

# Skellig Michael World Heritage Site

## Management Plan 2008–2018



Comhshaol, Oidhreacht agus Rialtas Áitiúil  
Environment, Heritage and Local Government



OPW  
The Office of Public Works  
(Oifis na n-Obair-Poiblí)



# Skellig Michael World Heritage Site

## Management Plan 2008–2018

July 2008

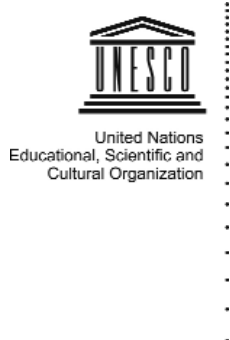


Cornhshool, Oidhreacht agus Rialtas Áitiúil  
Environment, Heritage and Local Government



# MISSION STATEMENT

To protect, conserve and promote an appreciation of Skellig Michael World Heritage Site by putting in place a management framework that will ensure its Outstanding Universal Value is preserved for present and future generations.



---

# CONTENTS

## Foreword

## Executive Summary

## Chapters

<b>1. Introduction</b>	
1.1 Introduction to the Management Plan .....	1
1.2 Purpose of the Management Plan .....	1
1.3 Preparation of the Management Plan .....	2
<b>2. Description and History of Skellig Michael</b>	
2.1 Introduction .....	5
2.2 Location .....	6
2.3 Boundary of the World Heritage Site .....	7
2.4 Geology .....	7
2.5 Description of Key Features .....	7
2.6 Brief History of Skellig Michael .....	11
2.7 The Natural Heritage of Skellig Michael .....	14
<b>3. Significance of Skellig Michael</b>	
3.1 Significance of Skellig Michael .....	19
3.2 Justification for Inscription .....	21
3.3 Authenticity and Integrity of Skellig Michael .....	22
<b>4. Management Framework</b>	
4.1 Ownership .....	25
4.2 Statutory Protections .....	25
4.3 International Guidance and Charters .....	29
4.4 Site Management .....	29
4.5 Management Issues .....	43
<b>5. Implementing the Plan</b>	
5.1 Implementation Strategy .....	49
5.2 Statement of Intent .....	49
5.3 Objectives and Actions to achieve outcomes in Statement of Intent .....	49
5.4 Monitoring and Reviewing the Effectiveness of the Management Plan .....	59

## Appendices

Appendix 1:	Table 1 — Summary of Action Programme, 2008–2018 .....	63
Appendix 2:	Site Boundary Maps and Nature Conservation Areas Designations .....	73
Appendix 3:	Description of Key Features .....	76
Appendix 4:	Summary of Archaeological Investigations, 1986–2007 .....	89
Appendix 5:	Conservation Works Undertaken to Date .....	97
Appendix 6:	Natural Heritage Information .....	105
Appendix 7:	General Information .....	111
Appendix 8:	Summary of Public Consultation Process .....	112
Appendix 9:	Contacts and Useful Websites .....	115

## Bibliography

---

## List of Figures

- Fig. 1 — Site location.
- Fig. 2 — Plan of the monastic enclosure of Skellig Michael, showing the location of the cells, oratories, church, *leachta* and the monks' toilet. Also shown are the present entrance into the enclosure and two earlier entrances.
- Fig. 3 — Skellig Michael World Heritage Site Boundary Map.
- Fig. 4 — Skellig Michael: General.
- Fig. 5 — Nature Conservation Areas Designations.
- Fig. 6 — Outline of Excavations, 1986–2001.

## List of Plates

- Pl. 1 — Aerial view of the Monastery of Skellig Michael, from the east.
- Pl. 2 — Aerial view of Skellig Michael, from south, showing the two peaks, Christ's Saddle and the Lighthouse Road.
- Pl. 3 — The Upper Section of the South Steps, leading up to the Monastery.
- Pl. 4 — Aerial view of the Monastery, showing the inner enclosure (illustrating location of cells, oratories, church and *leachta* of the Lower Monks' Garden, with the remains of an earlier cell (G)). This view also shows the top of the East Steps and original entrance into the Monastery.
- Pl. 5 — Nineteenth-century view of the Guesthouse and cross situated outside the entrance to the Monastery, published in *Notes on Irish Architecture*.
- Pl. 6 — The first detailed plan of the Monastery on Skellig Michael, published in *Notes on Irish Architecture* in the 1870s.
- Pl. 7 — View of St Michael's Church, showing collapsed retaining wall on the south side, published in *Notes on Irish Architecture*.
- Pl. 8 — Puffin (*Fratercula artica*).
- Pl. 9 — Grey Seal (*Halichoerus grypus*).
- Pl. 10 — Sea Campion (*Silene uniflora*) growing beside the steps.
- Pl. 11 — Sea Mayweed (*Tripleurospermum maritimum*).
- Pl. 12 — View of Skellig Michael and Little Skellig from the mainland.
- Pl. 13 — Early morning within the Monastery, showing Monks' Graveyard and cells.
- Pl. 14 — Working on the stabilisation of structures on the South Peak.
- Pl. 15 — Working on the South Peak aided by ropes and overseen by a full-time Safety Officer.
- Pl. 16 — Survey work on the Lower Monks' Garden prior to excavation and after removal of vegetation.
- Pl. 17 — Post-excavation recording in the Lower Monks' Garden.
- Pl. 18 — The Lower Lighthouse still in use.
- Pl. 19 — View of the Upper Lighthouse Road and Upper Lighthouse, now disused.
- Pl. 20 — Visitors within the monastic enclosure.
- Pl. 21 — A guide giving a talk to visitors in the Monastery.
- Pl. 22 — Aerial view of the Monastery, showing the inner enclosure and the Upper and Lower Monks' Gardens.
- Pl. 23 — Monastic inner enclosure.
- Pl. 24 — Aerial view of the East Steps.

- Pl. 25 — Aerial view of the North Steps.
- Pl. 26 — Aerial view of the South Steps, leading to Christ's Saddle.
- Pl. 27 — View of the South Steps from the South Peak.
- Pl. 28 — Aerial view of the Upper Monks' Garden.
- Pl. 29 — Aerial view of the west end of the Monastery, showing the retaining walls.
- Pl. 30 — View of Cells A, B and C within the inner enclosure.
- Pl. 31 — View of Cells E and F within the inner enclosure.
- Pl. 32 — The inner dome of Cell F, showing corbelling and projecting stone pegs.
- Pl. 33 — View across to Little Skellig from the east window of St Michael's Church.
- Pl. 34 — The Monks' Graveyard within the inner enclosure.
- Pl. 35 — A water cistern located just below Cell B in the inner enclosure.
- Pl. 36 — Lignite perforated disc and fragment of ring/amulet, which were both found in the Large Oratory.
- Pl. 37 — Bronze ring-pin (eleventh century) found within the drystone wall at the earlier entrance in the Upper Retaining Wall.
- Pl. 38 — Carved bone object (possible gaming piece) found in Lower Monks' Garden.
- Pl. 39 — Water-rolled pebbles found in association with a *leacht* in the Monastery.
- Pl. 40 — Decorated bone comb plate (ninth/tenth century) found on the surface within St Michael's Church.
- Pl. 41 — Sherds of medieval pottery from the Lower Monks' Garden.
- Pl. 42 — Small Oratory prior to excavation and conservation works.
- Pl. 43 — Aerial view of the Small Oratory Terrace post excavation, consolidation and conservation works.
- Pl. 44 — The protective canopy at Cross Cove.

## List of Tables

- Table 1 — Summary of Action Programme 2008–2018.
- Table 2 — Excavations on Skellig Michael 1986–2007.
- Table 3 — SPA Bird Species Count Data.
-

# FOREWORD

---



It gives me great pleasure to publish this Management Plan for Skellig Michael, one of only three UNESCO World Heritage Sites on the island of Ireland. It is appropriate that we are reminded of the significance of the World Heritage designation: UNESCO considers for inscription sites of natural and cultural heritage properties that are considered to be of 'Outstanding Universal Value', i.e. that have 'cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such the permanent protection of this heritage is of the highest importance to the international community as a whole'. The definition reminds us that we have a duty not just to this generation or to the Irish people but to the future generations of all nationalities to protect this unique and wonderful site.

The preparation of this plan to preserve this superb World Heritage Site is an important step on a journey that began when the monks first colonised Skellig Michael, perhaps as early as the sixth century.

The Management Plan aims to protect and preserve the Outstanding Universal Value of the site and to present it in a sustainable, respectful fashion, enabling local communities and visitors to enjoy its cultural and spiritual richness. The policies in this plan have been informed by an extensive public consultation process. The level of response to that process reflected the desire of individuals and organisations to ensure that the special qualities of this World Heritage Site are safeguarded for generations to come. It is our responsibility to work together to implement the policies and to deliver the actions detailed in the implementation strategy of the Management Plan.

I am extremely grateful to the many bodies and individuals who have worked so hard to produce this plan, in particular the members of the Skellig Michael World Heritage Site Steering Group, the thirty respondents to the call for public comment and to UNESCO officials. I am confident that this document will prove to be an invaluable management tool for all those involved in the ongoing conservation and presentation of this unique and special place.

A handwritten signature in blue ink, which appears to read "John Gormley". The signature is fluid and cursive.

John Gormley TD,  
Minister for the Environment, Heritage and Local Government

---



# *EXECUTIVE SUMMARY*

---

The Skellig Michael Management Plan 2008–2018 has been prepared by the Department of the Environment, Heritage and Local Government (DOEHLG), in conjunction with the Office of Public Works (OPW), following an extensive consultation process. The aim of the plan is to protect and preserve this World Heritage Site (WHS), also known as Great Skellig. The plan provides information on the various aspects of the management policy for Skellig Michael, including conservation and presentation, visitor management, the legislative protections it enjoys and the development considerations necessary to protect the site into the future.

The plan sets out the key objectives and long-term vision for the management of Skellig Michael, provides a brief history of the site and describes its key cultural and natural heritage features. It defines the Outstanding Universal Value of the site and the justification for inscription of the site on the UNESCO World Heritage List. It proposes a policy framework for the effective management, preservation and protection of the site for the future while sustaining its intangible and cultural significance for the benefit of local communities and visitors.

Chapter 1 provides an introduction to the plan, its purpose and preparation. A brief description of Skellig Michael together with the historical background and key geological features of the site are provided in Chapter 2. The significance and values, cultural heritage, natural heritage and intangible heritage of Skellig Michael World Heritage Site are set out in Chapter 3. The site is described as an outstanding example of a perfectly preserved early medieval settlement. It is maintained that the presence of the monks for such a lengthy period has imbued the site with such a strong sense of spirituality that it is palpable to anyone spending time on the island. It illustrates, as no other site can, the extremes of a Christian monasticism characteristic of North Africa, the Near East and Europe.

The current management framework for the site is dealt with in Chapter 4. The site, with the exception of the lighthouse area, lies in State ownership. The DOEHLG is the State body responsible for heritage policy matters under the World Heritage Convention. This chapter sets out the range of protections for the site: national legislation, local mechanisms, international guidelines, statutory and non-statutory guidance. A number of management issues are identified that must be addressed under the plan. The Management Plan implementation strategy is covered in Chapter 5. The plan is described as a tool for the effective implementation and co-ordination of all the various policies and objectives for the preservation of the island. A statement of intent is provided, setting out the key objectives of the plan and the actions necessary to achieve those objectives.

---

# *CHAPTER 1*

## *INTRODUCTION*





## 1.1 Introduction to the Management Plan

This Management Plan has been developed to protect and preserve Skellig Michael World Heritage Site (WHS), also known as Great Skellig. The plan addresses cultural and natural heritage issues in an integrated manner. It has been produced by the Department of the Environment, Heritage and Local Government (DOEHLG), Ireland, in conjunction with the Office of Public Works (OPW), and has been developed in consultation with local interest groups, non-governmental organisations and other interested parties. The area covered by the plan is the island of Skellig Michael, with the exception of the lower (working) lighthouse and its curtilage and the helipad area and its adjacent store.

It is a recommendation of the Operational Guidelines issued by the World Heritage Committee that all States Parties have adequate management frameworks, a documented management system and appropriate legislation in place to protect the World Heritage status of inscribed sites. This plan provides a framework for the proactive management of the site, helping to ensure that its Outstanding Universal Value is sustained and preserved for future generations.



*Pl. 1 - Aerial view of the Monastery of Skellig Michael, from the east.*

## 1.2 Purpose of the Management Plan

The Skellig Michael Management Plan 2008–2018 sets out the key objectives and future vision for the management of Skellig Michael. Its mission is to ensure the long-term conservation, preservation and presentation of this spectacular site to international standards by putting in place a management framework that will protect its Outstanding Universal Value. The plan aims to ensure that the site's unique qualities and global significance are understood in order to conserve and safeguard the inherited cultural and historical assets.

The Management Plan, developed over a period of two years, includes:

- a brief history and description of the key features of cultural and natural heritage on Skellig Michael;
- identification of the issues that affect the core values of the site;
- policies for effective management of this site into the future while sustaining its spiritual and cultural significance.

The plan will inform the day-to-day and long-term management of Skellig Michael. It will be a working document that is open to periodic review, with additions or amendments being made as conditions change.

### **1.3 Preparation of the Management Plan**

The Skellig Michael WHS Steering Group was established by the Department of the Environment, Heritage and Local Government in 2006 to oversee the preparation of the Management Plan, in accordance with Ireland's obligations under the World Heritage Convention. The group was comprised of technical experts from the National Parks and Wildlife Service (NPWS), National Monuments Service, Department of the Environment, Heritage and Local Government and the Office of Public Works, with administrative support and project management provided by the Heritage Policy and Architectural Protection Unit of the DOEHLG. Responsibility for the implementation of the Management Plan lies jointly with the DOEHLG and the OPW.

In the course of preparing the Management Plan the group met regularly to develop a consensus on the key priorities. A draft plan was launched by the Steering Group in July 2007, for public consultation. The consultation period ran from 19 July 2007 to 28 September 2007. The public consultation process involved placing advertisements in the national and regional newspapers, a press release, publication of the Draft Management Plan on the DOEHLG's website (<http://www.environ.ie>) and the circulation of over 100 copies of the consultative document to interested parties and relevant organisations. Over 30 submissions were received in response to the public consultation stage of the preparation of the Skellig Michael Draft Management Plan. There was a wide and varied scope to the submissions received, with significant input from community interest groups, professional and technical personnel, professional institutes, State-sponsored bodies, such as the Heritage Council, a member of the Irish Parliament (Dáil Éireann), non-governmental organisations, a local authority, guides, academics and the wider public.

All comments received were considered and taken into account by the Steering Group in the preparation of this plan. The group also consulted with agencies such as the National Tourism Development Authority, Fáilte Ireland, regarding comments received on sustainable tourism during the consultative phase. The plan also takes into consideration recommendations of the preliminary findings of an UNESCO reactive mission to Skellig Michael, which took place in November 2007. This plan was formally submitted to UNESCO's World Heritage Centre in July 2008.

A scenic view of Skellig Michael, a rugged island with a prominent rock formation and a path leading to stone structures. The foreground shows a grassy slope with a stone path leading towards several large, circular stone structures. In the background, a large, jagged rock formation rises from the sea, and the sky is blue with some clouds.

# CHAPTER 2

## *DESCRIPTION AND HISTORY OF SKELLIG MICHAEL*



## 2.1 Introduction

Skellig Michael is the most spectacularly situated of all the early medieval island monastic sites, with a well-preserved Monastery and remote Hermitage. The island's isolation has helped to preserve and protect the monastic remains. Their state of preservation and authenticity makes Skellig Michael of immense and immeasurable importance. It represents a unique cultural achievement, illustrating a significant period of history and a civilisation that has disappeared.



*Pl. 2 - Aerial view of Skellig Michael, from south, showing the two peaks, Christ's Saddle and the Lighthouse Road.*

Skellig Michael is also internationally renowned as one of the most important sites for breeding seabirds in Ireland. The steep rocky slopes and cliffs provide nesting places for species such as Fulmar, Kittiwake and Guillemot, while Storm-Petrel, Manx Shearwater and Puffin nest in burrows and other holes throughout the island.



## 2.2 Location

Country	Ireland
County	Kerry
Townland	Great Skellig
World Heritage Name	Skellig Michael
Year of Inscription	1996
National Co-ordinates	Longitude: 10°, 32', 19.5 secs N Latitude: 51°, 46'; 19.5 secs W National Grid Ref.: 024812 060654 (The Monastery)

The island of Skellig Michael lies 11.6km off Bolus Head, the westernmost tip of the Iveragh Peninsula in Co. Kerry, Ireland.

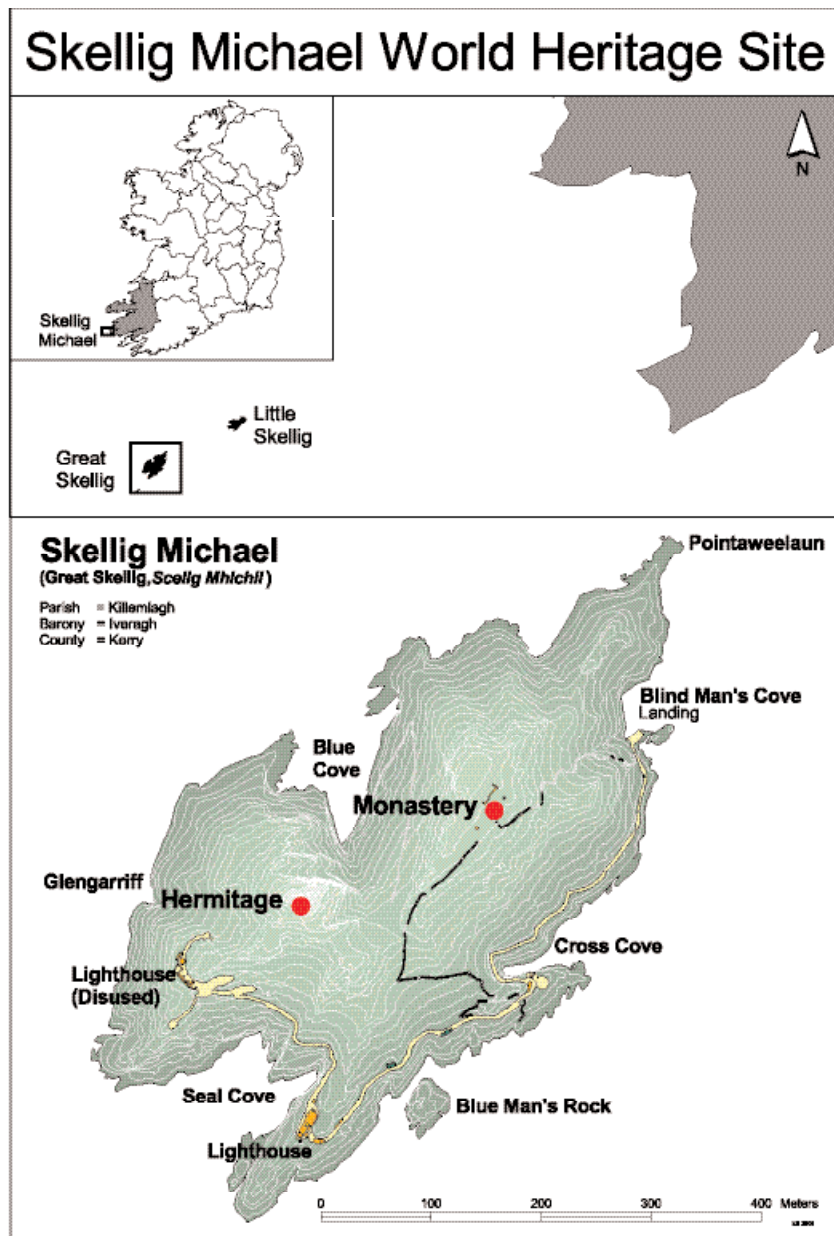


Fig. 1 - Site Location.

### 2.3 Boundary of the World Heritage Site

The island of Skellig Michael is approximately 21.9 hectares in size. The WHS boundary is drawn tightly to the island, with a buffer zone formed naturally by the Atlantic Ocean. The boundary of the WHS does not include the smaller, neighbouring island of Little Skellig or the surrounding sea area. Whilst these areas are deemed to be of great natural importance, they would not be considered to be of Outstanding Universal Value nor of World Heritage Site significance. The boundary of the WHS will be kept under review, however, as the natural heritage management develops further.

### 2.4 Geology

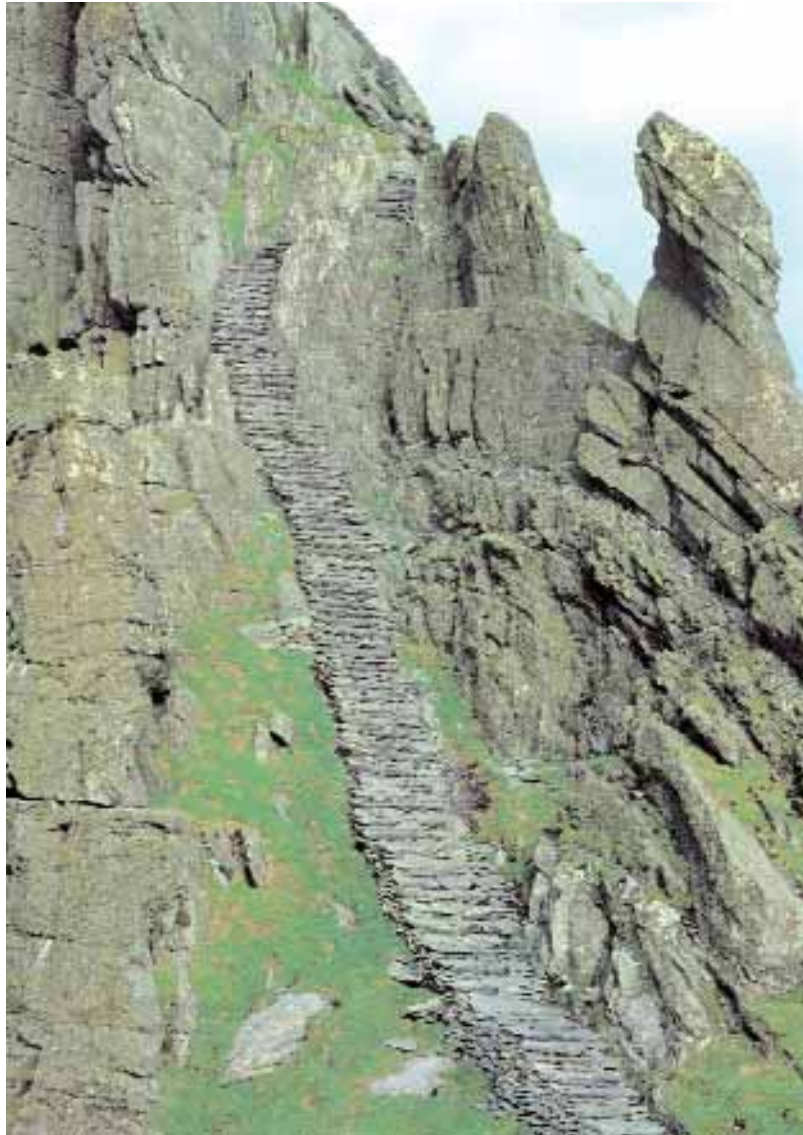
The pinnacles of the Skellig Islands, rising 218m above the Atlantic Ocean, superbly illustrate the relationship between landscape and geology. The durable Old Red Sandstone from which the islands are shaped also forms the backbone of the mountainous regions of south Kerry and west Cork, including the Macgillycuddy's Reeks and the Caha Mountains. These rocks began life as sediments deposited by flooding rivers during the Devonian period, some 400 million years ago. The topography of the region that we see today, of elongate east–north-east to west–south-west valleys separated by intervening ridges, is the result of a period of folding and mountain-building some 100 million years after the original sediments were laid down. Sea levels subsequently rose, forming the deep marine inlets of the south-west, such as Kenmare River and Bantry Bay, and isolating the Skelligs from the mainland.

The mountain-building movements compressed the sedimentary rock into hard, finely grained layers of sandstone and slate and created great lines of fracture, jointing and faulting. Erosion along major faultlines in the centre of Skellig Michael caused the rock to gradually break and fall away, leaving behind a U-shaped depression 130m above sea level, which is today named Christ's Saddle. Two peaks remain, one each side of the valley: one to the north-east, 185m high, is the location of the Monastery; one to the south-west, 218m high, is the location of the Hermitage. Erosion along fault and cleavage lines also created the three landing coves on the island.

### 2.5 Description of Key Features

There are two major sites on Skellig Michael: an extensive and well-preserved Monastery constructed just below the top of a high sloping rock platform on the east side of the island, and a Hermitage constructed on ledges high on the South Peak.

Three long flights of steps (East Steps, South Steps and North Steps) lead up to the Monastery from three different landing places. They comprise initially of rock-cut steps, which later give way to drystone construction. The base of the East Steps and a lower section of the South Steps were destroyed during the construction of the pier and Lighthouse Road in the 1820s.



*Pl. 3 - The Upper Section of the South Steps,  
leading up to the Monastery.*

The Monastery consists of an inner enclosure consisting of two oratories, a mortared church, seven cells (five of which are intact) and the remains of a beehive toilet, water cisterns, a cemetery, *leachta*, crosses and cross-slabs. It also includes two large terraces referred to as the Upper and Lower Monks' Gardens. High retaining walls support all the terracing, upon which everything is constructed.

On the other side of the island rock-cut steps and ledges lead up to the Hermitage. It comprises a series of platforms, traverses, enclosures and terraces daringly constructed on quarried ledges just below the peak. The Oratory Terrace still retains its original features: an oratory, altar, *leacht*, bench, cisterns and a possible shrine. Crosses and a cross-slab were also found at this site. Elsewhere on the island, associated with the climb, are additional monastic features. (Full descriptions of the monastic features of Skellig Michael are given in Appendix 2.)



