# Sceilg Mhichíl World Heritage Property 2021 Works Season Report





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# 1. Introduction

This report aims to outline the repair works completed on the UNESCO World Heritage Site of Sceilg Mhichíl Michael in the season of 2021. The works were overseen by the Office of Public Works (OPW). The report will outline the extent of the repair works carried out and will also briefly summarise works to be undertaken in 2022. The report will also list potential threats to the site and how these threats are being managed.

Sceilg Mhichíl was closed to the public at the start of the 2021 season due to the COVID-19 restrictions. However, the island re-opened for tourists on 1<sup>st</sup> July 2021 following an announcement by the OPW Minister, Patrick O'Donovan, on 2<sup>nd</sup> June 2021. Despite the COVID-19 challenges, the OPW undertook maintenance and repair works to ensure the continued preservation of the monastic settlement and steps. The OPW continued to implement the COVID-19 safety measures by appointing a COVID-19 Officer to ensure that government guidelines for COVID-19 prevention were implemented on site for the safety of workers, consultants and visitors. The OPW also installed new visitors toilets near the Helipad and an isolation hut for people experiencing sea-sickness following sea travel. Sceilg Mhichíl officially closed for the 2021 season on 4<sup>th</sup> October 2021.

Climate change also continued to be a threat to the island. As a health and safety measure, the OPW installed temporary crash decks to reduce the risk of injury from rock fall. The OPW intend to install robust permanent crash decks in the 2022 season to replace the temporary crash decks.

The OPW co-ordinated with the National Monuments Service (NMS) and National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage (DHLGH) to ensure the protection of the island's archaeology and wildlife. All works were carried out under Ministerial Consent issued by the Minister for DHLGH. All future works at the twin lighthouses will be carried out within the context of an agreed Conservation Management Plan for the sites, in accordance with Objectives of the *Sceilg Mhichíl Management Plan 2020-30*.

Other tasks and works undertaken in 2021 include:

- Publication, in collaboration with DHLGH, of the new 2020 2030 Sceilg Mhichíl Management Plan on 16<sup>th</sup> December 2021.
- Digital survey was undertaken at the Monastery.
- A puffin tagging exercise and survey was undertaken by University College Cork.
- The Discovery Programme continued their digital monitoring programme for the inner enclosing monastic retaining wall below St. Michael's chapel.
- NPWS carried out surveys on bird species populations and nesting locations.
- OPW Conservation Architects carried out 8 no. site visits to assess and monitor the repair works.
- OPW continued with the conservation works to the Upper Lighthouse Road.
- OPW installed visitor's toilets near the existing Helipad.
- OPW appointed a consultant archaeologist to carry out extensive archaeological excavations at the Upper Lighthouse.
- OPW Minister, Patrick O'Donovan, Minister of State at DHLGH, Malcolm Noonan, and Michael MacDonagh, Chief Archaeologist, DHLGH visited Sceilg Mhichíl.

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- Crossing the Line productions continued with their ongoing filming of repair and survey works as a visual record of the works for OPW archives.
- OPW appointed a structural engineering consultant for the design of three permanent crash decks on site.
- OPW appointed Carrig Conservation to carry out a Climate Vulnerability Assessment (CVA).

# 2. General Description

The island of Sceilg Mhichíl lies 11.6 km off the most westerly point of the Iveragh Peninsula, Co. Kerry (SMR: KE 104A-001; National Grid Reference 024812 060654). The island is approximately 21.6 ha in area. The WHP is owned by the Minister for the Department of Housing, Local Government and Heritage on behalf of the Irish State. The Lower Lighthouse. Lighthouse towerand helipad are owned by the Commissioners of Irish Lights (CIL).

The island's geological composition consists of Devonian Red Sandstone, formed in the Devonian Age approximately 400 million years ago. The topography that we see today is the result of rock formations that occurred circa 100 million years ago. Sceilg Mhichíl was also cut off from the mainland during the sea level rises resulting from the end of the last ice age approximately 10,000 years ago.

There are two main components of the WHS on the island. One is on the North Peak, the monastery enclosure located on the eastern side of the island that comprises a series of terraces, dry stone enclosing walls, three cisterns, seven corbelled cells (six intact) and two oratories. There are also the remains of St Michael's Church. This part of th monastic settlement was accessed via a series of three stairways, only one of which is accessible today.

