³⁶ Doyle, I. (1998) 'The Early Medieval Activity at Dalkey Island, Co. Dublin: A Re-Assessment', *Journal of Irish Archaeology*, Vol. 9 (1998), pp. 89-103.
- ³⁷ Liversage, G.D. (1968) 'Excavations at Dalkey Island, Co. Dublin, 1956-59', *Proceedings of the Royal Irish Academy* 66C, 53-233.
- ³⁸ Liversage *ibid.*; Leon, B. (2005) 'Mesolithic and Neolithic Activity on Dalkey Island—A Reassessment', *Journal of Irish Archaeology*, Vol. 14 (2005), pp. 1-21.
- ³⁹ Limited excavation to the north of the church by Liversage (1968) showed an enclosing wall and eleven inhumation burials, presumed to be of medieval date.
- ⁴⁰ Manning, 2009.
- ⁴¹ The antae are partially concealed in the later extension but are clearly visible on close inspection. The 'preservation' of antae in later walls can also be seen at Kill of the Grange.
- ⁴² Murphy & Potterton 2010. 62; Clarke argued that the kingdom of Brega limited the northwards expansion of Scandinavian settlement. Clarke, 2000, 37.
- ⁴³ Healy, 2009, 19-25; Other pre-Romanesque churches include Kill of the Grange, Killiney, Kilternan, Tully and Dalkey Island within Dun Laoghaire-Rathdown, and Killegar and Kilcroyne in north County Wicklow.
- ⁴⁴ The plasterwork suggests the former presence of a gallery, however this appears likely to be of early nineteenth century origin.
- ⁴⁵ A similar cross is mounted on the interior of Killiney Church.
- ⁴⁶ Waterman, D.M. (1970) 'Somersetshire and Other Foreign Building Stone in Medieval Ireland, c. 1175-1400', *Ulster Journal of Archaeology*, Third Series, Vol. 33 (1970), pp. 71; The church was roofed with slate at some point in the past, as previous archaeological excavations recorded roof slate from Wales and elsewhere (possibly Wicklow slate). The slate may be linked with the re-use and refurbishment of the church to house workmen during the construction of the Martello Tower and battery built on the island in 1804.
- ⁴⁷ Doyle, *ibid.* p.93.
- ⁴⁸ O'Reilly, J.P. (1904) 'Orientations and Certain Architectural Details of the Old Churches of Dalkey Town and Dalkey Island' *Proceedings of the Royal Irish Academy*. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature, Vol. 24 (1902 - 1904), pp. 195-226
- ⁴⁹ Cyclopean masonry comprises massive stones carefully shaped to fit together with a minimum of mortar. The masonry found in early medieval Irish churches emulate this by setting large slabs on edge to form the 'face' of a composite two-leaf and rubble core masonry wall.
- ⁵⁰ Wakeman 1891, 702.
- ⁵¹ Scantlebury 1960, 125.
- ⁵² Liversage 1958, 55.
- ⁵³ These stones are closely associated with early Christian sites in Ireland, with crosses occurring singly or as groups, while mass concentrations of grave-slabs are known from Clonmacnoise and Glendalough.
- ⁵⁴ O'Reilly *ibid.*
- ⁵⁵ First described by Lind, James (1753). *A Treatise on the Scurvy*. London: A. Millar
- ⁵⁶ Liversage, *ibid.*, Doyle, *ibid.*, Leon, *ibid.*
- ⁵⁷ Surviving as part of the Lawrence collection in the National Library of Ireland.