*Pl. 4 - Aerial view of the Monastery, showing the inner enclosure (illustrating location of cells, oratories, church and leachta of the Lower Monks' Garden, with the remains of an earlier cell (G)). This view also shows top of the East Steps and original entrance into the Monastery.*

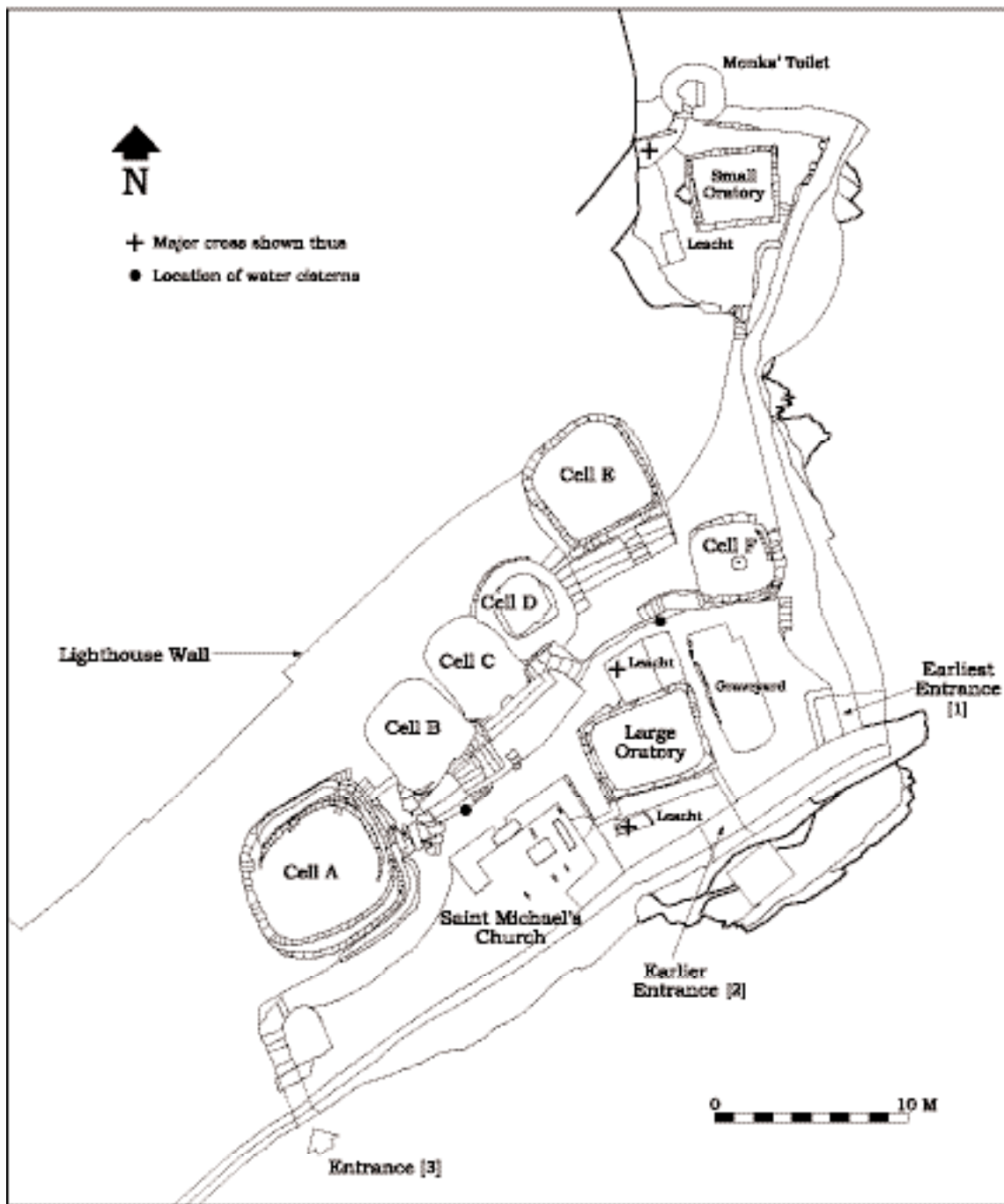


Fig. 2. - Plan of the monastic enclosure of Skellig Michael, showing the location of the cells, oratories, church, leachta and the monks' toilet. Also shown are the present entrance into the enclosure and two earlier entrances.

## 2.6 Brief History of Skellig Michael

### 2.6.1 Earliest References

The word *Sceillic* means a rock, particularly a steep rock. The first reference to Skellig occurs in legend, where it is given as the burial place of Ir, son of Milesius, who was drowned during the landing of the Milesians.

Françoise Henry, a noted academic, mentions a text from the eighth or ninth century in which reference is made to an episode of strife between the Kings of West Munster and the Kings of Cashel. Duagh, King of West Munster, is said to have 'fled to Scellecc'. This event is attributed to the fifth century, but we have no means of knowing if a monastic settlement already existed on the island at this time. Charles Smith, writing in 1756, refers to the monastery being founded by St Fionan, who lived in the sixth century.

### 2.6.2 Early Documentary History

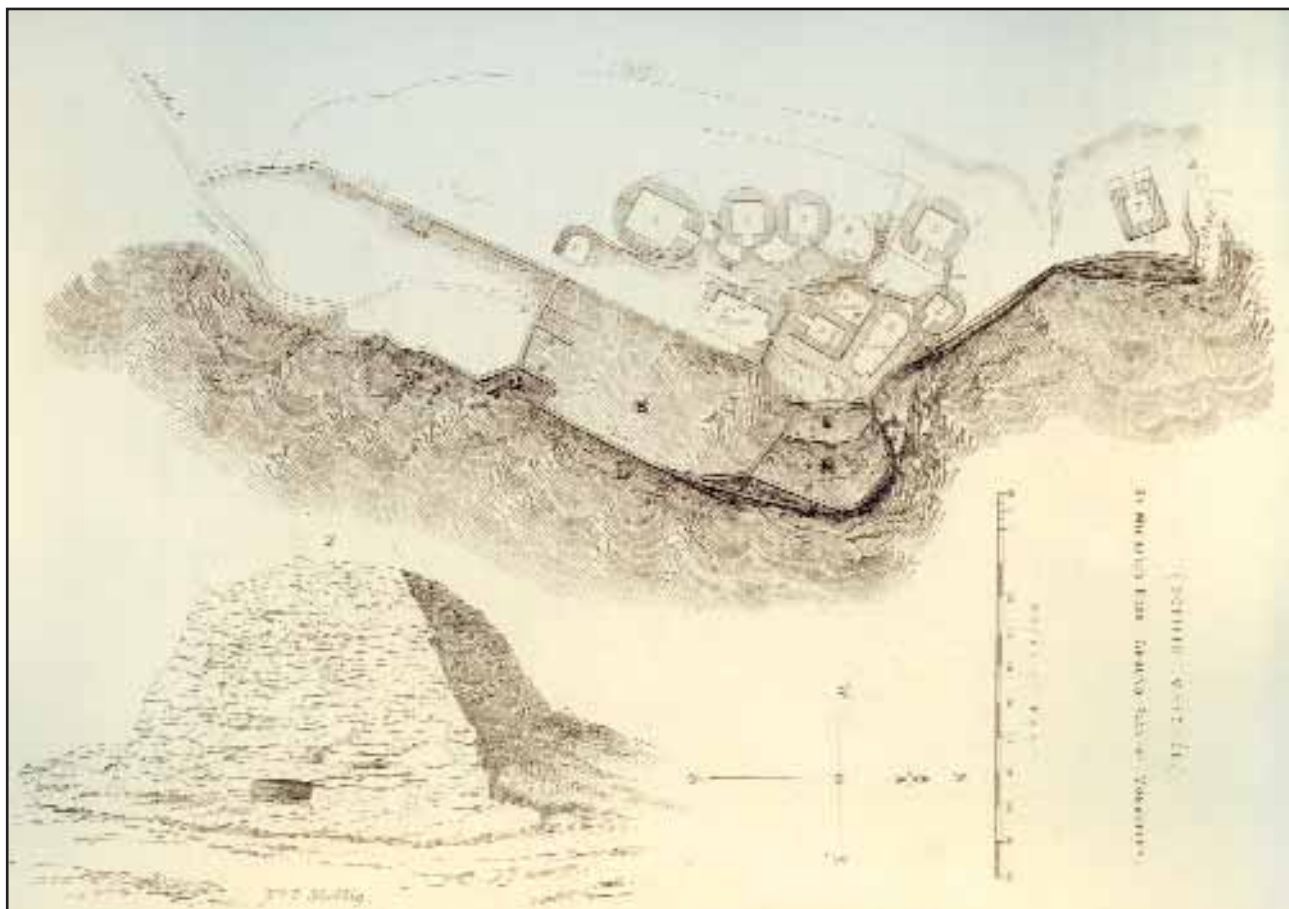
The earliest documentary evidence is *The Martyrology of Tallaght*, written near the end of the eighth century by Mealruain. It commemorates the death of a monk from Skellig called Suibhni ('Suibhni of Scelig'). This reference to Skellig in the festology of one of the most celebrated monasteries of Ireland suggests that Skellig was already well established at this time. A monastery may, perhaps, have been founded here as early as the sixth century, but in the absence of evidence precise dating is impossible.

Skellig is referred to in the *Annals of Inisfallen* under the year 824 and also in the *Annals of Ulster*, which give an account of the plunder of the Monastery by the Vikings. In 882 the *Annals of Inisfallen* refer to the death of 'Flann, son of Cellach, abbot of Scelec'.

The Monastery was dedicated to St Michael at some time in the tenth century. This is suggested by two references to the Monastery in the *Annals of the Kingdom of Ireland* by the Four Masters. The first reads, 'Age of Christ, 950, Blathmhac of Sgeillic died'; the second reads, 'Age of Christ, 1044, Aedh of Scelic-Mhichil died'. Thus one can assume that the dedication to St Michael occurred between the years 950 AD and 1044 AD. In monasteries it was customary to build a new church to celebrate a dedication, and the oldest part of the church, known as St Michael's Church, fits architecturally into this period.



Pl. 5 - Nineteenth-century view of the Guesthouse and cross situated outside the entrance to the Monastery, published in 'Notes on Irish Architecture'.



Pl. 6 - The first detailed plan of the Monastery on Skellig Michael, published in 'Notes on Irish Architecture' in the 1870s.



Pl. 7 - View of St Michael's Church, showing collapsed retaining wall on the south side, published in 'Notes on Irish Architecture'.

The church of St Michael was mentioned in *The History and Topography of Ireland* by Giraldus Cambrensis, who was in Ireland in the late twelfth century. His account of the miraculous supply of communal wine for daily Mass in St Michael's Church implies the constant occupancy of the Monastery at the time.

### 2.6.3 Later Developments

In the early thirteenth century a general climatic deterioration resulted in colder weather and increased storms on the seas around Skellig. This, along with a shift in the Irish Church from a monastic to a diocesan structure, signalled the end of Irish eremitic island colonies, with the result that the community of Skellig Michael eventually moved to the mainland at Ballinskelligs. This was probably not a single event, but is likely to have happened over a period of time.

The island probably continued to be used as a dependency of the Augustinian Abbey at Ballinskelligs, the island Monastery being occupied by some monks during the summer months. The prior of Ballinskelligs was still addressed in papal letters as 'Augustinian prior of St Michael's, Roche (de Rupe)'. The Augustinians must also have been actively involved in promoting and managing pilgrimages to the island and in maintaining the structures there.

Skellig Michael remained in the hands of the Augustinian monks until 1578 when, as a result of the Desmond rebellions, Queen Elizabeth I dissolved certain monasteries that were under the protection of the Earl of Desmond. The Skellig Islands thus passed into secular hands, to the Butler family.

Although the monastery ceased to exist, the island continued to be used as a place of pilgrimage. In 1756 Charles Smith gives his first recorded description of the rock. He refers to the difficult and dangerous pilgrimages and says that 'many persons, about twenty years ago, came from the remotest parts of Ireland to perform these penances, but the zeal of such adventurous devotees has very much cooled of late'.

In the early 1820s the Corporation for Preserving and Improving the Port of Dublin (the predecessor of the Commissioners of Irish Lights) purchased the island from John Butler of Waterville under a compulsory purchase order for the purpose of erecting two lighthouses on the Atlantic side. These were made accessible by an improved landing on the east side and a road that was blasted out on the precipitous southern and western sides of the island.

In 1880 the OPW took the monastic remains into guardianship and commenced a project for the repair of collapsed structures. Since that time the OPW has continued in its efforts to maintain and preserve the monastic remains. The State purchased the island in 1989 from the Commissioners of Irish Lights, with the exception of the lower (working) lighthouse and its curtilage and the helipad area with its adjacent store. The Commissioners also retained a right-of-way over the road.



## 2.7 The Natural Heritage of Skellig Michael

### 2.7.1 Birds

The Skellig islands have been recognised as two of Ireland's most important sites for breeding seabirds for several hundred years. Both the size of the seabird colonies and the diversity of species present make these islands very significant, both on a national and an international scale. Skellig Michael, along with the Blasket island group (of five islands) and Puffin Island, supports some of the biggest breeding populations of Manx Shearwater and Storm Petrel in the world. Other seabird species breeding on Skellig Michael include Rulmar, Kittiwake, Guillemot and Puffin. (For more details on the seabirds, see Appendix 6.)

Skellig Michael is known as a traditional eyrie for Peregrine Falcon, however the birds do not breed here every year. One pair of Chough is recorded as breeding here. Other birds recorded as breeding in small numbers include Raven, Rock Pipit and Wheatear.

Due to its ornithological importance, Skellig Michael is designated as a Statutory Nature Reserve, a Special Protection Area and is a proposed Natural Heritage Area. (Further information on designations is contained in Chapter 4.)



Pl. 8 - Puffin (*Fratercula artica*).

### 2.7.2 Mammals

Several mammals have been recorded on Skellig Michael over the years. Grey Seal haul out on rocky ledges around the island and while the numbers are not significant on a national scale, they add to the diversity of the island's fauna. This species is listed under Annex II of the EU Habitats Directive and the Irish population is monitored regularly. Other mammals recorded comprise Rabbit and House Mouse. The Rabbit is a relatively recent introduction, having been brought to the island in the early nineteenth century.



Pl. 9 - Grey Seal (*Halichoerus grypus*).

### 2.7.3 Vegetation

Much of Skellig Michael is composed of poorly vegetated habitats such as rocky sea cliffs and exposed rock. The vegetation that does occur is typical of highly exposed maritime conditions, limited by thin soil, steep ground, salt spray and high winds. Common plant species include Thrift, Sea Campion and Rock Sea-Spurrey, with patches of Red Fescue, Dock and Sea Mayweed occurring frequently. Lavelle (1997) records 38 species of higher plant (see Appendix 6).



Pl. 10 - Sea Campion (*Silene uniflora*)  
growing beside the steps.



Pl. 11 - Sea Mayweed  
(*Tripleurospermum maritimum*).





*CHAPTER 3*

*SIGNIFICANCE OF SKELLIG  
MICHAEL*



### 3.1 Significance of Skellig Michael

Per Article 1 of the 1972 World Heritage Convention, in terms of the category of properties set out, Skellig Michael is deemed to be a group of buildings. The entire island was inscribed on the World Heritage List, however per paragraph 47 of the Operational Guidelines for the implementation of the World Heritage Convention it can also be considered a cultural landscape of value. As such, it exhibits the 'combined works of nature and man and ... which are outstanding universal value from the historical [and] aesthetic ... point of view'. It is this interaction between the monks of Skellig Michael and the island's topography in what was a physically harsh environment that gives the site its outstanding cultural value.



*Pl. 12 - View of Skellig Michael and Little Skellig from the mainland.*

#### 3.1.1 Natural Value

The very nature of the Skellig Islands provides a safe haven for immensely important populations of seabirds, where they can nest and rear their young. The surrounding Atlantic Ocean provides rich feeding grounds whilst making access difficult for humans and keeping the islands free from predators. Vascular plants on the island, though not of national importance, contribute to the beauty and ecology of Skellig Michael.

#### 3.1.2 Cultural Value

Skellig Michael is the most spectacularly situated of all the early medieval island monastic sites. The extreme remoteness of Skellig Michael has allowed for an exceptional state of preservation, which is what makes it unique.

As stated at the time of nomination as a WHS, the Monastery and Hermitage on Skellig Michael represent a unique artistic achievement and are an exceptional testimony to a civilisation that has disappeared. They provide an outstanding example of a perfectly preserved early medieval monastic settlement, and the architectural ensemble is unique because of its level of preservation. It illustrates a significant stage in building history. During the course of conservation and repair works it has been possible to examine the structures in detail and also to work out a relative chronology for the cells. A clear evolution of drystone masonry techniques is evident, so this site offers a unique documentation of the development of this type of architecture and construction.

### 3.1.3 Intangible Value

The dramatic topography of the island and the integration of the various monastic elements within this landscape reinforce the uniqueness of this site. The presence of the monks on the island for such a long period of time has bequeathed us more than just physical remains. They have imbued the place with a strong sense of spirituality, which is palpable to anyone who has had the opportunity and privilege of spending time there. The physical remains bear testament to the remarkable achievements of the monks, which cannot fail to invoke a sense of wonder and awe. The sense of remoteness and removal from everyday life is further reinforced by the island's distance from the mainland and its frequent inaccessibility due to the unpredictable Atlantic Ocean.



*Pl. 13 - Early morning within the Monastery, showing Monks' Graveyard and cells.*

Following the monks' departure from the island and the establishment of the monastic settlement at Ballinskelligs, Skellig Michael continued to play an important role in their religious life. Throughout the medieval period veneration of the site continued and developed. In time it became renowned throughout Europe as a place of special pilgrimage and folk memory of this survived into the nineteenth century.

In the post-medieval period Skellig Michael was the location of two separate lighthouses that provided a beacon for passing ships, thereby establishing its important position in Ireland's maritime history.

### 3.1.4 Socio-economic Value

As well as being an icon of the region and a source of local pride, Skellig Michael forms an important part of the wider local economy. The island plays a role in aiding the economy of the Iveragh Peninsula and surrounding regions. Revenue is generated through the provision of amenities and services to tourists in the area. The enhancement of the visitor experience as outlined in this Management Plan will further help to support the local community and region.

## 3.2 Justification for Inscription

UNESCO regards for inscription sites of natural and cultural heritage that are considered to be of 'Outstanding Universal Value' i.e. that have 'cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such the permanent protection of this heritage is of the highest importance to the international community as a whole'.

The World Heritage Committee has developed precise criteria for the inscription of properties on the World Heritage List. In 1996 Skellig Michael was inscribed by UNESCO on the World Heritage List and is one of three World Heritage Sites on the island of Ireland. This listing recognises the outstanding universal significance of this cultural landscape and the importance of its protection to the highest international standards.

In its recommendation, in 1996, for inscription of Skellig Michael onto the UNESCO World Heritage List on the basis of criteria (iii) and (iv), ICOMOS — an advisory body to UNESCO — stated that 'Skellig Michael is an outstanding, and in many ways, unique, example of early religious settlement deliberately sited on a pyramidal rock in the ocean, preserved because of a remarkable environment. It illustrates as no other site can, the extremes of a Christian monasticism characterising much of North Africa, the Near East, and Europe.'

#### Criteria (iii)

... to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

#### Criteria (iv)

... to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.



### 3.3 Authenticity and Integrity of Skellig Michael

The island's isolation has helped preserve and protect it from agents of destruction that have adversely affected most other sites of the period. Alterations were made during the lighthouse-builders' occupation in the 1820s, but it has been possible to document these through investigation. Due to the vicissitudes of time, the extreme environment and increased visitor pressure, a programme of preservation works has been in train since the late 1970s for structural consolidation and repair. The philosophy underpinning this work is that all original features are retained and conserved *in situ*. This approach to the work has been recognised by UNESCO, during the inscription process, as guaranteeing the authenticity of the site.

Even though not mentioned at the time of inscription, integrity is an important issue to be taken into account. Integrity is a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes. In the case of Skellig Michael, there are two types of integrity: structural-historical integrity, in that the structures have evolved over time; and visual-aesthetic integrity, in other words, the iconic image that has been retained.

An aerial photograph of a coastal archaeological site. The site is situated on a steep, rocky hillside that has been partially cleared of vegetation, revealing stone foundations and walls. In the center, there are several large, circular stone structures with conical roofs, likely storage or processing buildings. A prominent stone wall runs along the left side of the site, possibly a defensive or boundary wall. The surrounding landscape is a mix of green grass and dark, jagged rock formations. In the upper left corner, the blue ocean is visible. The text 'CHAPTER 4' is overlaid in white, serif font in the upper left quadrant.

*CHAPTER 4*

*MANAGEMENT FRAMEWORK*



## 4.1 Ownership

Skellig Michael World Heritage Site is owned by the Minister for the Environment, Heritage and Local Government on behalf of the Irish people, with the exception of the lighthouse area referred to in Section 1.1. The Department of the Environment, Heritage and Local Government is the State body responsible under the World Heritage Convention for policy relating to the built and natural heritage of the site. The Office of Public Works is responsible for the management of the site.

## 4.2 Statutory Protections

The protection and conservation of Skellig Michael is controlled by a range of national legislation, local mechanisms, international guidelines, statutory and non-statutory guidance. These legislative provisions include, amongst others, the National Monuments Acts 1930–2004, the Wildlife Act 1976 and 2000, Planning and Development Acts, various EU Directives and international charters.

### 4.2.1. National Legislation

#### National Monuments Acts 1930–2004

Skellig Michael is a National Monument, as defined in the National Monuments Act 1930 (as amended). The National Monuments legislative code makes provision for the protection and preservation of National Monuments and for the preservation of archaeological objects in the State. As such, it provides statutory protection for archaeological elements of the nation's built heritage.

Skellig Michael is afforded the highest level of statutory protection. It is a National Monument in State ownership, the preservation of which is a matter of national importance by reason of its historical, architectural, traditional, artistic or archaeological interest.

Under the provisions of Section 14 of the National Monuments Act 1930 (as substituted by Section 5 of the National Monuments (Amendment) Act 2004) the prior, written consent of the Minister for the Environment, Heritage and Local Government is required for any works in respect of a national monument of which the Minister or a local authority are the owners or the guardians or in respect of which a preservation order is in force, that would:

- demolish, remove, disfigure, deface, alter, or in any manner injure or interfere with the National Monument or,
- involve excavating, digging, ploughing or otherwise disturbing the ground within, around or in proximity to the National Monument or,
- renovate or restore the National Monument or,
- involve selling the National Monument or any part of it for exportation or to export it or any part of it.

To ensure that the widest possible range of archaeological concerns are taken into account, the Minister is required to consult with the Director of the National Museum of Ireland before granting such consent.

In considering whether or not to grant such consent, the Minister may have regard to a number of issues, including, but not limited to:

- the preservation, protection or maintenance of the archaeological, architectural, historical or other cultural heritage or amenities of, or associated with, the National Monument;
- any environmental, cultural, social, recreational or economic benefit that would accrue to the State or area in which the National Monument is situated;
- the need to collect or disseminate information on National Monuments or in respect of heritage generally.

### **Wildlife Acts 1976 and 2000**

Under the provisions of the above Acts, Great Skellig is covered by two nature conservation designations:

#### **1. Nature Reserve**

Nature reserves on lands owned by the Minister or by the State are designated by Establishment Order under Section 15 of the Wildlife Act 1976, as amended by the Wildlife (Amendment) Act 2000. Great Skellig was designated a Statutory Nature Reserve in 1988 (S.I. No. 235/1988).

Under the Wildlife Acts there is an obligation to manage land designated as a Nature Reserve in accordance with the objectives for which it is designated. The Establishment Order for the Great Skellig Nature Reserve states that the island is:

‘the breeding habitat of certain species of seabirds and that the said habitat is likely to benefit if measures are taken for its protection and that it is desirable to establish the said land as a nature reserve and that the proper management of the said land as a nature reserve would not be precluded by any interest or any other person in or over the said land, for the purpose of conserving the said habitat ...’

#### **2. Natural Heritage Area (Proposed)**

Great Skellig is a proposed Natural Heritage Area (NHA) (Site Code 1954). NHAs are the basic designation for the protection of wildlife in Ireland. They are defined in Section 2 of the Wildlife Act 1976, as amended by Section 6 of the Wildlife (Amendment) Act 2000, as ‘an area which is worthy of conservation for one or more species, communities, habitats, landforms or geological or geomorphological features, or for its diversity of natural attributes’. Protection is afforded to NHAs under several sections of the Wildlife (Amendment) Act 2000, including restrictions and prohibitions on carrying out certain works. NHAs are normally also listed in a County Development Plan.

## Planning and Development Acts 2000–2006

Ireland has a modern and effective planning legislative code that offers comprehensive environmental and conservation protection. Skellig Michael is protected under the Planning and Development Acts 2000–2006 and the Planning and Development Regulations 2001, as amended, and through the exercise of the functions of the relevant planning authority, i.e. Kerry County Council, in its democratic and consultative County Development Plan process. All of the State, Semi-State and Non-Government Organisations having an interest in the built and natural heritage are invited and facilitated to participate in both the County Development Plan process and the planning application and appeals processes. The County Development Plan is drawn up after an extensive consultation process and local community input. The resultant Draft Development Plan is put on public display for a specified period of time. The local authority is required to consider the comments received in this open and transparent process.

The Kerry County Development Plan 2003–2009 provides the current strategic policies for the county. The plan sets out a number of objectives under its Built Heritage and Natural Environment sections. The archaeological heritage in the county is unique and the local authority is keenly aware of the need to protect it through implementation of the following objectives:

- the preservation of archaeological monuments and sites included in the Record of Monuments and Places;
- the identification of archaeological sites;
- the protection of settings of archaeological interest;
- the enhancing of public awareness and the provision of advisory guidance.

These wide-ranging planning objectives incorporate arrangements for taking into account the advice and recommendations of the National Monuments Service, the National Museum of Ireland and other statutory agencies with regard to the identification and preservation of archaeological monuments and sites in the county.

The archaeological structures, natural features, diverse habitat and vegetation on Skellig Michael combine to produce some of the most spectacular scenery in Ireland. The Council recognises the importance to the overall landscape of these features and strives to protect and enhance the landscape and physical beauty of the area by including the following objectives under the Natural Environment Section of the County Development Plan:

- to ensure that development likely to have serious adverse effects on the areas listed will not normally be permitted. The designation of sites does not imply a total restriction on all development. However, there will be a presumption against certain damaging types of development.
- To ensure that any development proposal in the vicinity of or affecting in any way a designated Special Area of Conservation (SAC), Special Protection Area (SPA) or Natural Heritage Area (NHA) provides sufficient information, showing how its proposals will impact on the habitat, and also indicating appropriate amelioration.