The second part of the World Heritage site is located on the South Peak with the remains of a hermitage, constructed ledges and altar remains.

The post-medieval industrial heritage of the island are the twin lighthouses and lighthouse road, built in the 1820s, the 19<sup>th</sup>-century pier, and the Commissioners of Irish Light's helipad.

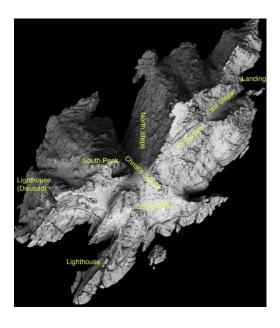


Fig. 1. LIDAR View of Sceilg Mhichil (Bourke, Hayden, & Lynch, 2011)

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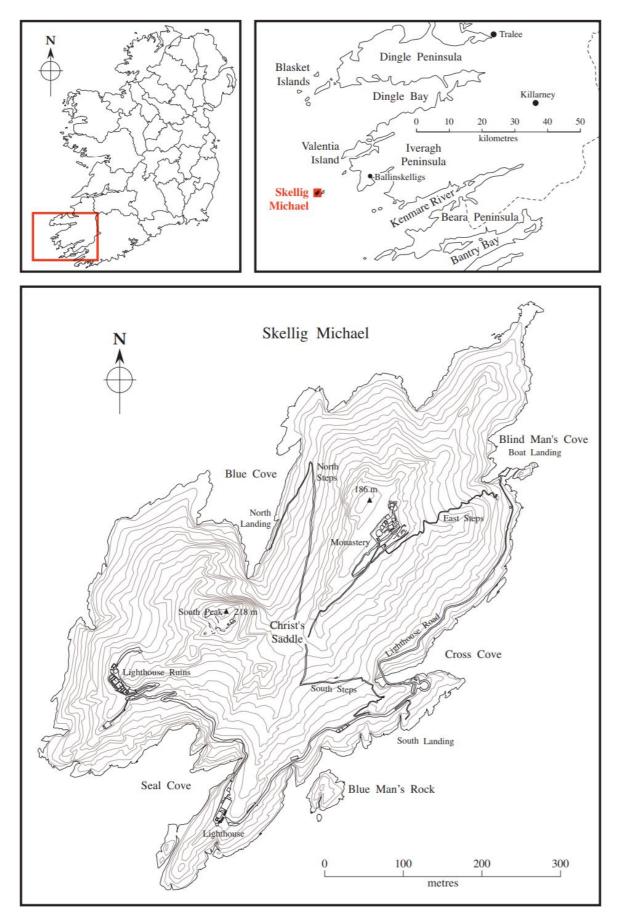


Fig. 2. – Location Map of Sceilg Mhichíl (Bourke, Hayden, & Lynch, 2011)

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# 3. Brief Site History

The following description can be found in *Skellig Michael World Heritage Site Management Plan* 2008 -2018 (Department of Environment, Heritage and Local Government; Office of Public Works;, 2008, pp. 11-13):

The word *Sceillic* means a rock, particularly a steep rock. The first reference to Sceilg 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.

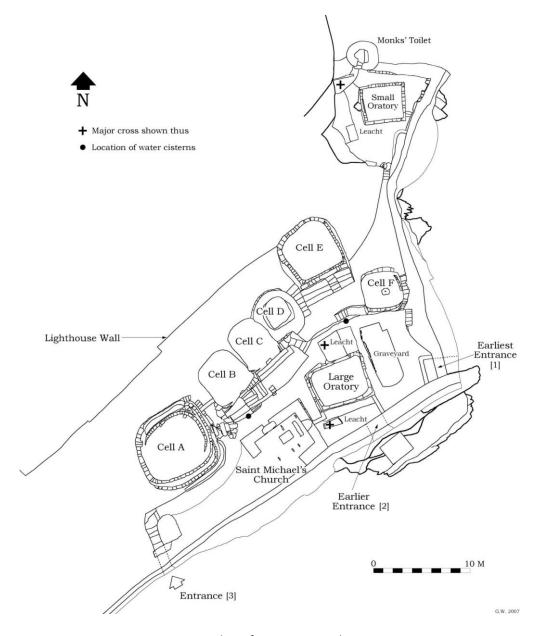


Fig. 3. – Plan of Monastic Settlement

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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 Sceilg called Suibhni ('Suibhni of Scelig'). This reference to Sceilg in the festology of one of the most celebrated monasteries of Ireland suggests that Sceilg 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.