- To maintain the conservation value of those sites selected as SPAs, as well as any other sites that may be so identified during the lifetime of the plan.
- To maintain the conservation value of all NHAs proposed for designation during the lifetime of the plan.

#### **4.2.2 EU Birds Directive**

Great Skellig, along with Little Skellig, has been designated a Special Protection Area (SPA) (S.I. No. 48 / 1986: Site Code IE 0004007) under the EU Birds Directive (79/409/ EEC). A SPA is an area deemed to be of international significance for birds, as designated by the Minister for the Environment, Heritage and Local Government by Order. SPA designation criteria include sites that regularly hold 10,000 pairs of seabirds and sites that hold 1 per cent or more of the all-Ireland population of a species listed in Annex 1 of the Birds Directive.

The SPA is designated for the assemblage of 20,000 seabirds, as well as for Manx Shearwater, Storm Petrel, Gannet and Puffin. (See Appendix 6 for data.) SPAs, along with Special Areas of Conservation (SACs), which are designated under the Habitats Directive (EU Directive No. 92/43/EEC), collectively form part of Natura 2000, a network of protected areas throughout the European Union.

Article 4.1 of the Birds Directive provides that Member States classify the most suitable territories as SPAs. This Article was implemented in Ireland in the first instance by the E.C. (Conservation of Wild Birds) Regulations 1985 (S.I. No. 291 of 1985). The enforcement provisions for SPAs were changed by the Habitats Directive. This is implemented in Ireland by the European Communities (Natural Habitats) Regulations 1997 (S.I. No. 94/1997) and its amendments in 1998 and 2005 (S.I. No. 233/1998 and No. 378/2005). Article 6 of the Habitats Directive requires an appropriate assessment of any works, plans or projects.

In order to protect ecologically important sites, certain activities may be restricted within designated areas. These activities (known as notifiable activities, damaging activities or operations requiring consent) have been identified as having the potential to destroy or significantly alter, damage or interfere with the ecology of a site. The list of such activities varies depending on the habitats and species present. (See Appendix 6 for a list of notifiable actions.)

Secondary legislation is currently being prepared in Ireland and it proposes to enlarge the area of the Skelligs SPA to include the area of sea between and around the islands. (See Appendix 2 for map of Nature Conservation Area Designations.) The National Parks and Wildlife Service (NPWS) of the DOEHLG will prioritise the compilation of a five-year Conservation Management Plan for the Skelligs SPA. This plan will put the ecological importance of the site in context on both a national and an international scale. It will describe the site, concentrating on the features for which it is designated, in this case breeding seabirds. The habitats, flora, fauna and human use will also be described.

The conservation plan will outline the main objectives for the conservation of the qualifying interests. It will also consider the management issues that may impact on the nature conservation features and delineate the strategies aimed at achieving the conservation objectives. Management strategies will be proposed to address these issues.

### **4.3 International Guidance and Charters**

The World Heritage Convention concerning the Protection of the World Cultural and Natural Heritage provides international guidance on conservation of World Heritage Sites. These guidelines provide directions that inform the management of Skellig Michael and outline obligations for the State Party, such as the preparation of a Management Plan for the site and periodic reporting, under the World Heritage Convention.

International charters set out recognised standards for the built heritage community, working towards the conservation and protection of cultural heritage sites. The International Council on Monuments and Sites (ICOMOS), an association of professionals throughout the world, set out general principles for the preservation of historic monuments and heritage in 1964. This document is known as the Venice Charter. Since then many additional charters have been formulated and ratified to cover other aspects of cultural heritage, such as authenticity, preservation, protection and management. The Council of Europe also plays a role in producing guidance documents for the preservation of cultural heritage.

ICOMOS Ireland, the national body, promotes ICOMOS' international charters, supports the implementation of the World Heritage Convention and promotes responsible custodianship of World Heritage Sites. It is available for consultation by Government Departments on matters relating to cultural heritage, and the international charters and conventions. Relevant charters, listed in Appendix 7, have provided guidance in the approach to the preservation of the site and in the management policies as set out in this plan.

### **4.4 Site Management**

#### **4.4.1 Current Site Management Framework**

Responsibility for the management of operational matters and works on Skellig Michael rests with the Office of Public Works. The Department of the Environment, Heritage and Local Government has been assigned responsibility for the legislative and policy framework for the built and natural heritage. The two organisations liaise to provide an integrated approach to the management of the site. Both organisations meet on a regular basis to ensure that cross cutting issues are addressed in an effective and co-ordinated manner.

The Management Plan strives to achieve a balance between conservation of the built and natural heritage, visitor management and increased public awareness.

#### **4.4.2 Cultural Heritage Management**

##### **Cultural Heritage Management Structure**

The management of the cultural heritage on the island of Great Skellig is in the remit of the Office of Public Works. Archaeological input to the conservation and presentation of the site is provided by the National Monuments Service of the DOEHLG by means of a service level agreement with the OPW.



District works meetings are held every few months to review projects of all works in the district in which Skellig Michael lies. Regular meetings are held, as required, between the OPW, the DOEHLG and the project team to discuss each year's programme of works and technical requirements.

### **Project Team for Conservation Works**

The project team for the conservation works comprises a conservation architect, an archaeologist and a structural engineer, all of whom have considerable expertise in their specific fields. Additional advice is drawn from expertise within the DOEHLG and the OPW. When required, experts from the private sector are commissioned to undertake specialist work both on- and off-site. The core team is inter-disciplinary and a close working relationship prevails at all times. Supervision of works is a shared responsibility and is subject to the nature of the works being undertaken. The works are carried out by a small team, led by experienced stonemasons who are qualified in drystone masonry construction and repair.

### **Conservation Framework**

All conservation works are undertaken with due regard to the various international charters and documents that provide a framework for the preservation of historic monuments and World Heritage Sites. These charters and documents act as guidelines and inform the work. In undertaking any work, however, cognisance must be had of actual site conditions and constraints.

Legislation in relation to national monuments and wildlife must be complied with when undertaking conservation works. All works are subject to consent from the Minister for the Environment, Heritage and Local Government and are reviewed on a regular basis. In relation to wildlife legislation and relevant Directives, the works team meets with the National Parks and Wildlife Service to review works carried out, their impact on the natural heritage of the island and to plan well in advance for the following or future seasons.

Since the commencement of the current programme of works, the philosophy behind the continued preservation of the site has been rigorous in adhering to an acceptable international framework. The approach taken was discussed in detail with the UNESCO representative at the time of World Heritage assessment. UNESCO was fully satisfied that the proposed interventions did not compromise the authenticity of the site; that same approach has informed all subsequent works.

### **Philosophy underpinning the Works Programme**

Owing to harsh weather conditions and some natural factors, there has been a long history of collapse and rebuilding of the monastic remains, notably the retaining walls. At the outset of the current works programme a detailed structural and engineering survey was carried out on the retaining walls of the Monastery. This provided the team with baseline information from which to work. Based on this survey, a list of necessary structural interventions was compiled and prioritised, which in turn provided a template for the structural consolidation of the site.

In the case of Skellig Michael, one of the most fundamental issues is that of structural stability. Until structural stability is achieved, no other conservation works can be undertaken, except for temporary remedial or holding works. Only when stabilisation has been achieved can final consideration be given to detailed conservation and presentation.



*Pl. 14 - Working on the stabilisation of structures on the South Peak.*

Before the start of each season the project team meets to discuss the programme and to plan all aspects of the works. Intervention is kept to a minimum, always bearing in mind the essential requirement of structural stability. The fundamental objective remains, at all times, the preservation of the site.

All structures are preserved, save in exceptional circumstances when preservation requires partial removal of a structure. Such circumstances may relate to archaeological excavation or structural stabilisation. In such rare cases the structure and its associated stratigraphy is fully recorded and the necessary section is taken down and reconstructed, using the original stone in the same pattern.

Where structural support is required for the preservation of the monument and excavation reveals original wall structures, these are conserved and raised, where necessary, to a level at which they can safely support all the features of the original construction. Where walls are being conserved, a sacrificial layer of drystone masonry will normally be added to the top. This intervention protects from damage what remains of the original masonry.

## Works Safety

Responsibility for overall safety on Skellig Michael lies with the Office of Public Works. All staff working on the island operate in accordance with the Safety, Health and Welfare at Work Act 2005 and the relevant ancillary Health and Safety legislation. At a local level, the site chargehand has day-to-day on-site responsibility for the implementation of general safety procedures as outlined in the Skellig Michael Safety Statement. Safety procedures are contained in a variety of documents and these procedures are adhered to using the guidance of an external specialist contractor, with assistance from the Health and Safety Unit of the OPW. Special attention is given to providing health and safety training for working on, or near water.

Specialist activities, such as rope access and the use of safety harnesses, are the responsibility of a specialist contractor. All personnel working on Skellig Michael are both suitably trained and equipped to complete the work in a safe manner. At the start of each season all works employees on Skellig Michael have their safety skills updated. In relation to 'Working at Height', all works employees are assessed and trained annually for the tasks to be undertaken.



*Pl. 15 - Working on the South Peak aided by ropes and overseen by a full-time Safety Officer.*

At the beginning of each season safety equipment is logged, marked, inspected and a record kept on file in the site office. The specialist contractor ensures the maintenance of all safety equipment in conformity with relevant Health and Safety legislation.

A detailed emergency plan, formulated in agreement with the relevant agencies and authorities, is in place for Skellig Michael. At the beginning of each season a training exercise for all OPW staff takes place.

## Conservation Works

A summary of works undertaken to date, from the nineteenth century to 2008, is outlined in Appendix 4.

## Survey and Recording

Measured surveys and photographic surveys are carried out before any works commence. Much of this work is carried out by the conservation team and, given the nature of the terrain, plane table surveys are used extensively. Plans, sectional profiles and elevations are recorded at differing scales during excavation; instrument surveys have been used to record the features after excavation.



*Pl. 16 - Survey work on the Lower Monks' Garden prior to excavation and after removal of vegetation.*

A photogrammetric survey (1:1000) of the island was commissioned in 1982, which was subsequently tied into the National Grid. This provided insufficient locational detail, however, in particular for the South Peak. Consequently a LiDAR survey was carried out in November 2007, which has provided an accurate baseline survey for all areas of the island. The level of coverage of the main Monastery and the South Peak has been 100 points per square metre, which has provided high-definition records of all structures in these areas.

Through the process of preservation a professional photographic record is also made, both from the ground and the air. For over ten years now the works have also been recorded professionally on film. These records will form an integral part of the official archive of Skellig Michael.

### Archaeological Investigations

Archaeology has played a major role in the programme of conservation works on Skellig Michael since its commencement in the early 1980s. The scope of archaeological work to date on Skellig Michael has been determined, by and large, by the preservation needs. This strategy has been deemed most appropriate given the limited area actually available for excavation on this precipitous island and the intact nature of the structures, in the Monastery in particular, which must be left undisturbed. This approach is in line with one of the fundamental principles of the DOEHLG's strategy to protect our finite archaeological heritage: 'the gathering of archaeological information should never in any circumstances destroy any more of the archaeological heritage than is necessary'. Within these parameters, then, the aim of the archaeologist on Skellig Michael has been to exploit fully the opportunities provided by the interventions required to conserve elements of the site, in order to provide new insights into this unique monastic settlement.



*Pl. 17 - Post-excavation recording in the Lower Monks' Garden.*

Over the years archaeological input has ranged from monitoring and supervising works to full archaeological excavation. Several archaeologists have been involved, including staff members of the National Monuments Service and private consultants (see Appendix 4, Table 2 and Fig. 2). A summary of archaeological investigations from 1986 to 2007 is given in Appendix 4.

### Portable Objects

It is policy to retain heritage objects on the island insofar as possible. There have been some instances of damage to objects, for example the large cross by the Small Oratory, which has been dealt with *in situ*. Ongoing monitoring of the condition of such items is being carried out and if deemed to be at further risk, heritage objects will be removed from the island for safe-keeping.

There are cases where a number of portable and damaged objects are too vulnerable to leave exposed at the site. These comprise small crosses, worked stone fragments and damaged crosses. All such objects are fully recorded, conserved where relevant and stored in a suitable environment to provide for their long-term preservation. These stone objects are being catalogued and will be kept in custom-built storage units at the OPW National Monuments Depot in Killarney, where they will be accessible during working hours, by prior appointment.

Numerous artefacts have been recovered during excavations on Skellig Michael over the years, all from the Monastery. The archaeological artefacts and samples recovered during excavation are stored in the premises of the National Monuments Service (DOEHLG) during the post-excavation reporting period. Following recording, conservation and publication, the artefacts will be transferred to the National Museum of Ireland for long-term storage.

### Engineering

Structural consolidation has been necessary in a number of places where the collapse of retaining walls could endanger the stability of the structures above them or could create a risk to visitors to the site. There was also some poor quality, and in some places dangerous, nineteenth-century walling that needed to be replaced.

A difficulty in carrying out the work has been the unavailability of suitable stone on the island. In many cases collapses have led to considerable quantities of stone from the original walls being distributed over the steep slopes below and into the sea. Even where walls were complete but in a precarious state, some stones were badly cracked and not re-usable. In particular, there has been a shortage of larger stones. Quarrying has not been an option, so it has been necessary to make do with what stone was available. The engineering methods used on the site have compensated for this shortage of suitable stone.

When reconstructing retaining walls up to a height of approximately 1.5m, the method adopted has been of a traditional, double-faced, drystone wall infilled with selected ties and smaller stone. For higher retaining walls it has generally been considered essential to place a backing of reinforced concrete, especially where the foundation was poor or the pressure of retained material was great. The advantage of

this backing was that it required less stone than a double-faced drystone wall and more of the smaller stones could therefore be used. Use of reinforced concrete for retaining wall structures has been kept well below ground levels and has been used only in limited circumstances, where absolutely necessary.

### **Maintenance**

Day-to-day maintenance has been an integral part of the annual works programme since 1978. Once the works programme to the Monastery, the Hermitage, and the Steps has been completed, a formal, structured maintenance programme will be drawn up for all the conserved structures. (Further details of the maintenance programme are contained in Appendix 5.)

### **Outstanding Works to Monastic Structures**

Once the preservation works on the South Peak are completed, the following outstanding works need to be undertaken before commencing the programme of works for the nineteenth-century lighthouse structures.

- St Michael's Church: cement mortars were used in the repair of this church in the late nineteenth century and this is damaging the fabric of the building. In addition, some of the dressed window and reveal stones were re-positioned incorrectly. This work needs to be undone, the cement mortar removed and the walls re-pointed using a mortar based on the historic mortar used originally.
- Structural repairs to the early nineteenth-century *Necessarium* to stabilise the access steps to the structure.
- Conservation works to the Guest House at the top of the East Steps, just outside the entrance to the Lower Monks' Garden.
- Repair and conservation work at the large prayer station off the South Steps, located midway between the Lighthouse Road and the Saddle.

### **Works Programme to Lighthouse Structures**

#### **The Lighthouse Road, from the Pier to the Lower Lighthouse**

This early nineteenth-century roadway is still in use and in the past was maintained by Irish Lights. Since its transfer to the State, its maintenance has been undertaken by the OPW. The roadway itself is in good condition. The roadway parapet is in poor condition in places. This parapet was originally rendered and lime-washed to protect and preserve it. This render now needs to be repaired in places as it has all but disappeared from the more exposed outer face. Much of the mortar has now been washed out from the body of the wall, reducing its strength considerably.

A detailed structural study of the full length of this road and parapet wall has been commissioned. The results of this will inform the nature and scale of the required intervention.

Associated with this stretch of roadway is a works platform and, above this, a dry toilet structure, both constructed by the lighthouse-builders. This platform is in a state of collapse, but due to its location, directly above the access steps to the Monastery, remedial works will be challenging. Temporary support was put in place some years ago to prevent further movement and ensure safe visitor access. This support will be removed when the platform is structurally repaired. The works required to conserve the toilet are comparatively straightforward.

It is also envisaged that there will be some repair required to the surface of the roadway and the gulleys, which drain the surface water away.

### **The Lighthouse Road, from the Lower Lighthouse to the Upper Lighthouse**

This roadway has not been used very much since the disestablishment of the Upper Lighthouse in May 1870, but landslides have caused considerable collapse onto the middle section. This had added to the load on the road in places, putting additional pressure on the retaining wall. Some of the parapet wall has collapsed or is in a dangerous condition. A detailed assessment of this length of roadway, involving a full structural analysis, has yet to be carried out. It is clear, however, that significant works will be required here including an archaeological element to the works.



*Pl. 18 - The Lower Lighthouse still in use.*



### **The Upper Lighthouse and associated structures**

The Upper Lighthouse is in a ruinous state and is in poor condition. A detailed survey has yet to be undertaken, but this will involve a structural appraisal of each of the buildings. The lighthouse and its associated structures will require both structural consolidation and conservation.



*Pl. 19 - View of the Upper Lighthouse Road and Upper Lighthouse, now disused.*

#### **4.4.3 Natural Heritage Management and Monitoring**

Accounts of breeding seabirds on the Skelligs go back as far as the 1700s, however more systematic surveys and ringing programmes only came into effect from the late 1950s onwards. Annual surveys, carried out between 1990 and 2002 by NPWS, censused the breeding seabirds and assessed annual productivity of Kittiwakes and ringed Manx Shearwater, Storm-Petrel and Puffin.

The Seabird 2000 survey has provided the best information thus far on the populations of Manx Shearwater and Storm Petrel. The techniques developed during this survey provide a quantitative method for mapping occupied underground nesting sites. (See Appendix 6 for results of seabird monitoring.)

National censuses provide population estimates of each species of seabird breeding in Ireland, against which the national and international importance of each individual colony (such as the Skelligs) can be assessed. These censuses also ensure that sites are protected under Article 4 of the EU Birds Directive. The information on bird numbers on Skellig Michael, gathered since 1990, indicates that the works programme

being undertaken by OPW has not impacted negatively on breeding bird colonies. Liaison is ongoing between NPWS and OPW to ensure that this situation continues. The Grey Seal, as a species listed on Annex II of the EU Habitats Directive, is also subject to regular national surveys.

NPWS liaises with the local authority regarding any development issues in relation to the pier and in relation to waste-management issues that may affect natural habitats on the island.

#### **4.4.4 Visitor Management and Sustainable Tourism**

##### **Access to Skellig Michael**

It is Government policy to provide the greatest possible level of visitor access to all built heritage sites in the care of the OPW. At Skellig Michael, however, the location of the island, some 11.6km off Bolus Head out in the Atlantic Ocean, and its topography mean universal access is not feasible. Due to weather and sea conditions it is only possible for boats to reach the island on a regular basis from late May through to late September. Boats to the island leave from Knightstown, Port Magee, Ballinskelligs and Derrynane. Access to the island is controlled by a permit system operated by OPW.

To date the length of the visitor season was dependent on weather conditions and the practicalities of getting the guide service established. Since 2007 the OPW has set out, on an annual basis, the period during which, weather permitting, a guide service will be available on the island. This period will also be the period of the 'season' referred to in the permits issued annually to boatmen to land visitors on the island. As in previous years, in the interest of the continued protection of the island and to prevent damage to the monuments and particularly for reasons of health and safety of visitors, access to the island outside of the defined period is not permitted. Access to the island by private craft is discouraged by the OPW.

In addition to visitors accessing the island through local boat operators, a small number of cruise ships also land passengers on the island. At present two shipping agents, representing a total of three cruise ships, apply annually for permission to land passengers on the Skelligs. The number of passengers is limited to 100 from each vessel and they are transferred by RIB to the pier. These visits are scheduled for 6.00/7.00am and must be completed by 11.00am, which is the time the visitors carried by the boatmen generally arrive. From records it is noted that two vessels landed in 2007, one in 2006 and two in 2005.

From August 2008 visitor access to the South Peak will again be possible. In reality, however, very few people attempt this difficult ascent. Generally speaking, those who do make the climb have some climbing experience. It is envisaged that only very few visitors may wish to visit the South Peak area. Public access to this area will be monitored, particularly with regard to safety issues, and access may be regulated as necessary.

### Visitor Numbers

In the period between 1978 and 1994 there was a significant increase in the number of visitors to the island. This led to a noticeable increase in damage to the site, both inadvertent and wilful. In this context the OPW initiated negotiations with local boatmen in 1994 to formulate an agreed plan to limit the daily number of visitors, with the aim of preserving the National Monument.



*Pl. 20 - Visitors within the monastic enclosure.*

In 1994 the OPW decided that the daily number of visitors should be capped at a maximum of 180. As the majority of boats operating at the time had a capacity of twelve persons, the number of boats required to achieve the maximum number of visitors was fifteen. However, in deference to the fact that there were nineteen boats either landing visitors on Skellig Michael in 1994 or who had made the financial commitment to do so in 1995, the OPW agreed to a total of nineteen boats being permitted to land passengers in 1995. It was further agreed that as boatmen retired, this number would reduce over time to a maximum of fifteen boats.

It was agreed that, subject to compliance with certain conditions, permits to land visitors on the island would issue to individuals, renewable on an annual basis and subject to certain conditions. OPW continues to use this permit system to effectively control the number of visitors to the site and to balance the need to preserve the National Monument and facilitate visitor access. These negotiated visitor numbers were endorsed by UNESCO in 1995 when the nomination for World Heritage status was under consideration. It is the intention of the OPW to continue to operate this arrangement for the foreseeable future however the criteria for the granting of future permits for boats to land visitors on the island will be reviewed. The average number of visitors per season in the period since 1995 is c. 11,100, a figure that, having been monitored over a period of thirteen seasons, is deemed sustainable in terms of protection of the National Monument.

### **Visitor safety**

There are inherent dangers in visiting Skellig Michael and due to the nature of the site, care must be taken at all times. In this context visitors are requested to give serious consideration before deciding to bring young children to the island. If young children do accompany adults, it is essential the adult(s) responsible ensure the safety of the children in their care. For safety reasons visitors must remain on recognised visitor routes while on the island.

Landing on the island can be difficult, and once on the island, access to the Monastery is via approximately 600 steps. These steps, although maintained regularly, are irregular and of drystone construction and by their nature cannot be made to comply with modern standards.

An important issue relating to the safety of visitors on the island is the duration of their visit. Visitors must be given sufficient time to climb the steps and take in a guided tour of the Monastery before descending to take their boat back to the mainland. It is not intended to introduce handrails to the island because this is seen as compromising the integrity of the site. However, visitors are advised by signage on the island of the intrinsic hazards of visiting the island.

The OPW is committed to ensuring that high levels of health and safety for visitors are maintained on the island. Close links have been established with the area air and sea rescue organisations and the local coastguard. During the 2008 season, and in co-operation with such organisations, the OPW will commission a full-scale safety evacuation drill to complement and inform the current emergency plan.

### **Guide Service**

A regular guide service was introduced in 1987 and has operated each season since. The guide service is currently managed by the OPW. The main function of the guide service is to protect the site, interpret the history, archaeology and significance of the monastic settlement, regulate the numbers of visitors within the monastic enclosure and monitor visitor numbers, the number of boats landing and weather conditions. The guides may also be called upon to assist with research projects.



*Pl. 21 - A guide giving a talk to visitors in the Monastery.*

Given the isolated nature of the site, it is necessary for the guides to live on the island during the visitor season. A total of five guides are employed, augmented by a supervisor guide based on the mainland. Guides generally spend a period of two weeks on the island, with one week off. Three guides work on the island at any one time, with the exception of the beginning and end of the season when only two guides are required.

While the primary role of the guides is to protect the National Monument, they also provide information and assist visitors in their understanding of the site. Further information is provided through an information panel located where the steps to the Monastery commence.

The guides continually monitor the number of visitors within the inner enclosure. If these numbers are deemed to be too high, access is regulated. Within the Monastery visitors can fully access the Upper Monks' Garden. For safety reasons visitors are not permitted to access the Lower Monks' Garden, but the full extent of this garden can be viewed from above. The inner enclosure is fully accessible to visitors, with the exception of a small area to the south of the Large Oratory. The Small Oratory Terrace is cordoned off for its protection, but it is possible for visitors to view it.

## **Sustainable Tourism**

In line with the ICOMOS International Cultural Tourism Charter 1999, one of the primary objectives for managing Skellig Michael in a sustainable way is to 'communicate its significance and need for its conservation to its host community and to visitors'. Currently, Skellig Michael attracts extensive tourism to the Iveragh Peninsula, which brings many socio-economic benefits to the area. A trip to Skellig Michael and its environs is an enjoyable and educational experience for the visitor. The majority of visitors to the region tend to remain on the mainland, from where many prominent features of Skellig Michael are visible. Information signage for Skellig Michael is provided by the OPW for tourists on the mainland and at the landing piers. The resident guides are responsible for the management of tourists on the island during the visitor season.

It is recognised that greater integration of tourism initiatives is required and the promotion and management of sustainable tourism in the area is encouraged. To facilitate this, the OPW and DOEHLG have met with Fáilte Ireland to discuss tourism initiatives for the region. It is Fáilte Ireland's intention to liaise with local tourism networks to develop a tourism plan for the area that meets the needs of the present tourists and region, protects and maintains the cultural integrity of the island, whilst managing essential economic and social needs. The plan will also look at the upgrading and integration of existing off-site interpretation of the Skelligs for visitors who are unable to visit the island.

### **4.4.5 Waste Management**

The OPW liases, as appropriate, with the local authority regarding the management of waste on Skellig Michael. All waste is removed from the island on a weekly basis, weather permitting, and disposed of and/or recycled as appropriate and as agreed with the Environmental Officer of Kerry County Council.

## **4.5 Management Issues**

Conservation, environmental protection, visitor management, sustainable tourism and other issues identified by the Skellig Michael Steering Group will be addressed in the Skellig Michael Management Plan.

These issues will form the basis of the objectives and action plan for Skellig Michael for the next five to ten years and in the longer term.

### **4.5.1 Built Heritage Conservation Issues**

The management of spoil is an issue that will need to be addressed when work commences on the roadway between the two lighthouses. This spoil has been washed down onto the roadway from above over time. The initial storage of spoil will not be an issue: some of it will be used in areas where original material has been washed away. At the close of works any remaining spoil will be disposed of in an appropriate manner, in consultation with the OPW, DOEHLG and the local authority.

#### **4.5.2 Natural Heritage Issues**

There is potential for negative impacts on nesting birds and habitats from two principal sources, in particular, namely visitors and conservation works. During the main visitor season, up to 180 people may visit the island per day. This number of people has the potential to cause disturbance to nesting birds and to cause habitat damage through trampling. However, movements of visitors on the island are largely controlled by the very nature of the terrain. Areas that are not accessible by existing steps or roadways are difficult to reach due to the steep and often unstable slopes. For safety reasons, guides request that visitors keep to recognised visitor routes at all times. This helps to minimise disturbance and damage to habitats. Visitors who access the island outside the recognised season are currently un-regulated, and this is a potential issue.

Works also have the potential to cause habitat damage as well as direct disturbance to nesting birds, including displacement and entombment. At present, the works team meets NPWS personnel on a regular basis to review works carried out, their possible impacts on natural heritage and to plan in advance for future works. The information on bird numbers gathered since 1990 indicates that the works programme undertaken thus far has not impacted negatively on breeding bird colonies. Ongoing survey work will continue to monitor this. The conservation works have provided additional habitat for birds nesting in dry stone walls.

The introduction of plants or animals not currently found on the island is a notifiable action-under the SPA for Skellig Michael. Mammals such as Rats, Mink, Hedgehogs and Cats could do considerable damage to breeding bird colonies. NPWS will make clear, via appropriate means, to all those visiting Skellig Michael that no plant or animal species should be released onto the island.

#### **4.5.3 Visitor Management and Sustainable Tourism Issues**

The safety of visitors to the island is always a primary concern. Access to Skellig Michael other than via boatowners who operate under the OPW's permit system is not encouraged, however it could occur through the use of private crafts. The OPW continues to monitor this issue on a regular basis.

World Heritage Sites may be impacted directly by the visitors themselves and by development of visitor services. Due to the location and topography of Skellig Michael development is restricted, therefore impact is low, but visitors can cause disturbance to the monuments or habitats and species, and overcrowding could be detrimental to the conservation of the site. It is a constant challenge to balance the preservation of the island with the socio-economic benefits that tourism can bring to the area. A primary objective for managing heritage is to communicate its significance and the need for its conservation to its host community and to visitors.

#### 4.5.4 Visual impacts on Landscape Setting

The landscape setting of Skellig Michael is visually stunning. As with all World Heritage Sites, there is a need to balance the need for provision of facilities for visitors, guides and project teams with the possible impact on the setting of the island of temporary structures, signage and toilets.

#### 4.5.5 Climate Change

The impact of climate change on World Heritage is an area of increasing concern amongst the heritage community and is recognised as one of the greatest threats to the conservation of heritage sites. Climate change can have physical effects on cultural heritage, such as rising sea levels, temperature changes and increased wind, compromising archaeological structures. Climate change also can impact socially and culturally. The natural heritage can be particularly affected by climate change with intense rainfall, changes in phenology (timing of events, such as flowering) and changes in the eco-system configuration leading to, amongst others, disturbance in breeding patterns of species and growing seasons of plants.

To date, Skellig Michael has seen relatively few effects of climate change. However, its location makes it particularly vulnerable to the damaging effects of increased storm and wind strength. During the 2007 season the winds came predominantly from a northerly direction, quite out of character to what has been experienced in the previous thirty years. This had an impact on the ability to carry out some of the conservation works. An increase in adverse weather conditions also impacts on the landing of visitors on the island pier. Skellig Michael will, in the future, require close monitoring and maintenance by the relevant authorities to mitigate potential impacts of climate change.

#### 4.5.6 Research Strategy

Different strands of research have been ongoing since the commencement of works on the island. The results of these will now be incorporated in an integrated publication, which will analyse and interpret the information gleaned to date. This will, in turn, inform a formal research strategy, which will be formulated for the island as a whole.

#### 4.5.7 Awareness and Promotion

The limited availability of information for Skellig Michael and its environs is an issue that the Office of Public Works and the Department of the Environment, Heritage and Local Government is anxious to redress and has made steps to progress. Currently, visitor information is available on the Heritage Ireland website, maintained by the OPW (<http://www.heritageireland.ie>) and in the OPW's *Heritage Sites of Ireland* information booklet. Further information on Ireland's World Heritage Sites is also available on the DOEHLG website: <http://www.envron.ie>. Information is also available through Fáilte Ireland's website: <http://www.discoverireland.ie>.

The current discussions with Fáilte Ireland regarding the development of an integrated tourism plan for the area should help to address the current deficit of information.



#### **4.5.8 Management Structure Issues**

The conservation programme is being carried out jointly by the OPW and the DOEHLG, as previously described, with visitor management and access issues coming under the remit of OPW and natural heritage issues being monitored by NPWS. While this structure has proved effective to date, the appointment of a Site Management Team to efficiently co-ordinate the day-to-day management of Skellig Michael and to liaise with interest groups will be beneficial.

A photograph of a stone archway leading to a view of the ocean. The arch is made of rough, grey stones. Through the arch, a bright blue sky with some clouds is visible above a deep blue sea. In the distance, a small, rocky island with a pointed peak rises from the water. The foreground shows the continuation of the stone wall and a path leading towards the sea.

# *CHAPTER 5*

## *IMPLEMENTING THE PLAN*



## 5.1 Implementation Strategy

This Management Plan will be used as a tool for the effective implementation of various policies and objectives. Rather than being a finite plan, it will be a living document that will evolve over time and will require regular reviews and amendments, with the support of the relevant organisations and individuals.

## 5.2 Statement of Intent

The following outcomes are sought during the lifetime of the plan.

- The effective implementation of the actions set out in the plan.
- The allocation of the necessary resources, human and financial, to meet the needs identified in the plan.
- Effective monitoring and periodic reporting of the state of conservation of Skellig Michael.
- Greater dissemination of information and enhanced enjoyment of the island for all.
- The provision of safe and efficient access to Skellig Michael.
- Improved liaison with community and local interest groups.
- To maintain and improve the conservation and management of both the cultural and the natural heritage of the site.
- Improved public awareness and appreciation of Skellig Michael World Heritage Site through the establishment of an informative website dedicated to the site.
- The establishment of a research framework strategy for both the cultural and natural heritage.
- Formal review of the Management Plan after five years.

In order to achieve the outcomes in the Statement of Intent over the next ten years, the various objectives and actions — outlined in Section 5.3 below — will need to be implemented.

## 5.3 Objectives and Actions to achieve outcomes in Statement of Intent

The main objectives and key actions proposed in this plan for Skellig Michael World Heritage Site reflect the Steering Group's vision and priorities, taking into account comments and views expressed in the extensive consultation process. A programme of action for the implementation of these objectives is set out in Table 1 in Appendix 1.

### Long-term Objective

**To protect, conserve and promote an appreciation of Skellig Michael World Heritage Site**

#### Rationale

Ireland will ensure the long-term conservation and preservation, to international best practice, of Skellig Michael World Heritage Site, with the appropriate guidance from the World Heritage Committee, the World Heritage Centre and Advisory Bodies such as ICOMOS and IUCN.

## Management Objectives

### Objective 1: To put in place an effective management framework to protect the Outstanding Universal Value of Skellig Michael

#### Rationale

To ensure compliance with the obligations of World Heritage Site national and international designations, it is essential that an effective management framework is put in place. In this context it is intended to appoint a Site Management Team, whose responsibility will be to ensure the efficient and effective day-to-day management of Skellig Michael. The management team's role would also involve liaising with relevant local interests. The Site Management Team will act as a focal point for issues that may arise during the lifetime of the Management Plan and would attend meetings with the boatmen, the proposed Expert Advisory Committee and any other relevant meetings.

In addition, adequate funding and resources will be provided to ensure continued works on the island.

#### Actions

- A1. Appointment of a Site Management Team with overall responsibility for day-to-day management issues arising in relation to Skellig Michael.
- A2. Provision of adequate funding, resources and logistical support to continue conservation works, as necessary, to effectively manage the island, to protect the natural and built heritage and to promote appreciation of the island.
- A3. Establishment of Skellig Michael WHS Management Plan Implementation Group to oversee the implementation of the objectives and actions set out in the plan, to review and update the Management Plan and to oversee compliance of the site with World Heritage Convention requirements and periodic reporting.
- A4. Production of an annual report on Skellig Michael by the Implementation Group.

### Objective 2: To improve liaison with local interest groups and other relevant parties

#### Rationale

It is accepted that regular communication between local communities and interests is essential. The Implementation Group and the Site Management Team will liaise with public agencies, local authorities, non-governmental organisations and interest groups, as required.

## Actions

- A5. Liaise with public agencies, e.g. the Heritage Council and Fáilte Ireland, non-governmental organisations, local communities and interest groups, as required, to ensure the effective implementation of the Management Plan.
- A6. Meet with local boatmen on an annual basis in advance of the tourist season. The agenda for this meeting (where minutes will be taken and circulated) will be to review the previous season, outline the intended works programme, provide insight into objectives for the forthcoming season and discuss other relevant matters.

## Conservation Objectives

**Objective 3: To preserve the cultural heritage of the island and sustain its  
Outstanding Universal Value**

### Rationale

Due to the harsh environment of Skellig Michael, an ongoing programme of conservation works will be necessary to maintain stability of the structures. The future works programme will concentrate on the lighthouse structures and will be carried out on a phased basis. A detailed specification for each phase of the works will be drafted in the context of the conservation programme, in consultation with an Expert Advisory Committee. The Committee will advise on the publication programme, on best practice for all works and natural heritage issues and also on research frameworks set out under Objective 12. The Expert Advisory Committee will comprise relevant experts from various fields, such as architectural conservation, industrial archaeology, ecology and the natural heritage. It is envisaged that the term of the Advisory Committee would run for three to five years and that it would meet regularly with the Site Management Team and the Project Team.

Archaeological investigations have been in progress since the early 1980s at the monastic settlement and South Peak Hermitage on Skellig Michael, and will conclude in 2008. Future programmes of work will focus on the post-medieval structures elsewhere on the island. The information gleaned from all archaeological investigations carried out to date will now be integrated with the results of building analysis and detailed topographic and other surveys to provide an in-depth analysis of the cultural evolution of the monastic settlement. A detailed stratigraphic report of the archaeological excavations will be produced and lodged in the Archive Section, DOEHLG. This report will include a full account of all excavations, with supporting illustrations, a finds catalogue and specialist reports.

Work will be progressed on the production of a publication that will incorporate the results of all works undertaken and an evaluation of their results within a national and international context, with a view to publication during the lifetime of the plan. This ambitious work programme of publications and works will be reviewed annually, in the light of resources.

### Actions

- A7. Draft a full pre-works survey and a detailed specification for each phase of future works, in advance of any work commencing on the site.
- A8. Prepare a formal, structured maintenance programme for all conserved structures.
- A9. Produce a detailed stratigraphic report of the archaeological excavations for lodgement in the Archive Section, DOEHLG, and for publication on website.
- A10. Publish a full, costed record of the conservation works and excavations undertaken, from 1978 to present, during the lifetime of the plan. The publication will be on a phased basis, as advised by the implementation group, and will be made available on the proposed website for Skellig Michael.
- A11. Ensure that heritage objects from Skellig Michael are cared for appropriately.
- A12. Draft terms of reference for and appoint an Expert Advisory Committee to advise on best practice for all works, the publication programme and future research.

### Objective 4: To identify and conserve the natural heritage of the island

### Rationale

Skellig Michael has a rich natural heritage. In particular, it is an important seabird breeding area, a status recognised by its designation as a Special Protection Area and a Nature Reserve. It is important to monitor seabird numbers and to prevent disturbance or damage occasioned by human activity. The introduction of alien species could have detrimental effects on the island's biodiversity, so it is also important to prevent such arrivals.

### Actions

- A13. Prepare and implement a five-year conservation plan for the Skelligs SPA.
- A14. Maintain close co-operation, including regular meetings, between the project team, the guide service and the NPWS.
- A15. Apply, as necessary, for notifiable activity consent. (See Appendix 6 for a list of notifiable activities.)
- A16. Ensure an appropriate assessment for any plan or project (either individually or in combination) likely to have a significant effect on the species and their habitats for which the SPA has been designated.
- A17. Develop, in conjunction with the future works programme, a monitoring programme for Manx Shearwater and Storm-Petrel.

- A18. Carry out a census count of all breeding seabirds (except for nocturnal species) every two years.
- A19. Participate in the next Ireland and Britain breeding seabird survey.
- A20. Carry out a vegetation survey, including an investigation of species that may have been cultivated by the monks.
- A21. Include the Skelligs in national Grey Seal censuses.
- A22. Ensure the island is kept free of introduced species. Compile an action plan to deal with accidental or deliberate introductions of predator species.
- A23. Liaise with Commissioners of Irish Lights to ensure that helicopter flights are kept to a minimum during the birds' breeding season.

## Statutory and Policy Objectives

**Objective 5: To further promote the importance of the WHS to ensure that there continues to be a co-ordinated approach by government departments, agencies and other statutory bodies with responsibilities for making and implementing national policies and undertaking activities that may impact on Skellig Michael and its environs**

### Rationale

The designation of Skellig Michael as a World Heritage Site (WHS) brings with it certain obligations in terms of planning controls and environmental policies. Local development plans can ensure that development and other relevant policies are compatible with the aims of designation of a WHS. It is vital that there is continued recognition of the importance of this WHS status. There must be a unified approach by government departments, agencies and statutory bodies.

### Actions

- A24. Adoption of the Management Plan as a framework for the policies, future plans and decisions regarding Skellig Michael.
- A25. The State to ensure compliance with all relevant statutory provisions for the protection of the site.
- A26. Encourage the local authority to recognise the status of this Management Plan in its County Development Plans.



- A27. Heighten awareness, via state agencies, local authorities and other statutory bodies, of the implications and responsibilities of World Heritage Site designation.
- A28. Ensure secondary legislation is in place to provide for the enlargement of the area of the Special Protection Area for Skellig Michael, to include the area of sea between and around the islands.

## Sustainable Tourism and Visitor Management Objectives

### Objective 6: The effective management of visitors to Skellig Michael

#### Rationale

It is essential that a balance is maintained between tourism strategies for the region and the preservation of Skellig Michael. It is important to recognise and support cultural tourism insofar as it is compatible with the primary obligation of the conservation, maintenance, protection and perpetuity of this World Heritage Site.

#### Actions

- A29. Liaise with Fáilte Ireland and local tourism networks in their development of a tourism strategy for the greater area.
- A30. Continue to review the optimum number of visitors to the island consistent with site protection. Education values will also be reviewed by carrying out a detailed visitor assessment of visitor impact and trends.
- A31. In the spirit of co-operation and to ensure conservation obligations are communicated to tourism agencies, continue to liaise with Fáilte Ireland and local tourism bodies.

### Objective 7: The provision of an appropriate standard of visitor access and interpretation

#### Rationale

To ensure that visitors have a safe and informative experience when they visit the site and that a quality service is provided for them. It is essential that visitor numbers are actively managed so that visitor numbers do not impact negatively on the island.

#### Actions

- A32. Establish a defined annual season within which the island will be open to visitors.
- A33. Maintain a quality guide service to enhance the visitor experience by ensuring that there are relevant training programmes in place for the guides.

- A34. Collect visitor statistics for each season and analyse trends.
- A35. Work towards establishing a minimum time limit of two-and-a-half hours for visitors to the island on days when normal weather conditions prevail.
- A36. Continue to balance the need to preserve the National Monument and facilitate public access through the operation of the permit scheme for landing visitors on the island during the visitor season.
- A37. Identify the criteria for the granting of future permits for boats to land visitors on the island.
- A38. Meet with boatmen annually, in advance of season, to discuss any issues. Minutes of the meetings will be circulated to relevant parties.
- A39. Inform local dive schools, private boating organisations and yachting clubs of the necessary parameters of access to the island.
- A40. Continue to control the number of larger private vessels permitted to access the island.
- A41. Monitor landings by occasional and private crafts to the island and take action, where appropriate.

## Promotion and Appreciation Objectives

**Objective 8: To increase understanding of and appreciation for Skellig Michael and its environs**

### Rationale

A prerequisite to protecting our heritage is a knowledge of its extent and its importance. Heritage is inextricably linked with our sense of identity and affirms our historic, cultural and natural inheritance.

### Actions

- A42. Publish a series of multilingual pamphlets for public distribution.
- A43. Establish a website for Skellig Michael to provide relevant information on the significance of the site, provide periodic updates on the implementation of the plan and to prepare visitors for their visit to the island.
- A44. Enhance dissemination of information on Skellig Michael by the provision of materials in diverse media relating to the island, which will be accessible to the public once full publication has been achieved. In the interim any reasonable request for information will be considered in the normal professional manner.

- A45. Establish an education outreach programme.
- A46. Continue to support and give public lectures/case study seminars on the conservation works and the history of the island.
- A47. Promote public awareness of other archaeological sites of importance in the area in order to broaden the experience of the visitors.
- A48. Support local initiatives, such as organised walks/tours of historical sites of interest, in the Iveragh Peninsula.
- A49. Liaise with Fáilte Ireland to ensure high quality information and off-site interpretation for visitors.

**Objective 9: The provision of a high level of public safety on the island**

**Rationale**

To meet statutory health and safety obligations and to provide for the safety of all visiting the island.

**Actions**

- A50. Continue to work with emergency response agencies to prepare a variety of rescue scenarios.
- A51. OPW to maintain an up-to-date safety statement for the island, in accordance with Health and Safety legislation, and as part of the risk assessment to be undertaken on the island.
- A52. Continue to ensure safe access to the island during the season by regular maintenance of the pier and steps and ensure that appropriate signage is in place at the pier and at the steps to the South Peak. Maintain the landing pier and steps on Skellig Michael during the official visitors season.

**Landscape and Setting Objectives**

**Objective 10: To maintain and enhance the landscape setting of Skellig Michael**

**Rationale**

To ensure best practice in conservation, so that the site is not damaged in any way or in a manner that would threaten its integrity.

**Actions**

- A53. (i) Explore the possibility of alternative on-site accommodation;
- (ii) Ensure temporary work huts are in keeping with the landscape of the island.

- A54. Maintain current waste-management strategy, agreed with Kerry County Council, of removal and recycling of waste.
- A55. Continue regular liaisons with the local authority environmental officer.
- A56. Commission feasibility study of the possibility of providing toilets for visitors that would not impact on the setting of the WHS.

## Monitoring Objectives

**Objective 11: To monitor those factors with the potential to impact on the built and natural environment of Skellig Michael**

### Rationale

The development of strategies of adaptability to world climate change will be key to the preservation and conservation of the site into the future. Such strategies can only be developed on the basis of a programme of monitoring and observation.

### Actions

- A57. In conjunction with ICOMOS Ireland, develop a framework for monitoring climate change.
- A58. Ensure that any possible impact of climate change on Skellig Michael is monitored and taken into account in the development of the National Climate Change Strategy.
- A59. Regularly monitor the decay of structures.
- A60. Monitor, on an ongoing basis, other factors that may impinge on the built and natural environment.

## Research Objectives

**Objective 12: To establish a research framework for Skellig Michael**

### Rationale

The establishment of a research agenda and framework for Skellig Michael, which will identify and prioritise research themes for the future, is a primary objective of the plan. Over the past twenty years extensive research has been carried out, in conjunction with archaeological investigations and conservation works. This has included research on the early history of the island, folklore, geology, quarrying, water management, building history, the development of drystone technology, the chronology of the site, analysis of human and faunal remains and palaeoenvironmental analysis. The results of this research will inform the proposed research framework.

The DOEHLG and the OPW will jointly commission the development of the research framework.

**Actions**

- A61. Enhance visitors' experience of visiting the site through increasing knowledge of the island and by encouraging research and ensuring research results are disseminated.
- A62. Support any relevant national research programmes.
- A63. Establishment of a research framework that would invite involvement of universities and interested parties in research programmes.
- A64. Complete the research programme on geology and historic quarrying.
- A65. Complete research on water collection and management.
- A66. Undertake and complete research into horticultural aspects of the monastic settlement.
- A67. Complete research into the development of drystone construction based on the work being carried out on the monastic structures.

## 5.4 Monitoring and Reviewing the Effectiveness of the Management Plan

The Management Plan is a dynamic document that will change as the management priorities shift, conditions on-site evolve and other factors come into play. It is essential that there is regular monitoring to provide the most up-to-date information.

The Management Plan Implementation Group, consisting of representatives from the DOEHLG, OPW and the Site Management Team, together with the objectives and actions identified in the plan and the annual reports on the plan, will ensure the sustainability of Skellig Michael World Heritage Site for present and future generations. Monitoring required by the plan will focus on indicators linked to the site's Outstanding Universal Value, authenticity and integrity.

The DOEHLG, as focal point, together with the OPW will be responsible for periodic reporting on the implementation of the World Heritage Convention. This is a report that will be submitted to UNESCO and that will provide an assessment of the legislative and administrative provisions adopted by Ireland and actions undertaken for the application of the Convention regarding Skellig Michael. The next cycle of UNESCO periodic reporting of Ireland's World Heritage Sites will take place in 2012.

State of Conservation or reactive monitoring provides information to the World Heritage Centre when the state of conservation of a World Heritage property may be affected by projects, works, disasters or exceptional circumstances. The Department of the Environment, Heritage and Local Government invited the World Heritage Committee to undertake a reactive monitoring mission to Skellig Michael in November 2007. During the mission a UNESCO expert met with officials from the Department and from the Office of Public Works. He also met with interested parties who had expressed concerns regarding works on the island. The UNESCO representative also undertook an on-site inspection of the conservation works carried out on the monastic structures on the island. The mission concluded, in its preliminary findings, that 'whilst the works have transformed the appearance of these remains, they are justifiable and that the Outstanding Universal Value of the site remains intact'. The Mission Report findings and recommendations will be subject to the agreement of the World Heritage Committee in Quebec, Canada, in July 2008.

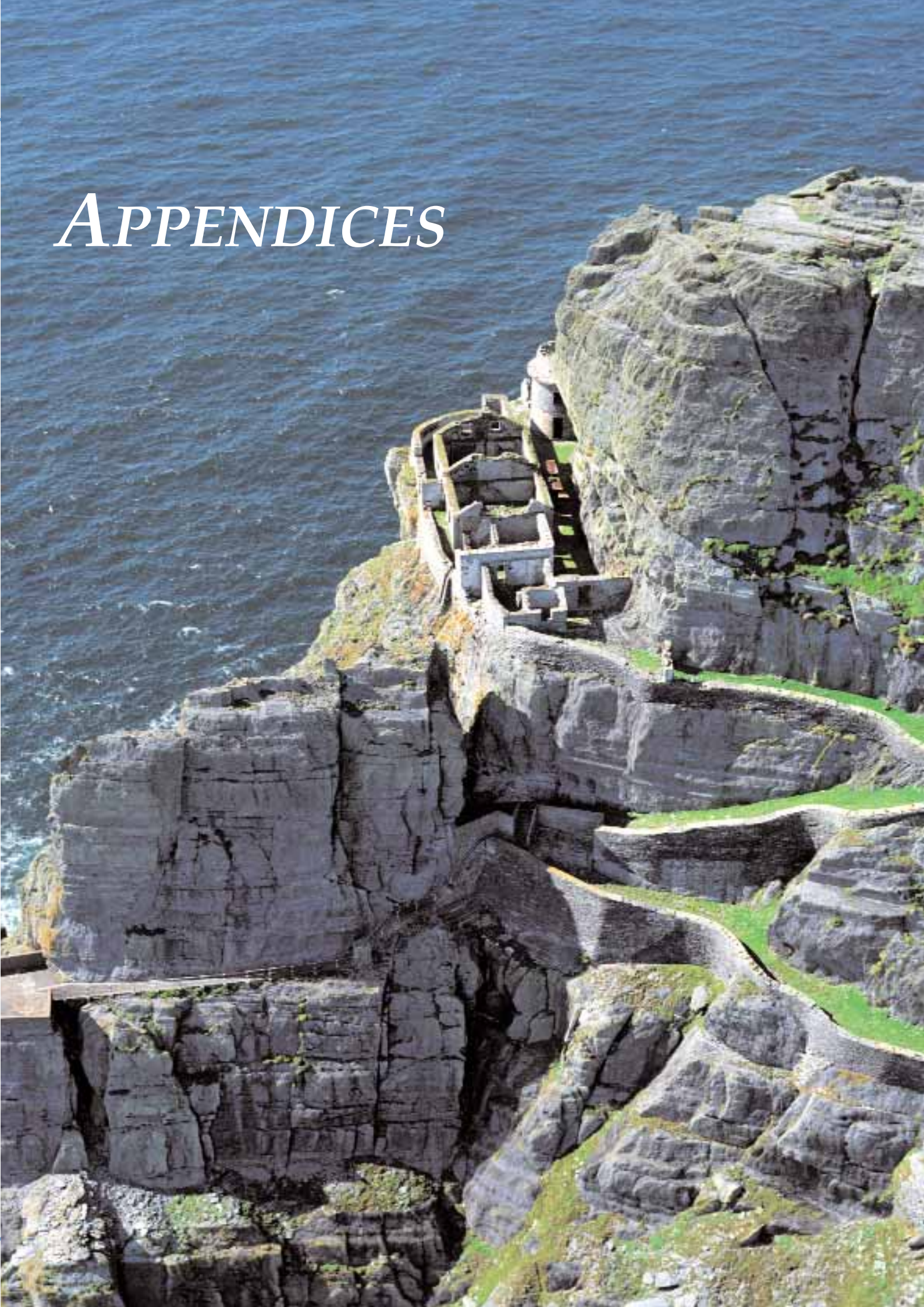
It is recognised that, with varying management priorities and other factors stemming from the complexity of the site, the relevance of the Management Plan may change over time. As such, the effectiveness of the implementation of the plan will be addressed by:

- extensive reassessment of the plan after five years;
- production of annual Skellig Michael reports;
- periodic reporting;
- monitoring the progress of actions in Action Programme 2008–2018;
- assessment of the effectiveness of each action to achieve objectives;
- undertaking interim reviews, as required.