Sceilg 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.

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.

In the early thirteenth century, a general climatic deterioration resulted in colder weather and increased storms on the seas around Sceilg. 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 Sceilg Mhichíl 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.

Sceilg Mhichíl 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.

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Fig. 4. – Painting of Sceilg Mhichíl by Admiral R. B. Beechey, R.H.A., mid 1800s (CIL).

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.

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# 4. Site Access

The site is accessed by boats departing from Portmagee or Knight's Town on Valentia Island. The CIL conduct intermittent inspections on the Lower Lighthouse and access the island through the use of helicopter, landing on the helipad. The OPW currently issues 15 boat licenses annually to private operators, subject to review. The number of daily visitors is capped at 180 visitors per day. Approximately 15,000 visitors land on Sceilg Mhichíl each year. Boats land at the pier and passengers disembark by climbing the steps. Visitors then ascend the Lower Lighthouse Road. A section of this route passes under a crash deck. The visitors reach the base of the eastern steps where an OPW guide gives an induction before directing them to the monastery steps. Additional guides are located at the monastery complex, completing the tour. On average, visitors currently spend three hours on the island. New toilets for visitors were installed in the 2021 season near the existing helipad.



Fig. 5. – Tourists arriving at the landing pier

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# 5. Works Descriptions 2021

# 5.1. Upper Lighthouse Road Repairs

Repair works to the Lighthouse Road continued through the 2021 season, having commenced in the 2017 season. The works were preceded by archaeological investigation that revealed the construction details of the Lighthouse Road and its associated features, thereby informing the repair works. It is envisaged that repair works will be completed to the Upper Lighthouse Road over the course of the next two seasons. The repair of the Upper Lighthouse Road will provide safe access for workers and visitors to the fog signalling platform and Upper Lighthouse complex.

Following an approved archaeological excavation strategy in 2021 at the Upper Lighthouse, clearance of organic buildup and debris, cleaning of the original drainage system, the replacement of missing wall capstones with locally sourced Valentia slate and the retention and repair of existing sand stone capstones was carried out. Repair works were undertaken using lime mortar and traditional construction techniques. MWP also issued a Natura Impact Statement report to the OPW for the proposed repairs to the sea wall along the Lighthouse Road (Appendix A).

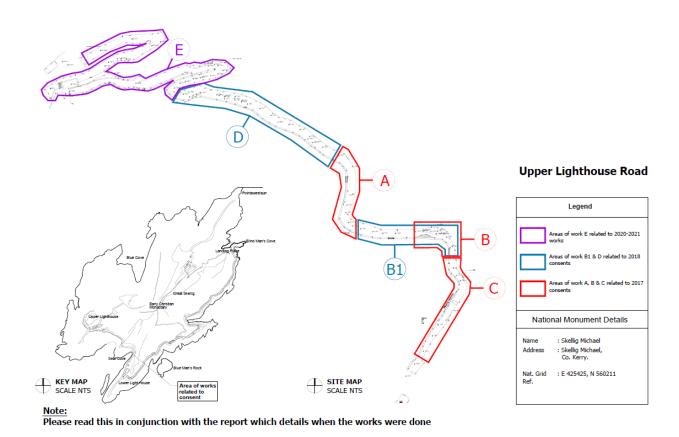


Fig. 6. – Works to Upper Lighthouse Road 2017 - 2021

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Fig. 7. – View of the Upper Lighthouse Road



Fig. 9. – View of the Upper Lighthouse Road from the Upper Lighthouse gate

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# 5.2. Digital Surveys

The OPW awarded the contract for the digital survey of the Monastery to Paul Corrigan Associates (PCA) following a tender process. The digital survey drawings will form the basis for Ministerial consent applications, design decisions and tender packages for proposed future conservation works. The OPW also intended to carry out a re-survey of the Upper Lighthouse following extensive archaeological excavations which revealed the original floor finish. However, the re-survey works were postponed due to bad weather at the end of the season. It is now intended to carry out the resurvey of the Upper Lighthouse in the 2022 season.

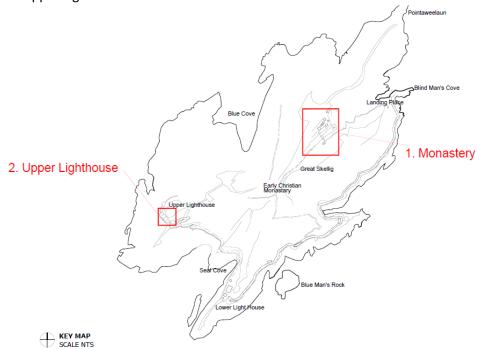


Fig. 9. - Key Plan of 2021 Digital Survey Locations

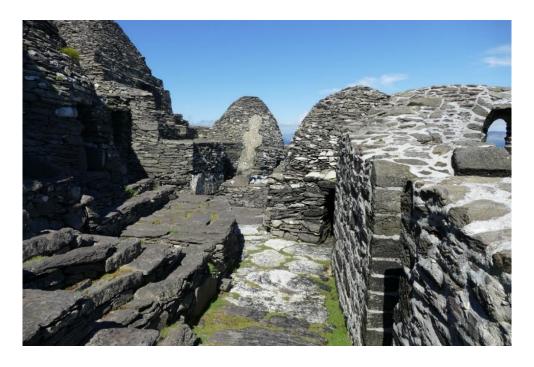


Fig. 10. – View of the Monastery at Sceilg Mhichíl

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#### 5.4. Discovery Programme Survey - Monastery

Since 2015, the Discovery Programme have been monitoring the movement of the main retaining wall of the monastic settlement. Markings were added in 2017 to the South Peak to determine the stability of the structures at that location. The Discovery Programme issue an annual report to the OPW with their findings and recommendations. In September 2021, the Discovery Programme undertook a survey of the monastic settlement and published their findings (See Appendix I). The 2021 report confirmed that a section of the retaining wall directly below St. Michael's chapel is currently undergoing slight movement beyond acceptable tolerances, but slightly at a reduced rate than observed in 2020. This section of the monastic wall has been historically susceptible to collapse, with major reconstruction having been undertaken during the 19<sup>th</sup> century.

Due to increased rainfall and pressure from runoff rainwater, the OPW will be undertaking repairs to this section of the enclosing wall over the coming years. The OPW commissioned a digital survey of the Monastery in 2021 to facilitate the future repair works. All works will be subject to Ministerial Consent and best conservation practices will be implemented. All proposed repair works will be subject to an agreed archaeological mitigation strategy.

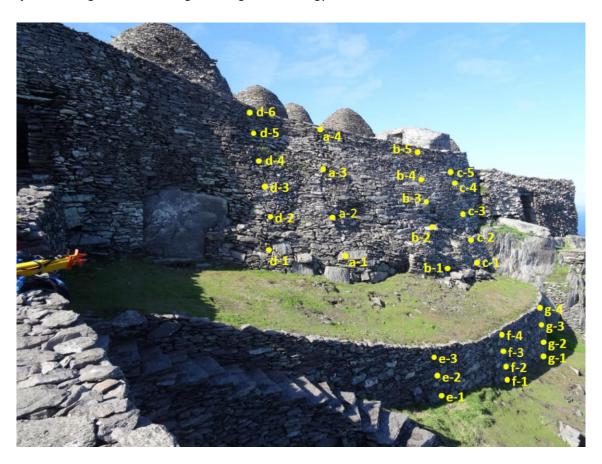


Fig. 11. - Discovery Programmed marker point locations at monastery retaining wall.