As these steps are taken, relevant sections of the plan may need to be updated accordingly and reissued in the plan. Public consultation may be undertaken to inform relevant stakeholders of new issues, if they arise.

Through continued monitoring by the Implementation Group and participation by local interest groups, public agencies, non-governmental organisations and other relevant parties, the deterioration of the cultural and natural heritage of Skellig Michael can be prevented and a sense of pride will be instilled, thus ensuring the preservation of the unique qualities of this precious island.

# *APPENDICES*







# APPENDIX 1:

TABLE 1 - SUMMARY OF ACTION PROGRAMME, 2008–2018

Management Plan Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 1: To put in place an effective management framework to protect the Outstanding Universal Value of Skellig Michael.	A1. Appointment of a Site Management Team.	DOEHLG, OPW	Year 1	Management team appointed
	A2. Provision of adequate funding, resources and logistical support.	DOEHLG, OPW	Ongoing	Funding and resources available
	A3. Establishment of Skellig Michael WHS Management Plan Implementation Group.	DOEHLG, OPW	Year 1	Group established
	A4. Production of an annual report on Skellig Michael.	Implementation Group	Annually	Report published
	A5. Liaise with public agencies, non-governmental organisations, local authority, local communities and interest groups to facilitate the effective implementation of the Management Plan.	Relevant parties, DOEHLG, OPW	Ongoing	Meetings and discussions take place and further actions identified
	A6. Meet with local boatmen on an annual basis, in advance of the tourist season.	OPW, Boatmen	Annually	Minuted meetings circulated
Objective 2: To improve liaison with local interest groups and other relevant parties.				

Conservation Objectives	Action	Lead Agencies	Target for Implementation	Indicators	
Objective 3: To preserve the cultural heritage of the island and sustain its Outstanding Universal Value.	A7. Draft a full pre-works survey and a detailed specification for each of the next phase of the works.	OPW, DOEHLG,	Ongoing	Specification and Survey complete	
	A8. Prepare a formal structured maintenance programme.	OPW	Year 2	Programme prepared	
	A9. Produce a detailed stratigraphic report of the archaeological excavations.	DOEHLG	Year 2	Report produced	
	A10. Publish a record of the works and excavations on a phased basis.	OPW, DOEHLG, DOEHLG and Specialists	Phase 1- Year 3	Works published and lodged in Archive	
	A11. Ensure that heritage objects from Skellig Michael are cared for appropriately.	OPW, DOEHLG and National Museum of Ireland	Ongoing	Artefacts forwarded to National Museum of Ireland, as appropriate	
	A12. Draft terms of reference and appoint an Expert Advisory Committee.	OPW, DOEHLG	Year 1	Expert Advisory Committee established	
	Objective 4: To identify and conserve the natural heritage of the island.	A13. Prepare and implement a five-year conservation plan for the Skelligs SPA.	DOEHLG (NPWS)	Year 1 and 2	Plan in place
		A14. Maintain close co-operation, including regular meetings, between the project team, the guide service and NPWS.	DOEHLG (NPWS), OPW	Ongoing	Meetings held
		A15. Apply for notifiable activity consent, as necessary.	DOEHLG (NPWS)	Ongoing	Consent granted

Conservation Objectives	Action	Lead Agencies	Target for Implementation	Indicators
	A16. Ensure an appropriate assessment for any plan or project likely to have a significant effect on the species and their habitats for which the SPA has been designated.	DOEHLG (NPWS)	Ongoing	Assessments carried out
	A17. Develop, in conjunction with the future works programme, a monitoring programme for Manx Shearwater and Storm-Petrel.	DOEHLG (NPWS), OPW	Year 1, 2	Monitoring programme in place
	A18. Carry out a census count of all breeding seabirds (except for nocturnal species) every two years.	DOEHLG (NPWS)	Year 1, 3, 5, 7, 9	Count completed
	A19. Participate in the next Ireland and Britain breeding seabird survey.	DOEHLG (NPWS)	Year 3	Survey completed
	A20. Carry out a vegetation survey, including an investigation of species that may have been cultivated by the monks.	DOEHLG (NPWS)	Year 3	Survey completed
	A21. Include the Skelligs in national Grey Seal censuses.	DOEHLG (NPWS)	Ongoing	Census complete
	A22. Ensure the island is kept free of introduced species. Compile an action plan to deal with accidental or deliberate introductions of predator species.	DOEHLG (NPWS) OPW	Ongoing Year 2 (action plan)	Action plan compiled, situation monitored
	A23. Liaise with Commissioners of Irish Lights to ensure that helicopter flights are kept to a minimum during the bird breeding season.	DOEHLG (NPWS)	Year 1	Meeting held Letter to issue to CIL

Statutory and Policy Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 5: To further promote the importance of the WHS to ensure that there continues to be a co-ordinated approach by government departments, agencies and other statutory bodies with responsibilities for making and implementing national policies and undertaking activities that may impact on Skellig Michael and its environs.	<p>A24. Adoption of the Management Plan as a framework for the policies, future plans and decisions regarding Skellig Michael</p> <p>A25. Compliance with all relevant statutory provisions for the protection of the site.</p> <p>A26. Encourage the local authority to recognise the status of this Management Plan in its County Development Plans.</p> <p>A27. Heighten awareness, through state agencies, local authorities and other statutory bodies, of the implications and responsibilities of a World Heritage Site designation.</p> <p>A28. Ensure secondary legislation is in place to provide for the enlargement of the area of the Special Protection Area for Skellig Michael.</p>	<p>OPW, DOEHLG, local authorities</p> <p>DOEHLG, OPW, local authorities</p> <p>DOEHLG, Kerry County Council</p> <p>DOEHLG, OPW, relevant bodies</p> <p>DOEHLG</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Year 1</p>	<p>Management framework in place</p> <p>Effective legislative framework in place</p> <p>Plan referenced in the County Development Plan</p> <p>Increased awareness by all bodies</p> <p>Secondary legislation in place</p>

Visitor Management and Sustainable Tourism Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 6: The effective management of visitors to Skellig Michael.	A29. Liaise with Fáilte Ireland in its development of a tourism strategy.	OPW, Site Management Team, Fáilte Ireland, Local tourism networks	Ongoing	Tourism development plan in place
	A30. Continue to review the optimum number of visitors consistent with site protection.	OPW	Ongoing	Review in place
	A31. Liaise with Fáilte Ireland and local tourism bodies to ensure conservation obligations are communicated to tourism promotion agencies.	OPW, Site Management Team, Fáilte Ireland, local tourism networks	Ongoing	Controls in place, tourism sustainable
Objective 7: The provision of an appropriate standard of visitor access and interpretation.	A32. Establish a defined annual season within which the island will be open to visitors, weather permitting.	OPW	Current Year	Season defined in 2008
	A33. Maintain a quality guide service and relevant training programmes for the guides.	OPW	Ongoing	Satisfactory training in place
	A34. Collect visitor statistics for each season and analyse trends.	OPW	Ongoing	Data collated and analysed, report produced
	A35. Work towards establishing a minimum time limit of two-and-a-half hours for visitors to the island on days when normal weather conditions prevail.	OPW, Boatmen	Ongoing	Time limit in place
	A36. Effective operation of the permit scheme for landing visitors on the island during the visitor season.	OPW, Boatmen	Ongoing	Permit system in place and operating effectively

Visitor Management and Sustainable Tourism	Action	Lead Agencies	Target for Implementation	Indicators
	A37. Identify the criteria for the granting of future permits for boats to land visitors on the island.	OPW	Year 1	Criteria established
	A38. Meet with boatmen annually, in advance of season, to discuss any issues.	OPW, Boatmen, Site Management Team	Annually	Meetings held, minutes of meetings circulated
	A39. Inform local dive schools, private boating organisations and yachting clubs of the necessary parameters of access to the island.	OPW	Ongoing	Notices issued to relevant parties
	A40. Continue to monitor the permit system for larger private vessels to the island.	OPW	Year 1 and Ongoing	Number of vessels accounted for
	A41. Monitor landings by occasional and private crafts on the island and take action, where appropriate.	OPW	Ongoing	Number of vessels recorded

Promotion and Appreciation Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 8: To increase understanding of and appreciation for Skellig Michael and its environs.	A42. Publish a series of multilingual pamphlets for public distribution.	OPW	Year 1	Leaflets published
	A43. Establish a website for Skellig Michael.	DOEHLG, OPW	Year 1 and ongoing	Website in operation
	A44. Provision of materials in diverse media relating to the island.	DOEHLG, OPW	Ongoing	Archive established in year 2
	A45. Establish an education outreach programme.	OPW	Year 2	Programme established
	A46. Continue to support and give public lectures / case study seminars on the conservation works and the history of the island.	DOEHLG, OPW	Ongoing	Lectures and seminars held
	A47. Promote public awareness of other archaeological sites of importance in the area in order to broaden the experience of the visitor.	Fáilte Ireland, OPW, DOEHLG, local tourism networks	Ongoing	Visitor numbers at other sites in area increasing
	A48. Support local initiatives, such as organised walks/tours of historical sites of interest, in the Iveragh Peninsula.	Fáilte Ireland, OPW, local tourism networks	Ongoing	Walks/tours established
	A49. Liaise with Fáilte Ireland to facilitate high quality appropriate information and off-site interpretation for visitors.	OPW, DOEHLG	Ongoing	Quality of off-site interpretation maintained



Promotion and Appreciation Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 9: The provision of high level of public safety on the island.	A50. Continue to work with emergency response agencies to prepare a variety of rescue scenarios.	OPW	Ongoing	Emergency plan in place, rescue scenario has taken place
	A51. Maintain an up-to-date safety statement for the island.	OPW	Ongoing	Safety statement in place
	A52. Continue to ensure safe access to the island during the season by regular maintenance of the pier and steps.	OPW	Ongoing	Piers and steps safe and maintained
Landscape and Setting Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 10: To maintain and enhance the landscape setting of Skellig Michael.	A53. Explore alternative on-site accommodation, and ensure temporary work huts are in keeping with landscape.	OPW	Year 1	Accommodation identified
	A54. Maintain current waste-management strategy, agreed with Kerry County Council, of removal and recycling of waste.	OPW, Kerry County Council	Ongoing	No waste left on site
	A55. Continue regular liaisons with the local authority environmental officer.	OPW, Kerry County Council	Ongoing	Regular meetings to take place
	A56. Commission feasibility study of the possibility of providing toilets for visitors that do not impact on the setting of the site.	OPW	Year 1	Consultants engaged

Monitoring Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 11: To monitor those factors with the potential to impact on the built and natural environment of Skellig Michael.	A57. In conjunction with ICOMOS Ireland, develop a framework for monitoring climate change. A58. Ensure that any possible impact of climate change on Skellig Michael is monitored and taken into account in the development of the National Climate Change Strategy. A59. Regularly monitor the decay of structures. A60. Monitor on an ongoing basis other factors that may impinge on the built and natural environment.	OPW, DOEHLG, ICOMOS Ireland  DOEHLG  DOEHLG, OPW  Site Management Team, Implementation Group	Year 1  Year 2  Ongoing  Ongoing	Indicators identified and monitored  Adapted to National Climate Change Strategy  Regular monitoring to take place  Regular review of Management Plan

Research Objectives	Action	Lead Agencies	Target for Implementation	Indicators
Objective 12: To establish a research framework for Skellig Michael.	A61. Enhance visitors' experience of visiting the site through increasing knowledge of the island and by encouraging research and ensuring research results are disseminated.	DOEHLG, OPW	Ongoing	Increased research made available to public
	A62. Support any relevant national research programmes.	DOEHLG, OPW	Ongoing	Support of programmes
	A63. Establish a research framework, inviting involvement of universities and interested parties in research programmes.	DOEHLG, OPW, Expert Advisory Committee	Year 3	Co-ordinator in place, research framework established
	A64. Complete the research programme on geology and historic quarrying.	DOEHLG	Year 3	Research completed
	A65. Complete research on water collection and management.	DOEHLG	Year 3	Research completed
	A66. Undertake and complete research into horticultural aspects of the monastic settlement.	DOEHLG	Year 2	Research completed
	A67. Complete research into the development of drystone construction based on the work being carried out on the monastic structures.	DOEHLG, OPW	Year 3	Research completed

## APPENDIX 2:

### SITE BOUNDARY MAPS AND NATURE CONSERVATION AREA DESIGNATIONS

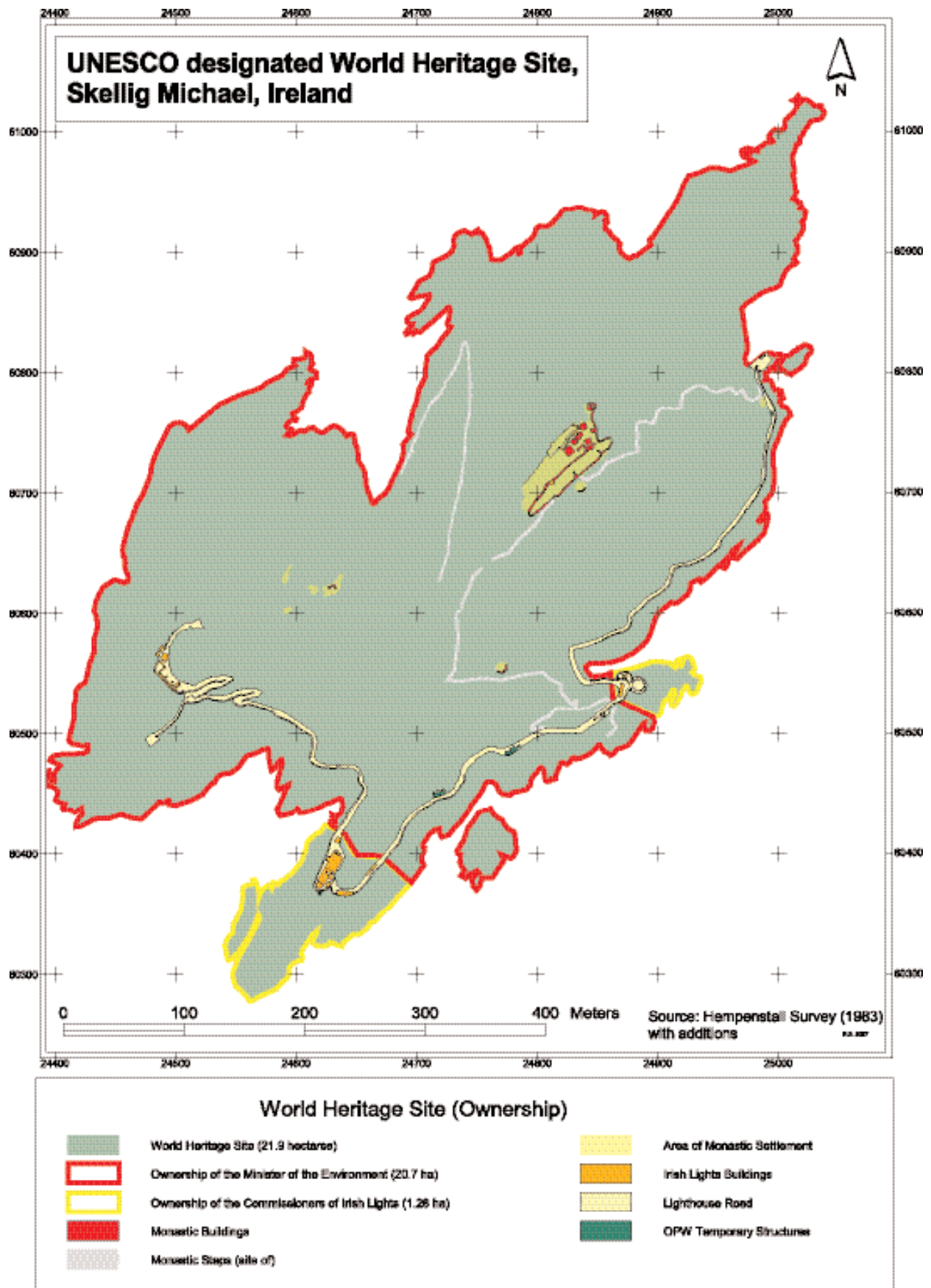


Fig. 3—Skellig Michael World Heritage Site Boundary Map.

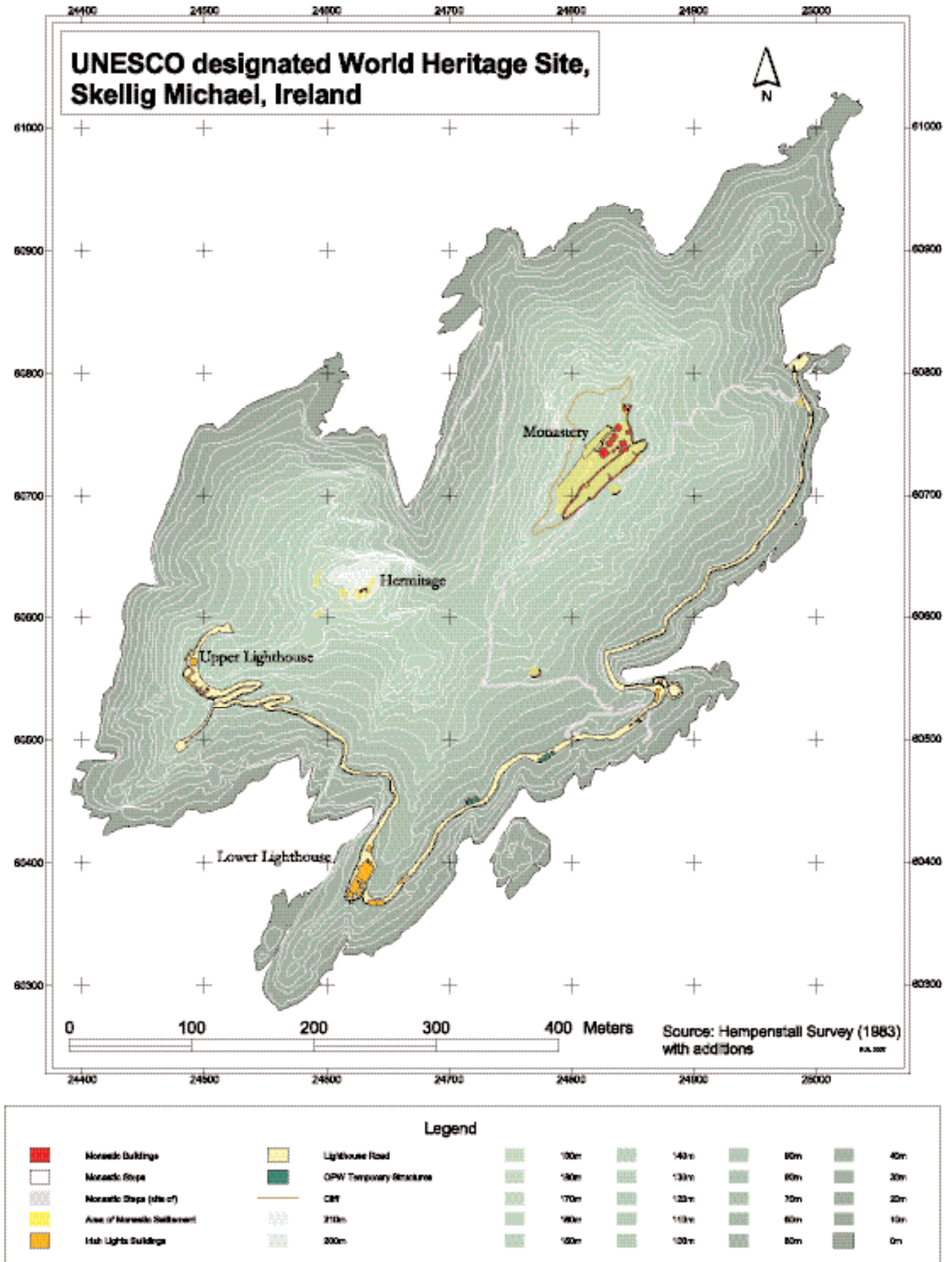


Fig. 4—Skellig Michael: General.

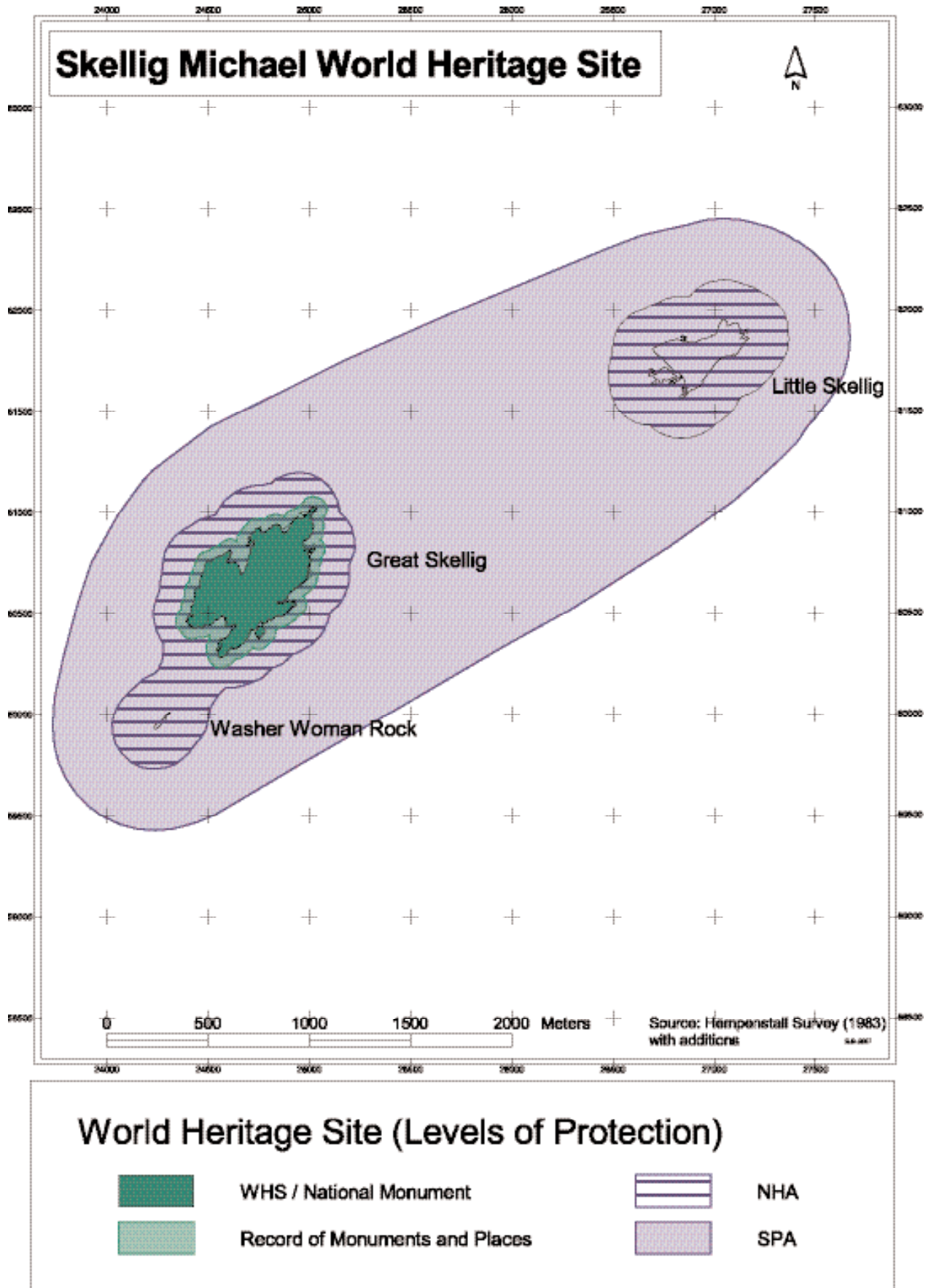


Fig. 5—Nature Conservation Areas Designations.

# APPENDIX 3:

## DESCRIPTION OF KEY FEATURES

### The Monastery

The Monastery comprises two oratories, a mortared church, six cells (one of which is in a ruinous state), the remains of a beehive toilet, cisterns, a cemetery, *leachta*, crosses and cross-slabs. It also includes two large terraces referred to as the Upper and Lower Monks' Gardens. The Lower Garden houses the remains of two very early structures.



*Pl. 22 - Aerial view of the Monastery, showing the inner enclosure and the Upper and Lower Monks' Gardens.*



*Pl. 23 - Monastic inner enclosure.*

### Access to the Monastery

There are three long flights of steps that lead to the Monastery. It was necessary to have three landing points so that the monks could land safely after their sea voyage. The state of the seas and winds would dictate which landing place they would use. The base sections of these flights were rock-cut, with the steps constructed of drystone once they had reached a level where stormy seas could no longer reach them to cause damage.

The base of the East Steps was blasted away by the lighthouse-builders when they constructed the pier and the Lighthouse Road. Above this level the steps have been conserved and are in very good condition. The remains of a structure, which may have sheltered a boat or housed provisions, are located here.



*Pl. 24 - Aerial view of the East Steps.*

The North Steps were used extensively by the lighthouse-builders. The lower, stone-cut section has been very worn by the action of the sea. A parapet was added at the lowest section of the drystone steps, which are in one long, continuous flight. The steps have been repaired, but due to collapse on the very steep ground it has not been possible to recover all of the steps and some sections have been ramped. Neither the East nor the North Steps are accessible to the public.





*Pl. 25 - Aerial view of the North Steps.*

The South Steps are used by visitors today and are accessed from the lighthouse road. The South Steps join the North Steps at Christ's Saddle and continue as one flight up to the Monastery. There are other structures associated with these steps. There are remains of walling, which was probably used to create level terraces. These terraces may have been used to cultivate foodstuffs. Alongside the steps are the remains of a substantial prayer or pilgrimage station. There are also the remains of a lighthouse platform and a lighthouse toilet. At Christ's Saddle there is a constructed 'cave' or shelter.



*Pl. 26 - Aerial view of the South Steps, leading to Christ's Saddle.*



*Pl. 27 - View of the South Steps from the South Peak.*

### **The Gardens**

The Monastery is accessed via what are known as the Upper and Lower Monks' Gardens. The present entrance into the Upper Monks' Garden is not original and was possibly constructed in the early nineteenth century. This garden would have provided a suitable area for growing vegetables: it is south-facing and well shielded from the elements. Archaeological excavation of the Lower Monks' Garden uncovered the remains of a very early circular, drystone cell surrounded by paving. This cell is very similar to the cell on nearby Illaunloughan. This discovery indicates that the 'garden' was never used solely for cultivation. The remainder of this 'garden' is very steep, but it is possible that small cultivation terraces were located here.