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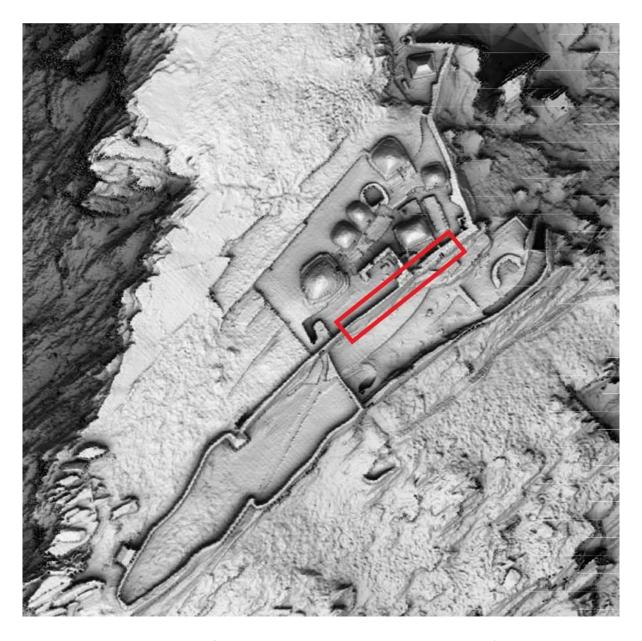


Fig. 12. - Location of movement to retaining wall below St. Michael's Chapel.

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### 5.5. Works to Lower Lighthouse

### 5.5.1. Project Background

The Lower Lighthouse complex was completed in 1826 but has seen significant alterations in the intervening years. The Keepers' Houses originally had a pitched roof but this was removed in 1910 and a reinforced concrete flat roof was added. In 1968, the original lighthouse tower was demolished and a new tower constructed. The Keepers' Houses were inhabited until 1987, when the lighthouse was fully automated.

OPW is currently in negotiations with CIL to lease the lower lighthouse. CIL will retain full ownership and control of the lighthouse tower and this will be inaccessible to building users. In 2019, with the permission of CIL and approved Ministerial Consent, the OPW commenced internal stripping out works including the removal of the existing dry lining to expose the original building fabric beneath.

The Lower Lighthouse will be refurbished to accommodate OPW staff, as well as NMS, NPWS and external consultants that visit the island. The aim of these works is to provide safe accommodation with sleeping, washing, cooking, administrative and communication facilities for OPW site operatives, consultants and visiting academics. The OPW are currently working on plans for the Lower Lighthouse refurbishment.

#### 5.5.2. Oil Removal and Tank Dismantling in Lower Lighthouse Compound

Works were completed on the dismantling of the former fuel storage tanks of the Lower Lighthouse complex. The tanks were fully removed in 2021 following the safe removal of oil by a specialist contractor in the 2020 season.

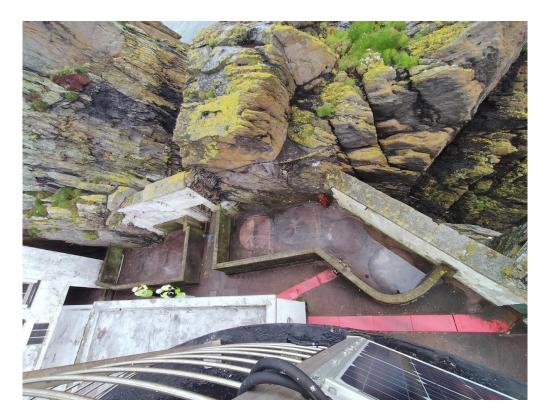


Fig. 13. – Area in the Lower Lighthouse Compound where former fuel tanks were removed

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#### 5.5.3. ARUP Energy and Water Strategy Report

The ongoing refurbishment of the Lower Lighthouse has highlighted many of the challenges, which have faced human settlement on the island over the millennia. The main challenge is that of water supply. There is no natural source of fresh water on the island. Historically, the monks and the lighthouse keepers collected rainwater. This required an innate knowledge of bird nesting locations, nesting season, saline levels due to windborne salt and other factors, as collected fresh water was easily contaminated due to local environmental factors. The island also lacks a supply to the main electrical grid. The Lower Lighthouse will be entirely off grid and energy usage proposals require expert advice.

The OPW commissioned ARUP to undertake a report for an energy and water strategy for the Lower Lighthouse complex in 2020. The report recommended the use of solar photovoltaic panels, the delivery of fresh potable water to the island by boat, the use of recycled water for other purposes, a natural ventilation solution and the use of composting toilets. The OPW is now seeking to appoint ARUP as M&E consultants for proposed works at the Lower Lighthouse.