*Pl. 28 - Aerial view of the Upper Monks' Garden.*

## The Walls

One of the main elements of the Monastery is its retaining walls. The monks used these massive walls to create terraces upon which to build and to provide shelter from the prevailing winds. There is a long history of collapse of these walls, some of which occurred during the monastic occupation.

The east retaining wall has three phases of construction, representing repeated collapse and rebuilding. The retaining wall to the Small Oratory Terrace is substantially original. It had moved significantly over the centuries, with the top section falling inwards; a revetment was added in antiquity to prevent it falling onto the terrace. This wall has now been stabilised *in situ*.

The long, upper, south-facing retaining wall comprises at least two phases of monastic construction, repair during the lighthouse occupation in the early nineteenth century (including the construction of a *necessarium*, or dry toilet, for the construction workers) and a late nineteenth-century repair. Further, minor conservation work was undertaken in the late 1970s.

The long, lower, south-facing retaining wall has also suffered repeated collapse. Most of the retaining wall holding the Upper Monks' Garden had collapsed and was substantially rebuilt in the early nineteenth century. This in turn was close to collapse and was rebuilt during the current works programme. The retaining wall to the Lower Monks' Garden is almost fully original at its west end, but the eastern section had collapsed and it was necessary to reconstruct it during the current works programme to preserve the site.



Pl. 29 - Aerial view of the west end of the Monastery, showing the retaining walls.

## The Entrances

There are two entrances into the Monks' Gardens. The earlier one (the Lower Entrance), at the top of the East Steps and leading into the Lower Monks' Garden, has been repaired, but is no longer in use. The later one, leading into the Upper Monks' Garden, probably dates from the early nineteenth century and is

currently used by visitors. There are three entrances (the Upper Entrances) into the inner enclosure. The earliest (through the East Retaining Wall) is a short distance from the East Steps. This was abandoned after serious collapse at an early stage in the history of the Monastery. The monks then constructed an entrance on the south side, from the Lower Monk's Garden, built into an unusually jagged wall. This entrance, which is no longer in use, pre-dates the construction of the Large Oratory — the earliest extant church on the site. The last entrance to have been constructed by the monks, also built on the south side, is accessed from the Upper Monks' Garden and is still in use today.

## **The Oratories**

### **The Large Oratory**

This oratory is of the usual inverted-boat shape, with the door in the west wall. It is built of stones of a moderate size laid in horizontal courses. Internally, it is rectangular up to about 2.3m in height and then develops into an elongated dome. The internal walls show signs of later lime-washing. There is a small, rectangular window in the east wall. On either side of the door, which has inclined jambs, the wall is lined inside with two large, vertical slabs. The walls of the oratory are about 1.2m thick. Externally, there is a cross of white quartz inserted in the stones of the wall some distance above the door, but this is not an original feature.

### **The Small Oratory**

This oratory is built on a small, artificial terrace to the east of the inner enclosure. The interior of the building is constructed very carefully, more so than the Large Oratory. The oratory is 2.4m x 1.8m inside and 2.4m high. There is a small, rectangular east window. The door has inclined jambs. The corners are articulated throughout, both inside and out. This structure is of later date than the Large Oratory. Nearby are the remains of a beehive toilet cell, which is a unique structure to have in a Monastery dating from this period.

## **The Dwelling Cells**

### **Cell A**

This is the largest cell and it clearly had a communal function. It is particularly imposing and has very thick walls, with several offsets to facilitate construction. The walls, 1.8m thick at the base, are built of small, flat stones and there are a number of projecting stones on the outside at the upper level, again a construction feature. The door has a double lintel, inside and out, and the floor retains most of its original paving.

The space inside measures 4.6m x 3.8m and the cell is 5m high. It is sub-rectangular at floor level, but this evolves into an ovoid shape about 1.0m above ground level. For storage purposes there are two cupboards and projecting stone pegs. Uniquely, there are window openings, one of which focuses on the South Peak and another on Little Skellig.

### Cell B

This cell lies to the east of Cell A. It is built of very carefully worked large stones, but there are no projecting stones, inside or outside. The interior is square on plan and measures 2.75m x 2.75m and is 3.0m high. The corners are well defined and lead to a large, square capstone. The cell is paved, but much of this dates from the nineteenth century. There are two cupboards in the walls.

### Cell C

This cell lies to the east of Cell B and is very similar to it. It is probably the last to have been constructed. It is also built of large stones, but is not quite as refined. It is almost square on plan, measuring 2.75m x 2.6m. The corners are squared and lead to a rectangular capstone. There are no cupboards or special features. It retains most of its original paving and there is a drain running down the centre of the cell, under the pavement.



*Pl. 30 - View of Cells A, B and C within the inner enclosure.*

### Cell D

This cell lies to the east of Cell C, but is no longer fully intact. It is probably the earliest surviving cell within the inner enclosure and was already ruined when Cell C was constructed. It is D-shaped on plan and its shape is defined by orthostats. There is still some original paving visible at the entrance.

### Cell E

This cell lies to the north-east of Cell D and is situated at a higher level than the other cells. It is built of relatively small stones and has stepped plinths and projecting stones at upper level. It is quite spacious inside, measuring 3.65m x 3.58m, and is almost 4.0m high. Though almost square on plan, it becomes circular in shape as it reaches the roof. Most of the interior paving dates from the nineteenth century. There are some projecting stone pegs and there are holes in the walls to take two wooden beams for a loft.



*Pl. 31 - View of Cells E and F within the inner enclosure.*

### Cell F

This cell lies to the south-east of Cell E and is built of moderately sized stones. The cell is 2.98m x 2.75m, with the corners defined up to about 60cm above the lintel, after which it becomes circular. There is a stone with a circular opening that completes the dome; it is unclear if this is an original feature. There are three cupboards in the walls and projecting stone pegs. The floor is irregularly paved and includes some upright slabs that define a raised section on three sides, where the monks would have slept.



*Pl. 32 - The inner dome of Cell F, showing corbelling and projecting stone pegs.*

### St Michael's Church

St Michael's Church lies to the west of the Large Oratory and is on the same level. Part of this mortared church collapsed in the late nineteenth century when the retaining wall on the south side fell down. The church is rectangular in plan, unlike the inverted-boat-shaped oratories, and has straight walls and sharp rectangular corners. It would have had a timber roof structure. There is an east window and a doorway on the north side. There is evidence of two distinct stages of construction: an earlier, smaller, mortared church was at some later date expanded, incorporating the smaller church. This earlier church was constructed using large blocks of stone, whereas the masonry of the later church is primarily of oblong stones laid horizontally with definite coursing. Sandstone for the door and window of this church was brought from Valentia Island. There is evidence that this church was rendered externally.



*Pl. 33 - View across to Little Skellig  
from the east window of  
St Michael's Church.*

### The Leachta

There are three *leachta* in the Monastery. The *leacht* on the north side of the Large Oratory is constructed in two phases: the earlier phase pre-dates the oratory while the later post-dates it. There is also a free-standing *leacht* on the south side. The two most highly decorated stone crosses are associated with both these structures. There is also a free-standing *leacht* near the entrance to the Small Oratory

### The Monks' Graveyard

This is located to the east of the Large Oratory. It is defined by large, long orthostats along its base, against which a row of crosses and cross-slabs are placed vertically on the west side. The graveyard was bigger originally, but the east side fell away when part of the east retaining wall collapsed.



*Pl. 34 - The Monks' Graveyard within the inner enclosure.*

### **Paving**

The area enclosed by the cells and oratories is fully paved throughout. Large white quartz flags are used to define a symbolic area in front of the Large Oratory. The paving dates from the monastic period and gives the Monastery an almost urban quality. The paved area to the east of the Monks' Graveyard is a nineteenth-century repair.

### **Crosses / Cross-slabs**

There are two large, decorated crosses near the Large Oratory, one on either side, each of which is accompanied by a smaller cross-slab. There are many crosses and cross-slabs behind the Large Oratory in the Monks' Graveyard. On the island there are over 90 crosses/cross-slabs, most of them roughly shaped. These have been recorded and are being catalogued.

### **Quarrying and Water Collection**

The sloping rock above the Monastery provided the major source of building stone for the monks. The area beneath was also quarried. Once the sloping bedrock was exposed, the monks used it to collect rainwater, cutting channels into it to direct the water into the cisterns below.

### **The Cisterns**

There are two cisterns located within the inner monastic enclosure. They are constructed on the exposed sloping bedrock and the sides are made up of orthostats and drystone walling. Together these cisterns can hold about 450 litres of water. There is an additional cistern to the west of Cell A, which was identified incorrectly as a souterrain prior to its excavation. There is an additional cistern outside the Monastery, below the Lower Monks' Garden, by the East Steps. This is probably associated with the Guesthouse.





*Pl. 35 - A water cistern located just below Cell B in the inner enclosure.*

### **Guesthouse**

At the top of the East Steps, just before the entrance into the Lower Monk's Garden, is a drystone structure on the left-hand side. It is elongated in shape, with a door on the east side, directly opposite the steps. It has one cupboard. This was most probably a Guesthouse, where visitors could be accommodated outside of the Monastery. Associated with this place is a large, undecorated stone cross known as Dunraven's Cross.

### **The Hermitage**

The first mention of the possible existence of structures on the South Peak was made by the Ordnance Survey of 1841, but it was not until a visit to the island by the antiquarian Lord Dunraven, in the 1850s, that reference was first made to a probable oratory: 'Near the highest point of the island, which is called the Spit, I found the remains of a little building which appears to have been quadrangular, probably an oratory.'

Liam de Paor, who studied the monastic remains in the early 1950's, made a vague reference to structures on the South Peak. Subsequently, noted academic Françoise Henry, although unable to ascend the Peak herself, received a plan of the ruins of the structure from one of the lighthouse-keepers, which confirmed Lord Dunraven's observations.

The lack of information about the South Peak structures prompted the Office of Public Works to conduct its own detailed study, which began in the mid-1980s. This investigation discovered what appears to be a Hermitage constructed on the steep slopes of the peak. The Hermitage consists of three separate terraces, labelled Garden/Dwelling Terrace, Oratory Terrace and Outer Terrace. The Garden/Dwelling and Oratory Terraces are located near each other, on the two best natural ledges of the peak. Their spatial proximity is

reinforced by the construction of two routes between them, suggesting that they had an important functional relationship. The Outer Terrace, in contrast, is set very much apart from the other terraces and is also the most difficult to reach.

### Access to the Hermitage

The climb to the Hermitage starts at Christ's Saddle and follows rock-cut steps and handholds to the Lower Traverse, below the Needle's Eye. The monks cut almost vertical rock-cut steps up through a cleft in the rock and at this point this is known as the Needle's Eye. Above this is a contemplation or prayer station. A further steep climb leads up to the first of three terraces. At a point halfway up this climb is a separate, more basic route, which leads right up to the summit. The rock-cut steps near the top of this route run under the Upper Traverse, evidence that this was the original route used by the monks to get to the summit prior to the construction of the Hermitage.

### The Garden/Dwelling Terrace

This kidney-shaped terrace is 13m long and varies in width from 2m to 4m. The long axis of the terrace runs roughly from north-west to south-east. The retaining wall, 1.5m high at the north-western end of the platform, is built on firm bedrock and is in impeccable condition. Much of the remaining terrace has collapsed, the current ground level now being below the original level. It is possible that a small dwelling cell may have existed here.

### The Oratory Terrace

The second and most important of the three eremitic stations of the South Peak, the Oratory Terrace, lies at right-angles to the Garden/Dwelling Terrace and 4m above it. The main structure is that of a corbelled oratory with a narrow entry midway in the east wall. Internally it is approximately 2.3m x 2m. Against the east wall are the remains of an altar. Two small, interconnected basins are located beside the church. These hold water — a vital resource for a hermit in this inhospitable place. The monks had cut channels into the near vertical, exposed rock faces above this terrace to channel the rainwater down into the basins below.

At the western end of the terrace, approximately 1.0m east of the rockface, are the remains of a rectangular *leacht*, 1.1m x 1.6m. This is most likely to have been an external altar. A low drystone bench runs along the rockface, looking towards the oratory. This terrace appears to have been fully paved originally. The terrace is constructed in quite a complex way to allow for circumnavigation of the oratory itself. A similar arrangement can be seen on the Small Oratory Terrace within the Monastery, indicating that this must have been an important liturgical requirement. To the east of the Oratory Terrace is a long, narrow, tapering terrace upon which are the possible remains of a shrine.

### The Upper Traverse

This is located above the Oratory Terrace and leads across to the final rock-cut climb to the summit and the Outer Terrace. It was originally paved and had a parapet wall.

### **The Outer Terrace**

The Outer Terrace is the most isolated of the three terraces on the South Peak. This terrace is structurally dissimilar to the others on the Peak as the masonry remains consist of a 17m long perimeter wall enclosing a series of stepped ledges. The function of this terrace is unclear, as the location of a dwelling cell here would have been impossible. It may have been used as a shelter or a place of contemplation. Indeed, it may never have been completed.

### **Quarrying on the South Peak**

There is clear evidence of quarrying below the South Peak and on the peak itself. The area between the Needle's Eye and the Garden/Dwelling Terrace displays evidence of major quarrying. Below the south retaining wall of the Oratory Terrace there is also evidence of quarrying, with platforms constructed to store the stone prior to bringing it up. At the base of this retaining wall is a small, raised platform that would appear to have been the place from where the monks winched up the quarried stone from below. Quarrying on the South Peak is currently the subject of further investigation and research.

### **The Lighthouse Constructions**

The main elements of the lighthouse constructions are:

- East Pier;
- Lower Lighthouse Road, which leads from the pier to the modern lighthouse and has a parapet along its entire length;
- Upper Lighthouse Road, which runs from the modern lighthouse and zigzags up the west side of the island to the Upper Lighthouse. It, too, had a parapet, but this has fallen away in places;
- Upper Lighthouse, with its house, light tower and outbuildings;
- Twentieth-century Fog Station, which is located on a spur below the Upper Lighthouse;
- Working Platform, just above the road where the South Steps begin;
- Construction Workers' Toilet above the Working Platform, off the South Steps.

# APPENDIX 4:

## SUMMARY OF ARCHAEOLOGICAL INVESTIGATIONS, 1986-2007

---

### Monastery

The main areas excavated in the Monastery were the Small Oratory Terrace, the Lower Monks' Garden, the southern end of the Upper Monks' Garden, the south-east corner of the inner enclosure, the Large Oratory and the current entrance to the inner enclosure (see Fig. 6).

The Small Oratory Terrace, which projects northwards from the main cell complex, was shown to be a highly ordered space centred on the oratory itself. In the narrow confines between the oratory and the rockface to the west and the enclosure wall to the north and east, excavation revealed paving, steps (including rock-cut steps), small terraces built against the rockface and a *leacht* constructed on the sloping bedrock just over 1.0m from the entrance to the oratory. The remains of a small cell, interpreted as a toilet or latrine, were fully exposed and a stone-lined drain was found to partly underlie the north wall of the oratory and discharge through the enclosure/retaining wall to the east.

Much of the excavation on this terrace consisted of removal of the moist, peaty sod that supported a heavy growth of Sea Campion (*Silene Uniflora*), thereby revealing the structural features, which were then left *in situ*. The depth of this peat layer varied from c. 0.12m on the south side of the oratory to c. 0.3m against the rock face to the west. Sherds of transfer-printed pearlwares found at the interface between this peat and underlying layers indicate that most of the peat growth had taken place since the early nineteenth century. The full depth of stratigraphy was investigated in a limited area to the south of the oratory, where a few fragments of human bone were found in close proximity to a small stone cross with broken shaft.

The extensive excavations undertaken in the Lower Monks' Garden and in the south-east corner of the inner enclosure have indicated how the layout of the inner enclosure changed and developed between the foundation of the monastery in the seventh century and its abandonment in the twelfth century. In this area, highly complex engineering and conservation works were required to consolidate, repair and in places restore the inner and outer retaining/enclosure walls. Archaeological excavation was an integral part of these works and in addition to gaining an insight into the chronology of building, collapse and rebuilding of retaining walls, two early entrances into the inner enclosure were examined, one in the south wall and one in the east retaining wall. At the eastern end of the 'garden', underlying up to 4.0m of nineteenth-century debris, the remains of a monastic cell were revealed. Its southern side had collapsed outwards when the outer wall of the enclosure had collapsed in antiquity, but rudimentary paving had survived within and immediately outside what remained of the cell. A structure, once thought to be a souterrain, was also excavated and shown to be a cistern that was part of an elaborate system of water collection and management. The retaining walls, which form the eastern and northern boundaries of the current entrance to the inner enclosure, were shown to be nineteenth-century in date.

A single cutting was excavated inside the terrace retaining wall in the Upper Monks' Garden. This revealed that the upper part of the wall was nineteenth-century in date and overlay the remains of the original wall of the Monastery. The monastic wall, which was 1.2m–1.3m in width, rested on large boulders that overlay bedrock in this area. The make-up of the terrace comprised sterile, silty clay with stone chippings.

Limited excavation was carried out within the Large Oratory, which threw some light on its method of construction. Large sandstone slabs were set on edge on the line of the oratory walls and boulder clay was deposited behind them, in the space that would form the interior of the structure. The drystone walls were then constructed against the outer face of the sandstone slabs. Over the centuries, clay deposits accumulated to depths of up to 300mm within the oratory, and there was evidence of burning *in situ* within the oratory at different levels.

### **The South Peak**

Excavation on the South Peak was focused on the 'Prayer Station', the Garden Terrace, the Oratory Terrace, the Traverse and the Outer Terrace. There was also archaeological supervision of work to the steps, the traverse beneath the Needle's Eye and the platform above the Needle's Eye (see Fig. 6).

The excavation of the 'Prayer Station' uncovered the full extent of the enclosing walls and the area within was fully excavated. This latter consisted of c. 350mm depth of deposits, comprising Sea Campion with an extensive root system and stones from the surrounding walls. The quarried surface of the interior, which would have been exposed while the structure was in use, was a dramatic layer of white quartz.

The retaining wall of the Garden Terrace survived in varying states of preservation, depending on its relationship with the fracture lines of the underlying sandstone bedrock. As a result, it was necessary to excavate to bedrock where the terrace wall had largely collapsed at the south end of the terrace, but elsewhere excavation took place to an average depth of less than 500mm. The construction sequence of the south end of the terrace was revealed by excavation. After quarrying out of the terrace, the underlying bedrock was left stepped, following natural shelves and joints in the bedrock. These steps provided flat bases for the construction of the wall. The outer face of the terrace wall was built first to a height of two/three rough courses. The interior of the terrace was then infilled with dumps of large and small stone fragments in a matrix of smaller stone chips and clay. The terrace wall was then raised further, but in a wider form, with an inner face resting on the infilled material. Further dumps of quarry waste were subsequently deposited behind the wall as it was built, raising the level of the terrace to its full height. Over time, the upper part of the terrace wall began to collapse inwards; to counteract this, a reinforcing wall was built inside it. The presence of this reinforcing wall and its foundation trench meant that the usable width of the terrace varied from just 0.65m at its narrowest to 2.15m at its widest. It seems unlikely that any cell or structure could have stood on this terrace once the reinforcing wall was built.

The Oratory Terrace is the most obviously influenced in location, size, shape and layout by the underlying geology. Similar to the Small Oratory Terrace in the main Monastery, this is a highly ordered space with many of the same features, albeit on a smaller scale. The retaining walls of the terrace survived to varying degrees, again depending on their relationship with the underlying bedrock, but it could be shown that considerable effort had been expended in ensuring that circumnavigation of the oratory was possible. Quarry waste had been used to build up the terrace and a narrow ledge of bedrock had been left along the northern side of the terrace, at the base of the rockface, into which two water cisterns had been cut. Excavation revealed that the oratory itself was originally almost square in plan, measuring 2.32m in length and 2.28m in width. The full length of its north wall, most of the west wall and the internal face of the

south wall were exposed. Only the inner face of its east wall survived due to slippage of stones into a void caused by the collapse of stones bridging an underlying fissure. The remnants of a small altar were revealed, built against the surviving inner face of the east wall. This altar survived to a maximum of three courses in height and had rotated clockwise as it was partly sucked down into the underlying void. It originally appears to have measured c. 900mm east-west x 960mm north-south. A small area of paving was revealed in front of the altar, including a large flat slab interpreted as a kneeling stone.

The terrace to the west of the oratory was originally paved and a *leacht* measuring 1.56m east-west x 1.14m north-south was sited 2.95m from the entrance to the oratory. The interior of the *leacht* was excavated, but was found to have been disturbed by two Rabbit burrows. A lense of oxidised and charcoal-flecked soil was uncovered on the bedrock beneath the *leacht*. A curving drystone wall was uncovered at the west end of the terrace, at the base of the cliff, and the possible socket for the standing cross-slab was revealed east of the *leacht*. A small, sub-triangular terrace was excavated just east of the Oratory Terrace, where three flat slabs set upright within a rectangular walled area may be the remnants of a small slab shrine.

Excavation was also carried out on a series of narrow ledges on the steeply sloping cliff-face below the Oratory Terrace. This area had clearly been quarried. Two drystone platforms constructed by bridging gullies on the cliff-face are interpreted as 'staging platforms' to aid the movement of quarried material to the terrace above.

The Traverse, which leads naturally from the Garden and Oratory Terraces to the South Peak, appeared as a flat ledge before excavation. Clearance of the Sea Campion revealed the line of the inner face of the terrace wall, and subsequent excavation of the collapsed stonework exposed the original retaining wall, which had been at least partially rebuilt along its inner face. The original, highly distorted paving of the terrace was also revealed. The south end of the terrace broadens into a sub-rectangular space, which may have served as a type of 'prayer station', similar to that just above the Needle's Eye. A steep gully extending from above the Needle's Eye directly to the South Peak contained a number of rock-cut steps and three later, tiny terraces. This route clearly predates the construction of the Traverse, indicating that access to the South Peak was important at an earlier period.

The Outer Terrace is the most remote, exposed and difficult to access. Its retaining wall curves sinuously around the south-western end of the steep rock cliff, with its base rising almost 7m from the north to the east side of the terrace. The terrace wall was best preserved at its southwest corner, but was largely collapsed on its other sides. The nature and extent of the surviving walls was determined and remnants of paving were recorded in the southwest corner. The remains of a possible small *leacht* were recorded on the highest bedrock ledge on the south side of the terrace.

### Human Remains

The remains of three articulated burials and the disarticulated remains of at least five other individuals have been retrieved from the main Monastery. Analysis of this small sample by Linda Lynch suggests a bias towards adult males and children between the ages of nine and eleven. Two of the articulated burials were recovered from south of the *leacht*, close to the Large Oratory; the third was interred nearby, against the outer face of the east wall of St Michael's Church. These burials have been dated to the period between the tenth and thirteenth centuries. The average stature of the males was 170.60cms (5ft 6ins), they had reasonably good teeth, some degenerative joint disease and at least one of the children displayed evidence of iron deficiency.

### Artefacts

In addition to a number of small, crudely made stone crosses and water-rolled pebbles that must have been brought onto the island, approximately 110 artefacts were recovered during the excavations. All the artefacts were recovered from the main Monastery.

The few finds that may be attributed to the early medieval period include part of a lignite ring/amulet and a perforated lignite disc, both of which were found in the Large Oratory. A small iron knife with wooden handle was also recovered from the Large Oratory and a hone stone was found in the lower levels of deposits on the ledge below the Small Oratory. Part of a decorated bone comb plate, with iron rivets, was found on the surface of the interior of St Michael's Church and dates to the ninth/tenth century. A bronze ring-pin (AD 1000–1075) was found in the retaining wall to the left of the eastern entrance, while a spatulate-headed stick pin (AD 1150–1250) was found in the rubble of a collapsed wall in the upper level of the Lower Monks' Garden. A small number of medieval pottery sherds, including Saintonge and Bristol wares, a bone pin, a bone gaming piece, a hone stone, some copper wire, lead and slag, were also recovered from the Lower Monks' Garden.



*Pl. 36 - Lignite perforated disc and fragment of ring/amulet, which were both found in the Large Oratory.*



*Pl. 37 - Bronze ring-pin (eleventh century) found within the drystone wall at the earlier entrance in the Upper Retaining Wall.*

The majority of artefacts belong to the post-medieval period and, in particular, to the nineteenth-century occupation of the site by lighthouse personnel. Ceramics include transferwares, pearlwares and creamwares dating to the late eighteenth/early nineteenth centuries. Clay pipes are well represented and a man's leather shoe dating to the late nineteenth/early twentieth century was recovered from the make-up of the retaining wall at the main entrance to the inner enclosure. Glass, iron, iron slag and brick were recovered from the Lower Monks' Garden. Fragments of a crudely carved wooden crucifix were found in the altar of the Large Oratory and a twentieth-century bronze and wood crucifix was found on the surface in the Lower Monks' Garden, directly below the Large Oratory.



*Pl. 38 - Carved bone object (possible gaming piece) found in Lower Monks' Garden.*



*Pl. 39 - Water-rolled pebbles found in association with a leacht in the Monastery.*





*Pl. 40 - Decorated bone comb plate (ninth/tenth century) found on the surface within St Michael's Church.*



*Pl. 41 - Sherds of medieval pottery from the Lower Monks' Garden.*

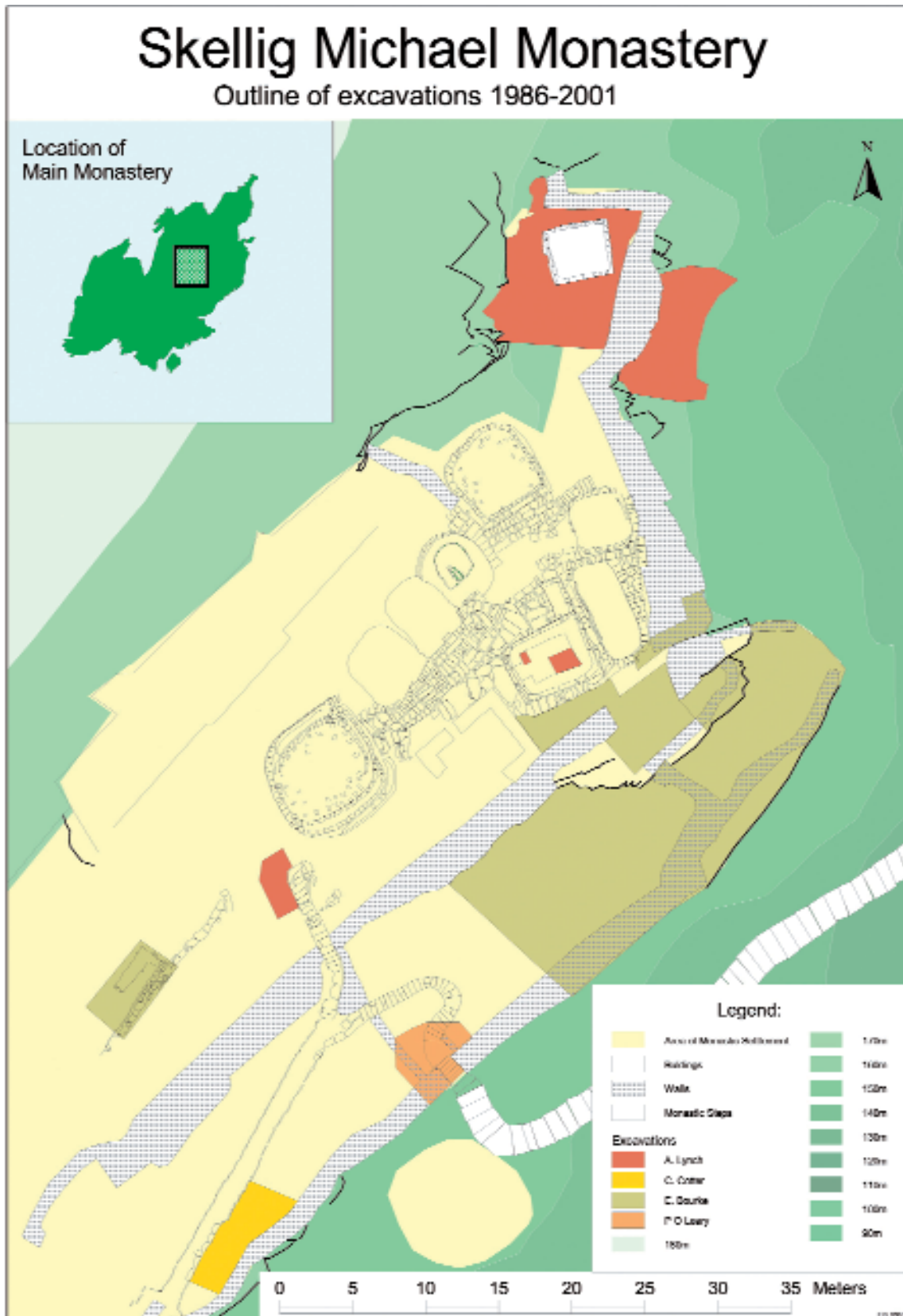


Fig. 6 - Outline of Excavations, 1986-2001.

**Table 2: Excavations on Skellig Michael 1986–2007**

Year	Licence Number		Details
1986–7	E338	Ann Lynch	Excavation of Small Oratory Terrace and south entrance into the inner enclosure.
1986–7	E338	Ann Lynch	Excavation of Large Oratory, inner enclosure.
1988		Paddy O’Leary	Supervision of works to south entrance to the Lower Monks’ Garden.
1990	90E0034	Claire Cotter	Excavation of western end of Upper Monks’ Garden.
1993–6	93E0195	Edward Bourke	Excavation of Lower Monks’ Garden.
1996–7	93E0195	Edward Bourke	Excavation of cistern, west end of inner enclosure.
1998–9	93E0195	Edward Bourke	Excavation of second southern entrance into inner enclosure, burials and leacht next to Large Oratory.
2000	93E0195	Edward Bourke	Excavation of east entrance into inner enclosure, supervision of conservation works to ‘Monks’ Graveyard’.
2001–2	93E0195	Edward Bourke	Supervision of conservation works to East and North Steps.
2003	93E0195	Edward Bourke	Excavation of early structure found at base of East Steps.
2004	93E0195	Edward Bourke	Excavation of a traverse beneath the ‘Needle’s Eye’, a prayer station, initial testing of the Garden Terrace and a number of other features on the South Peak.
2005–6	93E0195	Alan Hayden	Excavation of the Garden Terrace, Oratory Terrace, Traverse and other features on the South Peak.
2007	93E0195	Alan Hayden	Excavation of the Outer Terrace, a terrace below the Outer Terrace and the north-western Traverse.

# APPENDIX 5:

## CONSERVATION WORKS UNDERTAKEN TO DATE

---

### 1. Works undertaken prior to site being taken into State care

The first known intervention to the site occurred in the 1820's. Lighthouse construction commenced in the mid-1820s when a pier, roadway and two lighthouses were built.

The Monastery became the home base for the construction crews and during this time many alterations were made, particularly to the plinths, steps and terraces between the monastic structures. New, level terraces were constructed above the original features to create wider, safer terraces and many of the interiors of the dwelling cells were re-paved. The Large Oratory became the workmen's church. A latrine tower (*necessarium*) was constructed in the Upper Monks' Garden, accessed from above, to provide toilet facilities. Repairs were also made to those retaining walls that had collapsed.

In order to construct the pier and the new roadway, the lower section of the East Steps was blasted away and from this time on the South Steps became the main access to the Monastery and Hermitage. It was necessary for the lighthouse-builders to build a new flight of steps from the Lighthouse Road to link in with the original South Steps. When the construction works were completed, and before the workmen departed, they made good the Monastery. This involved building revetments between some of the cells, behind which they concealed their building rubble. The original entrance to the Monastery at the top of the East Steps was in a dangerous condition and this was blocked up. The full extent of these interventions only became apparent during the current conservation works programme.

### 2. Early works undertaken by the State

The monuments on Skellig Michael came into State care in late 1880 and a few years later repair works were carried out to the drystone retaining walls. Major rebuilding had to be undertaken to the retaining wall, where the south wall of the mortared St Michael's Church had collapsed. It was necessary to construct a reinforced concrete retaining wall within the church to prevent further collapse in this area. Some maintenance of a minor nature was also undertaken during the 1930s.

### 3. Recent works programme

#### 3.1 Initial works

The current works programme began in the summer of 1978 and has continued every season since. The first season's work was in response to the collapse of a section of the retaining wall to the west of St. Michael's Church. Once this was completed, work focused on the repair of the South Steps. Some initial survey work was undertaken at this time, but as the original 1840s Ordnance Survey had never been updated and was not particularly accurate, an overall photogrammetric survey of the island was commissioned. The new map provided detailed contours and made it possible to position the various monastic features in their correct locations on the island.

### 3.2 Works to individual structures

A detailed ground survey was then begun, recording the dwelling cells, churches, other structures and the retaining walls together with all the pavements, steps and terracing. The crosses/cross-slabs were also fully recorded. By this time many of the structures added by the lighthouse-builders were in poor condition and two nineteenth-century revetments, in particular, were in a state of collapse. These were removed during the following seasons and much of the original construction was uncovered beneath. Surprisingly, there was a substantial amount of the original plinths and terraces still remaining and these were conserved. The original paving lay just below a waterlogged peaty soil, which was removed, revealing that the entire inner enclosure was fully paved.

Crude repairs to the top of the outer layer of the cells and to the Large Oratory were removed because the buildings were taking in water. The structures were substantially intact, particularly in the interior.

### 3.3 Works to Small Oratory Terrace

From the mid-1980s attention turned to the deteriorating state of the drystone retaining walls. There has clearly been a history of collapse of these walls, going back to the time of the monks' occupation. A study was undertaken to examine the construction patterns of the different walling to try and establish a relative chronology. There had been much reconstruction throughout the nineteenth century. A plan was then devised to prioritise the works to the retaining walls.

Among the original walls, that supporting the Small Oratory Terrace was in a particularly dangerous state. The work to preserve this supporting wall was the first major structural intervention to be undertaken. This involved a strictly regulated programme over an entire season. This work was located in a vulnerable position, about 160m above the landing pier. Given the safety implications, the island had to be closed to the public for the duration of these works. Once the retaining wall was consolidated, the terrace itself was fully excavated to reveal paving and a *leacht*. All the structures on this terrace were then conserved.



*Pl. 42 - Small Oratory prior to excavation and conservation works.*



*Pl. 43 - Aerial view of the Small Oratory Terrace post excavation, consolidation and conservation works.*

### **3.4 Works to Lower Entrance**

The next work undertaken was to the original entrance into the Monastery, at the top of the East Steps. This was the collapsed entrance, which had been blocked up by the lighthouse-builders. A 'modern' diagonal wall had been built in the garden above, probably in the nineteenth century, to protect visitors. This structure had become seriously undermined and was in a very dangerous condition. When this area was opened up and excavated, most of the original features of the entrance gate were still intact, although somewhat damaged and out of plumb. One of the lintels was still in place, which meant the original dimension of the opening could be ascertained. Excavation on the upper side of the entrance revealed the cause of the collapse: the wall had been

built on a huge boulder, which sloped outwards. Over time the material behind the wall forced it to slide, causing a spectacular collapse. This entrance was repaired and the wall above anchored and reconstructed on the line of the original wall.

### **3.5 Works to Upper Monks' Garden**

The Upper Monks' Garden was the next focus of the continuing programme of works relating to the structural stability of the retaining walls. The eastern end of this retaining wall had collapsed in antiquity, although the base remained. A thin, curving wall had been constructed in the nineteenth century to make this vulnerable area safe. However, by the late 1980s this was beginning to fail, posing a danger to visitors. This wall was removed, revealing much disturbance in the ground beneath. The inner face of the original wall was discovered well below the garden level, indicating the scale of the collapse.

This wall was 2.0m wide at its base and had been constructed on large boulders, which were still in place. In order to retain the large amount of garden soil, it was necessary to position a small, reinforced concrete wall behind the drystone wall repair. The original wall base had become distorted before collapsing, so it was not possible to reconstruct a straight wall here in conformity with the original. As elsewhere, all original construction was retained.

### **3.6 Works to Lower Monks' Garden**

The next works project, the retaining wall in the Lower Monks' Garden, was a very considerable undertaking. This work took a number of seasons to complete and was challenging from an archaeological, structural and conservation point of view. Again, there had been a history of collapse dating from the monks' occupation and a series of retaining walls had been built through the nineteenth century in an attempt to stem further loss. There was a significant difference in ground levels across the length of this terrace. This 'garden' was divided into three sections for the purposes of the project and works began on the lowest, most easterly section, which was the most vulnerable part. Excavation revealed the presence of an early circular cell and part of another, unidentified structure. The external area was paved, indicating that this part at least could not have been used as a garden. It was necessary to build a new retaining wall to secure this part of the terrace. It was built along the base of the original wall, which was still intact. All original features on this part of the terrace were then conserved.

The middle section of the Lower Monks' Garden was very difficult to work on due to the difference in ground levels running north–south across the site. As work proceeded it became necessary to support the base of the Upper Retaining Wall in order to excavate. However, for reasons of stability and safety it was not possible to excavate down to the original level of the garden. Nonetheless, it was possible to reveal some of the middle section of the Lower Retaining Wall and to consolidate and present it. Excavation revealed large-scale collapse of the Upper Retaining Wall. Enormous boulders had fallen onto the garden below, causing considerable devastation. These boulders are now presented and give a graphic illustration of this disaster.

The upper section of this terrace was left intact and linked to the middle section, allowing the retention of later curved steps, leading from the original Lower Entrance to the present-day Upper Entrance into the inner enclosure. For safety reasons the public do not have access to the Lower Monks' Garden, but it can be fully viewed from both the end of the Upper Monks' Garden and the inner enclosure.

### **3.7 Works to Upper Entrance 2**

This earlier entrance lies to the east of the present-day entrance and is just south of the Large Oratory. The drystone walling between it and St Michael's Church is very unusual, having a very uneven, rough surface that is clearly intentional. The remains of this entrance were already known and had been recorded. This investigation revealed the width of the entrance and one of the internal lintels. It also revealed the partially collapsed east jamb, which was subsequently jacked back into position. Excavation on the interior revealed features of interest and three burials. This entrance pre-dates the construction of the Large Oratory. This area has now been presented to allow visitors view all the conserved features.

### **3.8 Works to the East Retaining Wall and Upper Entrance 1**

The East Wall was the last retaining wall to be repaired. There had been two major collapses here with subsequent rebuilding, one during the monks' occupation and one in the nineteenth century. These successive repairs were set further back so that the enclosed area above had become considerably reduced.

The latter repair was so poorly constructed and in such a state of collapse that, for safety reasons, it was necessary to take it down during the current works programme. Investigation below ground level within the Monastery was very difficult, requiring constant safety support. It was, however, possible to open up in critical areas, albeit with limited access. The investigation revealed yet another entrance into the inner enclosure, adding further to our knowledge of how the site developed. It is clear from these investigations that very serious collapse had taken place, necessitating the early abandonment of this entrance. It has now been consolidated and presented in such a manner to allow visitors view it from above.

### **3.9 Works to East and North Steps**

Once the major works to the retaining walls had been completed, the next project dealt with the consolidation and repair of the remaining two staircases. The East Steps, which had not been used since the lighthouse-builders had occupied the Monastery, were covered with vegetation. The upper section was fully revealed and this is where the consolidation works began. Below this area a removal of the soil and a thick carpet of matted Sea Campion revealed that a surprising number of the steps were still present, although many had slipped somewhat on the steep slope. They were repaired, section by section, right down to a point where they had been dynamited away by the lighthouse-builders. At this level the remains of an elongated structure were discovered, which may have been either a staging shelter for supplies or a boathouse.



The North Steps were then repaired. These had been modified and used by the lighthouse-builders and, at a lower level, a parapet wall had been added. This staircase was in a considerably worse condition than the East Steps. The ground on which the steps had been built had been seriously eroded, causing many of the large stone flags to slip off and lodge further down the slope. These stones had to be retrieved and re-instated. However, there was considerable loss and in places re-instatement was not possible; in these cases the ground has been ramped.

### **3.10 Works to the South Peak Hermitage**

The structures on the South Peak were fully recorded in the mid-1980s and since that time have been monitored continually. Due to the very exposed nature of the site, erosion of original material and structural destabilisation, it was necessary to undertake works to preserve the extensive remains. This works project commenced in 2004.

Initial work to the structures on the South Peak focused on the access platform (Lower Traverse), just below the Needle's Eye. Excess soil from a gully above had built up at one end and this was removed to reveal a short flight of original monks' steps in very good condition. Some repairs were undertaken to the retaining wall supporting the platform, where it had become unstable. Above the Needle's Eye a small contemplation or prayer station was excavated and conserved.

The steep access climb from this point to the Garden/Dwelling Terrace was cleared of soil and vegetation to reveal rock-cut steps and areas of extensive quarrying. On the terrace itself, considerable collapse had taken place at the south end. This terrace was excavated and the retaining wall was raised here to support the remaining material and prevent further erosion. No structures were discovered, possibly due to extensive loss of material over a long period. From here, two routes lead to the main terrace of the Hermitage, the Oratory Terrace.

The Oratory Terrace was fully excavated to reveal the entire extent of the small church, remains of an altar, a *leacht*, a bench, some paving and the remains of retaining walls. A possible shrine was also excavated on a narrow extended terrace at the east end. Far below the Oratory Terrace, on the south side, extensive quarrying was identified over a considerable area and platforms, which had been created by the monks to store quarried stone, were uncovered. Remains of a small, raised platform were also uncovered at the base of the retaining wall. This platform was probably constructed by the monks to facilitate winching up the stone from below in order to build the terrace and its structures.

The last construction, before the final ascent to the summit, is called the Upper Traverse. This was fully excavated and revealed a parapet wall enclosing a paved access route. The paving was in poor condition and had collapsed where the supporting soil below had been washed out. The traverse was consolidated and the paving was repaired.

From the Upper Traverse a steep climb up rock-cut steps leads to the summit and from there it is an awkward climb down a series of ridges on the north-west side to the Outer Terrace. This terrace

comprises a retaining wall that curves down the stepped rock, enclosing an area that is on more than one level. This wall had suffered structurally over time, particularly at the lower level, where much of it had either fallen in or fallen away. A considerable body of collapsed stone had fallen onto a ledge some distance below; this stone was retrieved and used in the structural repair and conservation works. The upper level was excavated to reveal a flagged pavement. The remains of a *leacht* were also uncovered and conserved. The lower section of retaining wall was stabilised and repaired. It is not known whether the monks actually ever fully completed the construction of this terrace.

The final work undertaken to the Hermitage relates to a previously unknown feature. This is a passage that runs from the start of the vertical climb below the Needle's Eye and leads over to the north-west, giving access to that side of the island. This may have been constructed by the monks to facilitate access to birds and their eggs. However, as it is of unusually large scale, it may have had another purpose. The passage would appear to have been paved. The existing walling was structurally repaired. Associated with this passage, near the start of the climb, is a small retaining wall and a platform. This area had been severely damaged during a fall of stone from above. This area was excavated and repaired.

## Maintenance Programme

### At the start of the season:

- the accommodation quarters, including solar energy system, electrics, etc., are checked for damage over the winter and brought up to the standard required to allow personnel stay on the island;
- the monastic structures are checked for any damage, which must be repaired before the visitors arrive on the island;
- the steep ground above the road is checked for any large stones that may have become dislodged or loosened over the winter and might pose a safety threat to people on the Lower Lighthouse Road below. Remedial action to be taken, as appropriate;
- the protective canopy at Cross Cove is inspected and any damage to the canopy is repaired immediately.



*Pl. 44 - The protective canopy at Cross Cove.*

**On a regular basis (weekly/fortnightly):**

- the drystone access steps (South Steps) frequently become loose given the amount of visitor usage, therefore need to be inspected regularly throughout the season and repair work carried out as required;
- regular inspections of the drystone structures for loose stones or minor collapses, which can occur as the result of attrition or damage by visitors. Repairs are undertaken as necessary;
- all pavements and vulnerable surfaces are monitored for damage and excessive wear and repair work is carried out as necessary.

**Annually**

Sea Campion poses a considerable problem in relation to the steps and all new growth is cut back off the East, North and South Steps each season. The structural stability of all structures is monitored, particularly those which have had no previous intervention.

# APPENDIX 6:

## NATURAL HERITAGE INFORMATION

The following table lists the bird species for which the Skelligs SPA has been designated and the count data for each. The all-Ireland populations allows the Skellig populations to be put into context. SPA designation criteria include sites that regularly hold 10,000 pairs of breeding seabirds and sites that hold 1 per cent or more of the all-Ireland population of a species listed on Annex I of the EU Birds Directive. The table is followed by accounts of each breeding seabird species.

**Table 3: SPA Bird Species Count Data**

Species	Skellig Count <sup>1</sup>	All-Ireland Population	Source of Data
Fulmar	806 AOS	39,000	Seabird 2000 survey
Manx Shearwater	738 AOS	44,000	Seabird 2000 survey
Storm-Petrel <sup>2</sup>	9,994 AOS	100,000	Seabird 2000 survey
Northern Gannet <sup>3</sup>	29,863 AON	36,000	NPWS survey
Kittiwake	944 AON	49,000	Seabird 2000 survey
Guillemot	1,709 p	160,000	Seabird 2000 survey
Puffin	4,000 i	21,000	Seabird 2000 survey

<sup>1</sup> The methodology used to census bird colonies depends on factors such as site accessibility and bird behaviour (e.g. some species are nocturnal and nest in burrows), leading to different count units as follows:

AOS = Apparently Occupied Sites  
AON = Apparently Occupied Nests  
P = pairs  
I = individuals

<sup>2</sup> Storm-Petrel is listed on Annex I of the Birds Directive

<sup>3</sup> All Gannets nest on the Little Skellig

### **Fulmar (*Fulmarus glacialis*)**

Fulmar are present in Ireland throughout the year, with no pronounced migration. Typically they nest on vegetated cliffs, from where they disperse following the breeding season. They return early the following year and are present on Great Skellig from January until September. Fulmar feed at sea on a wide variety of food. Annual censuses between 1991 and 2002 recorded between 632 and 863 Apparently Occupied Sites (AOS) on Great Skellig.

### **Manx Shearwater (*Puffins puffinus*)**

Manx Shearwater are migratory birds, returning to their breeding colonies in Ireland and Britain in spring. The islands off the Kerry coast support the bulk of the Irish population. As Manx Shearwater nest in burrows and are mainly active at their colonies during the night, the population was estimated by using a tape playback method to elicit responses from incubating adults. Using this method, 738 AOS were estimated on Great Skellig in 2001.

### **Storm-Petrel (*Hydrobates pelagicus*)**

The Storm-Petrel, a species listed on Annex I of the EU Birds Directive, is the smallest seabird found on Great Skellig. This species spends most of its life at sea, only coming to land to breed, usually on remote offshore islands, where the birds can be found between April and October. It is a migratory species and not all birds present at a site are necessarily breeding. Like the Shearwater, Storm-Petrel tend to be nocturnal when on land. They nest in burrows or among rocks. On Great Skellig they use crevices in the stonework of the Monastery buildings and the steps. The Seabird 2000 Survey recorded 9,994 AOS.

### **Leach's Storm-Petrel (*Oceanodroma leucorhoa*)**

This species is also listed on Annex I of the EU Birds Directive. There is no evidence of breeding on Great Skellig, but a number of birds have been caught and ringed on the island, suggesting the possibility that a few pairs may be breeding. Only one breeding colony of this species is known in Ireland (in Co. Mayo).

### **Shag (*Phalacrocorax aristotelis*)**

Single individuals have been recorded on Great Skellig. There may be small numbers breeding on the island.

### **Lesser Black-backed Gull (*Larus fuscus*)**

This gull species nests in relatively small numbers on the cliffs of Great Skellig. Between 1990 and 2002 counts of adults at or near nests ranged from 30 to 78.

### **Herring Gull (*Larus argentatus*)**

As with the lesser black-backed gulls, herring gulls breed in small numbers on the island. Between 1990 and 2002 counts of adults were between 4 and 43.

### **Great Black-backed Gull (*Larus marinus*)**

Great black-backed gulls tend to breed singly or in small colonies. Between 1990 and 2002 between 4 and 12 individuals (two to six pairs) were recorded on Great Skellig.

### **Kittiwake (*Rissa tridactyla*)**

Kittiwake nest in colonies on sheer, rocky cliffs. During the breeding season they feed on small pelagic fish species, such as Sand-Eels and young Herring. Although not migratory, outside the breeding season Kittiwake are considered to be oceanic birds. Survey work between 1990 and 2002 recorded between 625 and 1,143 Apparently Occupied Nests (AON) on Great Skellig, with numbers apparently falling.

### **Guillemot (*Uria aalge*)**

Guillemot tend to lay eggs on inaccessible, bare and narrow ledges on sea cliffs. As no nest is built, the eggs are pear-shaped to prevent them rolling off. Guillemot generally feed just offshore on pelagic shoaling species, such as Sand-Eel and Sprat. Young enter the water while still un-fledged, where they are tended to by adult males. Between 1992 and 2002 counts of individual adult birds on Great Skellig ranged between 862 and 1,422.

### **Razorbill (*Alca torda*)**

Razorbill tend to breed on ledges or in cracks on rocky cliffs and are often associated with colonies of other seabirds. They can be found on Great Skellig between March and August. The Razorbill that breed in Ireland and Britain are known to winter along the Atlantic coast of Europe and North Africa and the western Mediterranean. Between 1991 and 2002 counts recorded between 149 and 526 individual birds at suitable nesting sites on Great Skellig.

### **Puffin (*Fratercula arctica*)**

Puffin generally nest in Rabbit burrows or other similar holes on the Great Skellig. They arrive on the island in April and usually depart en masse in mid-August. Counts of breeding birds are difficult, therefore numbers are derived from counts made of adult birds present on the ground in the evening, flying around the island or rafting on the sea close by. Between 1990 and 2002 six counts using these methods estimated between 3,055 and more than 6,000 individuals.

## **EU Birds Directive: Notifiable Actions**

Any landowner/user contemplating undertaking any activities listed for a particular site is required to seek the consent of the Minister for the Environment, Heritage and Local Government. Works can only commence on the granting of the Minister's consent.

The following notifiable activities apply to the Skelligs SPA.

- Developing, operating or allowing leisure or sporting activities liable to cause significant disturbance to those birds listed or damage to their habitats.
- Construction or alteration of tracks, paths, roads, embankments, car parks or access routes, or the use of car parking.
- Introduction (or re-introduction) into the wild of plants or animals not currently found the area.
- Any activity that destroys habitat, except normal maintenance activities as defined in approved farm plans.
- Reclamation or infilling.
- Removal of soil, mud, sand, gravel, rock or minerals.
- Removing or altering walls or ruined buildings.
- Fishing by any type of nets.
- Any other activity of which notice may be given by the Minister from time to time.

## Species List

These lists include the scientific names of all species mentioned in the text of this plan.

The following vascular plants have been recorded on Skellig Michael (after Lavelle 1977).

### Ferns

Sea Spleenwort	<i>Asplenium marinum</i>
Broad Buckler-fern	<i>Dryopteris dilatata</i>
Polypody	<i>Polypodium vulgare</i>

### Grasses and rushes

Creeping Bent	<i>Agrostis stolonifera</i>
Common Bent	<i>Agrostis capillaris</i>
Early Hair-grass	<i>Aira praecox</i>
Red Fescue	<i>Festuca rubra</i>
Yorkshire-fog	<i>Holcus lanatus</i>
Toad Rush	<i>Juncus bufonius</i>
Annual Meadow-grass	<i>Poa annua</i>
Rough Meadow-grass	<i>Poa trivialis</i>

### Herbs

Scarlet Pimpernel	<i>Anagallis arvensis</i>
Thrift	<i>Armeria maritima</i>
Babington's Orache	<i>Atriplex glabriuscula</i>
Spear-leaved Orache	<i>Atriplex prostrata</i>
Sea Beet	<i>Beta vulgaris</i>
Common Mouse-ear	<i>Cerastium fontanum</i>
Sea Mouse-ear	<i>Cerastium diffructum</i>
Spear Thistle	<i>Cirsium vulgare</i>
Common Scurvygrass	<i>Cochlearia officinalis</i>
Sheep's-bit	<i>Jasione montana</i>
Autumn Hawkbit	<i>Leontodon autumnalis</i>
Buck's-horn Plantain	<i>Plantago coronopus</i>
Sea Plantain	<i>Plantago maritima</i>
Common Sorrel	<i>Rumex acetosa</i>
Curled Dock	<i>Rumex crispus</i>
Sea Pearlwort	<i>Sagina maritima</i>
Procumbent Pearlwort	<i>Sagina procumbens</i>
English Stonecrop	<i>Sedum anglicum</i>
Common Ragwort	<i>Senecio jacobaea</i>
Sea Campion	<i>Silene uniflora</i>
Prickly Sow-thistle	<i>Sonchus asper</i>



Smooth Sow-thistle	<i>Sonchus oleraceus</i>
Rock Sea-spurrey	<i>Spergularia rupicola</i>
Common Chickweed	<i>Stellaria media</i>
White Clover	<i>Trifolium repens</i>
Sea Mayweed	<i>Tripleurospermum maritimum</i>
Navelwort	<i>Umbilicus rupestris</i>

The following mammal species have been recorded:

Grey Seal	<i>Halichoerus grypus</i>
Rabbit	<i>Oryctolagus cuniculus</i>
House Mouse	<i>Mus domesticus</i>

Bird species not mentioned above:

Peregrine Falcon	<i>Falco peregrinus</i>
Chough	<i>Pyrrhocorax pyrrhocorax</i>
Raven	<i>Corvus corax</i>
Rock Pipit	<i>Anthus petrosus</i>

# APPENDIX 7:

## GENERAL INFORMATION

---

### International Charters and Conventions

- The International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter), 1964.
- World Heritage Convention, 1972.
- European Charter of the Architectural Heritage (Council of Europe), 1975.
- Convention for the Protection of the Architectural Heritage of Europe (Granada Convention), 1985.
- Charter for the Protection and Management of Archaeological Heritage (Lausanne), 1990.
- European Convention on the Protection of the Archaeological Heritage (Revised) (Valetta Convention), 1992.
- The Nara Document on Authenticity (Nara Conference on Authenticity in Relation to the World Heritage Convention, Nara, Japan), 1994.
- International Charter on Cultural Tourism, 1999.
- The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter) (Australia ICOMOS), 1999.

### Safety References

- *Skellig Michael Safety Statement*
- *Skellig Michael Standard Operating Procedures*
- Safety, Health and Welfare at Work Act 2005
- Safety, Health and Welfare at Work (General Applications) Regulations 1993
- Construction Regulations 2006
- Work at Height Regulations 2006
- Safety, Health and Welfare at Work (Noise) Regulations 2006
- Safety, Health and Welfare at Work (Vibration) Regulations 2006

# APPENDIX 8:

## SUMMARY OF PUBLIC CONSULTATION PROCESS

In total, 30 submissions were received as part of the public consultation stage of the Skellig Michael Draft Management Plan 2007–2017. There was a wide and varied scope to the submissions received, which comprised significant input from community interest groups, professional and technical personnel, professional institutes, State-sponsored bodies, a member of the Irish Parliament (Dáil Éireann), non-governmental organisations, a local authority, guides, academics and the wider public.

### Classification of submissions received

#### Categorisation of Submissions

Classification	Number of Submissions
Boatmen	8 (representing 11 boatmen)
General public	4
Professional bodies	3
Non-governmental organisations	2
Archaeologists	2
Guide	3
Wildlife filmmaker	1
Member of Dáil Éireann	1
Local community and tourist groups	3
State-sponsored bodies	2
Local authority	1
Total	30

The submissions can be categorised into the following areas.

1. Built Heritage Conservation.
2. Policy/Management.
3. Visitor Services/Management.
4. Natural Heritage/Wildlife Conservation.

## 1. Built Heritage/Conservation Issues

The issues contained in the submissions broadly relate to:

- information on archaeological excavations;
- future and current archaeological research;
- conservation policy and practice;
- need for expert consultative group;
- spiritual aspect of the island;
- access to archive;
- impact of works on natural heritage;
- spoil management;
- inter-disciplinary research strategy.

## 2. Policy/Management

The issues contained in the submissions broadly relate to:

- Management Plan process, e.g. consultation with local stakeholders;
- website creation;
- risk assessment;
- climate change;
- interpretation of UNESCO/ICOMOS charters;
- education and knowledge exchange;
- support of local tourism;
- call for independent appraisal of plan/inquiry.

## 3. Visitor Services/Management

The issues contained in the submissions broadly relate to:

- Site Management policies;
- health and safety at and accessing site (e.g. access to South Peak);
- lack of visitor facilities, in particular lack of toilet facilities and advance information;
- permits for local boatmen;
- visitor numbers;
- definition of length of season;
- access to island (including access by divers);
- lack of tourist strategy;
- waste management;
- visual impacts on landscape;
- access to island by larger foreign vessels;

- role of guides;
- access agreements and consultation with Commissioners of Irish Lights.

#### **4. Natural Heritage/Wildlife Conservation**

The issues contained in the submissions broadly relate to:

- wildlife/natural heritage area designation and conservation, e.g. Little Skellig gannet colony, shearwater nest protection, geo parks;
- underwater marine life survey;
- ornithological importance of Skellig Michael;
- role of natural environment in Management Plan;
- more focus on ecological significance in plan;
- insufficient wildlife monitoring.

# APPENDIX 9:

## CONTACTS AND USEFUL WEBSITES

---

Comments or queries about this Management Plan should be addressed to:

Heritage Policy Unit  
Department of the Environment, Heritage and Local Government  
1 Ardavan Business Park,  
Ardavan,  
Co. Wexford,  
Rep. of Ireland

Tel: +353-1-8883036  
Email: [skelligm@environ.ie](mailto:skelligm@environ.ie)

### Useful Websites

#### **ICOMOS Ireland**

<http://www.icomos.ie>

#### **ICOMOS International**

<http://www.icomos.org>

#### **The International Union for the Conservation of Nature and Natural Resources (IUCN).**

<http://www.iucn.org>

#### **Heritage Ireland (OPW)**

<http://www.heritageireland.ie>

#### **Department of the Environment, Heritage and Local Government**

<http://www.environ.ie>

#### **Office of Public Works**

<http://www.opw.ie>

#### **World Heritage Centre**

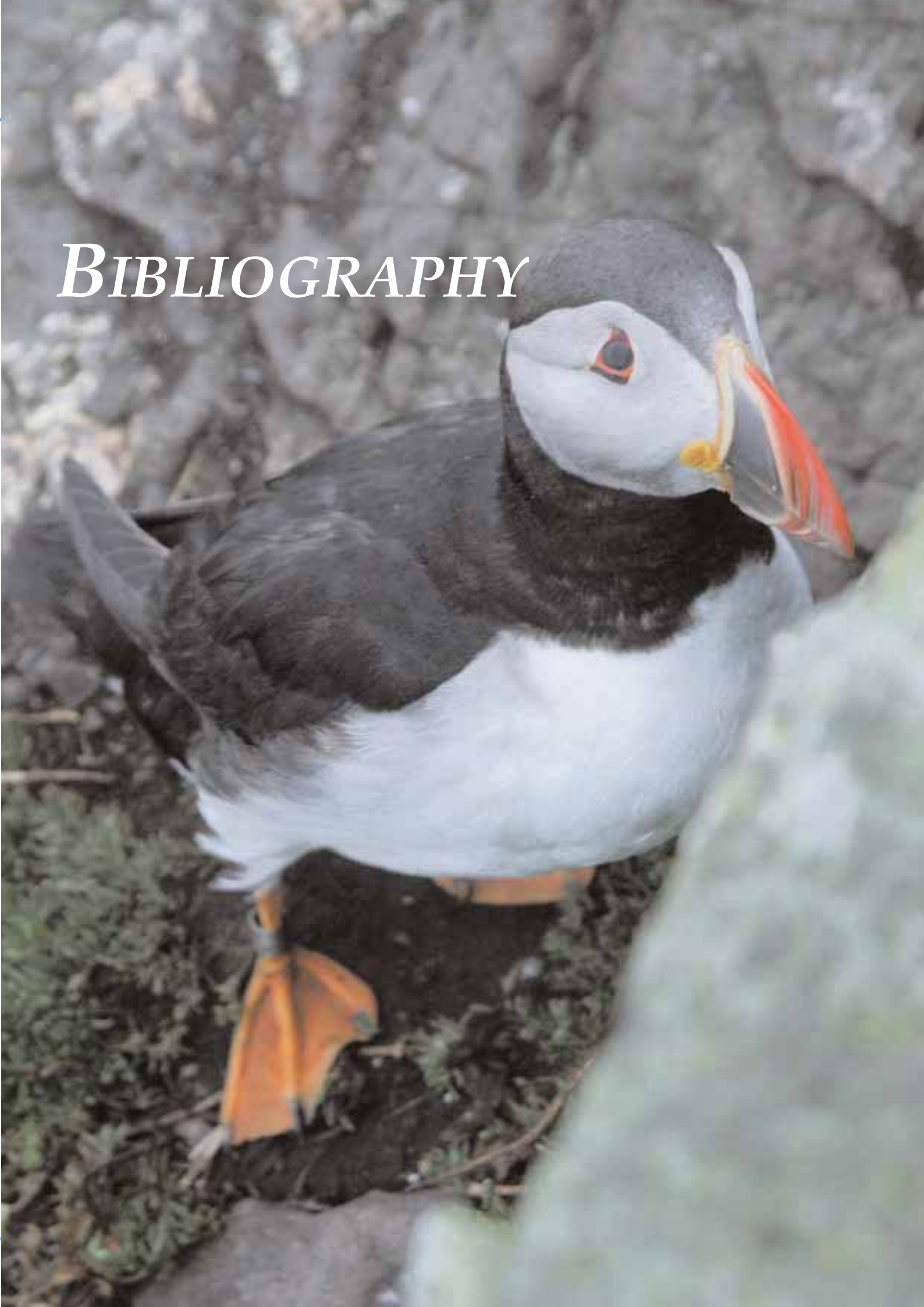
<http://www.whc.unesco.org>

#### **UNESCO**

<http://www.unesco.org>



# *BIBLIOGRAPHY*







Adamnán, *Vita Sancti Columbae*. Ed. and trans. with copious notes by W. Reeves. *Historians of Scotland* 6. Edinburgh, 1874.

*Adamnán's Life of Columba*, ed. A.O. Anderson and M.Q. Anderson (1961). Revised ed., M.O. Anderson (1991). Oxford University Press.

Allen, J. Romilly (1892) 'Notes on the Antiquities in Co. Kerry visited by the Royal Society of Antiquaries of Ireland and the Cambrian Archaeological Association, August 1891.' In *Royal Society of Antiquaries of Ireland*, 282–4.

*Annals of Inisfallen*. Ed. and trans. Sean MacAirt (1951). Reprint. Dublin, 1977.

*Annals of the Kingdom of Ireland by the Four Masters, from the Earliest Period to 1616*. Ed. and trans. John O'Donovan (1851). 3 vols. Dublin.

*Annals of Ulster*. Ed. and trans. William M. Hennessy (1887). 2 vols. Dublin.

Archdall, M. (1786) *Monasticon Hibernicum: or an History of the Abbies, Priories and other Religious Houses in Ireland*. Dublin. Reprint: ed. P. Moran (1872). Vol. ii. Dublin.

Athanasius, Saint. *The Life of Antony and the Letter to Marcellinus*. Trans. Robert C. Gregg (1980). *Classics of Western Spirituality*. New York.

Bede, the Venerable. *Historiam ecclesiasticam gentis Anglorum Historiam abbatum, Epistolam ad Ecgberctum, una cum Historia abbatum auctore anonymo, ad fidem codicum manuscriptorum denuo recognovit, commentario tam critico quam historico instruxit*. Ed. Carolus Plummer (1896). 2 vols. Oxford.

Bede, the Venerable. *A history of the English church and people*. Ed. and trans. L. Sherley-Price (1955) London; revised by R.E. Latham (1983). London.

Berger, Rainer (1992) '14C Dating Mortar in Ireland'. In *Radiocarbon*, vol. 34, no. 3, 880–89.

Berrow, S.D., Mackie, K.L., O'Sullivan, O., Shepherd, K.B., Mellon, C. and Coveney, J.A. (1993) *The second International Chough Survey in Ireland, 1992*. *Irish Birds* 5: 1–10.

Bourke, E. (1994) *Excavations 1993, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 45. Dublin.

Bourke, E. (1995) *Excavations 1994, Summary Accounts of Archaeological Excavations in Ireland*, I. Bennett (ed.), 44–5. Dublin.

- Bourke, E. (1996) *Excavations 1995, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 41. Dublin.
- Bourke, E. (1997) *Excavations 1996, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 48. Dublin.
- Bourke, E. (1998) *Excavations 1997, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 86. Dublin.
- Bourke, E. (2000) *Excavations 1998, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 93. Dublin.
- Bourke, E. (2003) *Excavations 2001, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 170. Dublin.
- Bourke, E. (2004) *Excavations 2002, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 217. Dublin.
- Bourke, E. (2005) 'A preliminary analysis of the inner enclosure of Skellig Michael, Co. Kerry'. In *Above and Beyond; essays in memory of Leo Swan*, T. Condit and C. Corlett (eds), 121–37. Dublin.
- Bourke, E. (2006) *Excavations 2003, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 220. Dublin.
- Calendar of Documents Relating to Ireland, 1302-04 (1875–86)* Eds H.S. Sweetman and G.E. Handcock. Vol. 5, 294–9. London. Reprint: London, 1974.
- Calendar of Papal Registers relating to Great Britain and Ireland (1893–1989)*. Vols 1–16. London.
- Cambrensis, Giraldus, *Topographia Hibernica et Expugnatio Hibernica*. Ed. J.F. Dimock (1867). Rolls Series 21, Vol. 5 of Giraldi Cambrensis Opera. London.
- Giraldus Cambrensis, *The History and Topography of Ireland*. Ed. and trans. John J. O'Meara (1951). Dundalk. Revised ed. London, 1982.
- Champneys, Arthur C. (1910) *Irish Ecclesiastical Architecture*. London.
- Chatterton, Lady (1839) *Rambles in the South of Ireland*. 2 vols. London.
- Cotter, C. (1992) *Excavations 1991, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 25. Dublin.

de Paor, Liam (1955) 'A Survey of Skellig Michael.' In *Journal of the Royal Society of Antiquaries of Ireland*, 85, 174–87.

de Paor, Maire and Liam de Paor (1958) *Early Christian Ireland*. Reprint: London, 1967.

Dunning, P.J. (1945) 'The Arroasian Order in Medieval Ireland.' In *Irish Historical Studies* 4 (November 16), 297–315.

Dunraven, Edwin Richard Windham Wyndham-Quin, Third Earl of Dunraven (1875 and 1877) *Notes on Irish Architecture*. Ed. Margaret Stokes. 2 vols. London.

Edwards, Nancy (1985) 'Origins of the Free-standing Cross in Ireland: Imitation or Innovation?' In *Bulletin of the Board of Celtic Studies*. Cardiff.

Etchingham, Colmán (1999) *Church Organisation in Ireland AD 650 to 1000*. Maynooth.

Fanning, Thomas (1981) 'Excavation of the Early Christian Cemetery and Settlement at Reask, County Kerry.' In *Proceedings of the Royal Irish Academy* 81 C, 65–163.

Foley, Patrick (1903) *The Ancient and Present State of the Skelligs, Blasket Islands, Donquin, and the West of Dingle*. Dublin.

Gogarty, Thomas (1912–13) 'Documents concerning Arch. Dowdall.' In *Archivium Hibernicum*, vols 1–2. Dublin.

Gwynn, Aubrey and R. Nevill Hadcock (1970) *Medieval Religious Houses in Ireland*. England.

Harbison, Peter (1976) 'John Windele's Visit to Skellig Michael in 1851.' In *Journal of the Kerry Archaeological and Historical Society*, 125–48.

Harbison, Peter (1991) *Pilgrimage in Ireland: The Monuments and the People*. London.

Hayden, A. (Forthcoming) *Excavations 2005, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed).

Hayward, Richard (1946) *In the Kingdom of Kerry*. Reprint: Dundalk, 1976.

Henry, Françoise (1940) *Irish Art in the Early Christian Period*. Revised. ed. London, 1965.

Henry, Françoise (1957) 'Early Monasteries, Beehive Huts and Dry-stone Houses.' In *Proceedings of the Royal Irish Academy* 58, 127–79.

Henry, Françoise (1963) *L'Art Irlandais*. 3 vols. Paris.

Horn, Walter (1973) 'On the Origins of the Medieval Cloister.' In *Gesta* 12, 14–52.

Horn, Walter and Ernest Born (1979) *The Plan of St. Gall*. 3 vols. University of California Press.

Horn, Walter, Jenny White Marshall and Grellan D. Rourke (1990) *The Forgotten Hermitage of Skellig Michael*. University of California Press.

Hughes, Kathleen (1966) *The Church in Early Irish Society*. London. Reprint: London, 1980.

Hughes, Kathleen (1972) *Early Christian Ireland: Introduction to the Sources. Sources of History: Studies In the Uses of Historical Evidence* 6. London.

Hughes, Kathleen and Ann Hamlin (1977) *The Modern Traveller to the Early Irish Church*. London. Reprint: Dublin, 1997.

Lamb, H.H. (1972–7) *Climate: Present, Past and Future*. 2 vols. London.

*Landscape Archaeology in Ireland*. Eds Terence Reeves-Smyth and Fred Hammond. British Archaeological Research, British Series 116, 1983.

Lavelle, Des (1977) *Skellig: Island Outpost of Europe*. Dublin. Reprint: Dublin, 2006.

Leask, Harold (1955) *Irish Churches and Monastic Buildings*. 3 vols. Dundalk.

*Lebor Gabála Éirenn*. Ed. and trans. R.A.S. Macalister (1938–56). 5 parts. Irish Texts Society. Dublin.

Lionard, Pádraig (1961) 'Early Irish Cross-Slabs' ed. Françoise Henry. In *Proceedings of the Royal Irish Academy* 61 C, 95–169.

Lynch, A. (1987) *Excavations 1986, Summary Accounts of Archaeological Excavations in Ireland*. In C. Cotter (ed.), 21. Dublin.

Lynch, A. (1988) *Excavations 1987, Summary Accounts of Archaeological Excavations in Ireland*. In I. Bennett (ed.), 17–18. Dublin.

Macauley, Kenneth (1764) *The Story of St. Kilda*. London.

Maclean, Charles (1980) *Island on the Edge of the World: The Story of St. Kilda*. New York.

Martin, Martin (1698) *A Voyage to St. Kilda*. London; reprinted many times thereafter.

- Martyrology of Tallaght, The. From the Book of Leinster and MS 5100-4 in the Royal Library, Brussels, MS 5100-104.* Eds R.I. Best and H.J. Lawlor (1931). London.
- Mason, Thomas (1936) *The Islands of Ireland*. London.
- Merne, O.J. & A. Walsh (2005) Breeding seabirds of the Skelligs, County Kerry. In *Irish Birds* 7, 461–74.
- Monastery of Tallaght* (1911). Eds. and trans. E.J. Gwynn and W.J. Purton. In *Proceedings of the Royal Irish Academy* 29, 115–79.
- Marshall, Jenny White and Grellan D. Rourke (2000) *High Island: An Irish Monastery in the Atlantic*. Dublin.
- Marshall, Jenny White and Claire Walsh (2005) *Illaunloughan Island: An Early Medieval Monastery in County Kerry*. Ireland.
- Mitchell, P.I., S.F. Newton, N. Ratcliffe, and T.E. Dunn (2004) *Seabird Populations of Britain and Ireland*. London.
- Nicol, Donald M. (1963) *Meteora: The Rock Monasteries of Thessaly*. London.
- O'Connor, Thomas. *Ordnance Survey Letters of 1841, Kerry 403 and 405-13*. Dublin: Archives of the National Monuments Service.
- Ó'Críonín, Dáibhí (1995) *Early Medieval Ireland 400-1200*. London and New York.
- O'Dwyer, Peter (1981) *Céil Dé: Spiritual reform in Ireland: 750-900*. Dublin.
- O'Kelly, M.J. (1958) 'Church Island near Valentia, Co. Kerry.' In *Proceedings of the Royal Irish Academy* 59 C, 57–136.
- Ó'Máidín, Unseann (1996) *The Celtic Monk: Rules & Writings of Early Irish Monks*. Cistercian Studies Series No. 162. Michigan.
- Ordnance Survey Map of 1841, Kerry 104*. Dublin: Archives of the National Monuments Service.
- O'Sullivan, A. and J. Sheehan (1996) *The Iveragh Peninsula: an archaeological survey of south Kerry*. Cork.
- O'Sullivan, Friar of Muckross Abbey, 'Ancient History of the Kingdom of Kerry.' Ed. Fr Jarlath Prendergast (1898–1900). In *Journal of the Cork Historical and Archaeological Society* 4–6.
- O'Sullivan, Michael (1987) 'Geological Aspects of the Constructions above the Needle's Eye on the South Peak of Skellig Michael.' In *Report to the Commissioners of Public Works*.

Roe, Helen (1965) 'The Irish Cross, Morphology and Iconography.' In *Journal of the Royal Society of Antiquaries of Ireland* 95, 213–18.

Roe, Helen (1976) 'The Cult of St. Michael in Ireland.' In *Folk and Farm*, ed. C. O'Danachair. Royal Society of Antiquaries of Ireland.

Rourke, Grellan D. (1987) 'Works to the Small Oratory terrace on Skellig Michael.' In *Public Works: the Architecture of the Office of Public Works, 1831-1987*. Architectural Association of Ireland, 111–13.

Rourke, Grellan D. (1997) 'The Stabilisation of the Early Christian Monastery on the Island of Skellig Michael, Co. Kerry, Ireland.' In *Studies in Ancient Structures: Proceedings of The International Conference, Turkey, 14–18 July 1997*. YTU Faculty of Architecture Publication, 585–94. Istanbul.

Rourke, Grellan D. (2002) 'Preserving the Monuments on Skellig Michael for the Future.' In *Antiquity*, 76.292, 542–52.

*Rule of St. Columba* (1873). Eds and trans. Arthur W. Haddan and William Stubbs. Vol. 2, Art. 1, Appendix A. Councils and Ecclesiastical Documents Relating to Great Britain and Ireland. Oxford.

*Rule of Tallaght, The* (containing The Teaching of Máel-ruain and The Rule of the Céilí Dé) (1927). Ed. and trans. Edward Gwynn. In *Hermathena* no. 44, 2d supp. vol. Dublin and London.

*Sancti Columbani Opera* (1957). Ed. and trans. G.S.M. Walker. *Scriptores Latini Hiberniae* 2. Dublin Institute for Advanced Studies.

Severus Sulpicius. *The Works of Sulpicius Severus* (1890–1900). Trans. Alexander Roberts. Select Library of Nicene and Postnicene Fathers of the Church 11, 1–122.

Smith, Charles (1756) *The Ancient and Present State of the County of Kerry*. Dublin. Reprint: Cork, 1969.

Stokes, Margaret (1978) *Early Christian Architecture in Ireland*. London.

*Thesaurus Palaeohibernicus: A Collection of Old-Irish Glosses, Scholia, Prose and Verse* (1901). Eds and trans. Whitley Stokes and John Strachan. 2 vols. Reprint: Oxford, 1975.

Thomas, Charles (1971) *Britain and Ireland in Early Christian Times, a.d. 400-800*. London.

Thomas, Charles (1971) *The Early Christian Archaeology of North Britain*. London.

*Two Lives of Saint Cuthbert: A Life by an Anonymous Monk of Lindisfarne and Bede's Prose Life* (1940). Ed. and trans. Bertram Colgrave. Cambridge University Press.

*Vitae Sanctorum Hiberniae, Partim Hactenus Ineditae ad Fidem Codicum Manuscriptorum Recognovit Prolegonimis Notis Indicibus Instruxit* (1910). Ed. Charles Plummer. 2 vols. Oxford.

Wakeman, W.F. (1886) 'A Survey of the Antiquarian Remains of the Island of Inishmurray.' In *Journal of the Royal Historical and Archaeological Association of Ireland*. Vol. 7, 4th series. Dublin. Reprint: London and Edinburgh, 1893.

Walsh, Rev. T.J. and Denis O'Sullivan (1949) 'St. Malachy, the Gill Abbey of Cork, and the Rule of Arrouaise.' In *Journal of the Cork Historical and Archaeological Society* 54, 40–61.

Wanless, S., S. Murray and M.P. Harris (2005) 'The status of the Northern Gannet in Britain & Ireland in 2003 / 04'. In *British Birds*, 98: 280–94.

*War of the Gaedhil with the Gaill; or, the Invasion of Ireland by the Danes and Other Norsemen* (1867). Ed. James Henthorn Todd. London.

Wessel, Klaus (1963) *Koptische Kunst: Die Spätantike in Ägypten*. Rechlinghausen.

*Western Asceticism* (1958). Trans. Owen Chadwick. Library of Christian Classics 12. Philadelphia.

Westropp, T.J. (1897) 'Cruise in Connection with the Munster Meeting, a Descriptive Sketch of Places Visited.' In *Journal of the Royal Society of Antiquaries of Ireland* 17, 265–358. (Also included in *The Antiquarian Handbook* (1904), ed. R. Cochrane. Royal Society of the Academy of Ireland.)

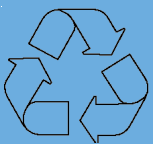
Wilson, T.G. (1968) *The Irish Lighthouse Service*. Dublin.

Windele, John (1826–51) *Journals on Travels in Cork and Kerry*. Handwritten manuscript in the library of the Royal Irish Academy: MS 12C.11. (For a valuable, though incomplete reprint of Windele's text, see Harbison 1976.)

World Heritage Centre (2008), *Operational Guidelines for the Implementation of the World Heritage Convention* (<http://www.whc.unesco.org>).







Printed on recycled paper containing a  
minimum of 75% post-consumer waste