Fig. 14. – View of Lower Lighthouse Complex from the Upper Lighthouse Road

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## 5.5.4. Timber Survey

A timber survey was carried out by Glenwood Preservation Ltd. on 19<sup>th</sup> August 2021 at the Lower Lighthouse. The specialist report was issued to OPW on 20<sup>th</sup> August 2021 reporting significant deterioration to the remaining timbers due to wet rot (Appendix E & F). It was also recommended in the report that the timbers are to be meticulously removed and replaced. The building has suffered from significant damp ingress throughout the years which has resulted in the deterioration of the remaining timbers.

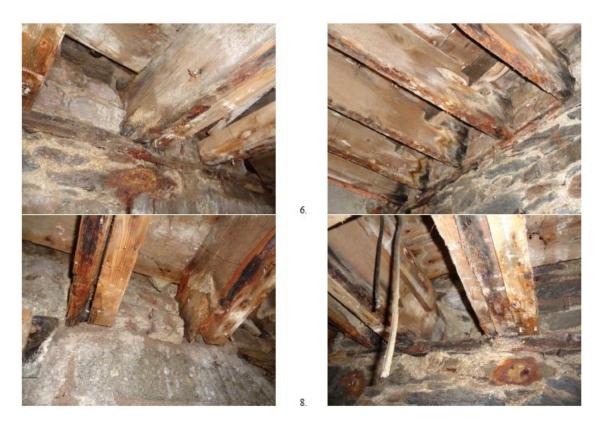


Fig. 15. – Existing timbers in poor condition at the Lower Lighthouse. Ref. Appendix F.

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### 5.6. Works to Upper Lighthouse

## 5.6.1. Project Background

The Upper Lighthouse is located at the end of the Upper Lighthouse Road and is in a ruinous state. The construction of the Upper Lighthouse began in 1821 together with the Lower Lighthouse. The upper light only functioned until 1870 due to the establishment of a new light on Inishtearaght, 22 miles north of Sceilg Mhichíl. The Upper Lighthouse consists of a lighthouse tower and dwellings which were formerly used by lighthouse keepers. These were built using rubble masonry, cut stone, brickwork and slate cladding on the outer walls. The dwellings were one storey buildings with attic rooms on top.

The Upper Lighthouse will be restored by the OPW as closely as possible to the original construction. The proposed restoration aims to give the visitors a greater sense of how the lightkeepers and their families lived and worked on the island in the 19<sup>th</sup> century. The proposed works will be subject to DHLGH Ministerial Consent. Fergus McCormick, OPW Senior Conservation Architect, conducted a site visit on 1<sup>st</sup> June 2021 accompanied by Dr. Connie Kelleher, DHLGH Senior Archaeologist, and Loughlin Kealy, retired UCD Professor of Architecture and member of the Sceilg Mhichíl Expert Advisory Committee. The purpose of this site visit was to discuss the proposed works to the lighthouse buildings. Loughlin Kealy provided expert advice during the site visit on conservation methodologies to be implemented during the design and refurbishment of the buildings.

The OPW submitted a DHLGH Ministerial Consent for the repair of the Upper Lighthouse Pier in January 2021. Once Ministerial Consent is received, the OPW intend to carry out the repairs early in the 2022 season. The OPW also obtained DHLGH Ministerial Consent for the repair works to the Upper Lighthouse sea wall in April 2021. The OPW will be installing scaffolding and carrying out repair works to the sea wall in the 2022 season.

The OPW commissioned Creagh House (Environmental) Ltd to carry out a geological survey to the Lighthouses in 2021. The appointed geologist Michael O'Sullivan visited the site on 9<sup>th</sup> September 2021. Creagh House (Environmental) Ltd issued their preliminary visual assessment of the building stone at the Upper and Lower Lighthouses to the OPW in January 2022 (Appendix J).

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Fig. 16. – Site inspection at the Upper Lighthouse held on 1<sup>st</sup> June 2021. From left to right; Fergus McCormick OPW Senior Conservation Architect and Loughlin Kealy, Retired UCD Professor of Architecture and member of the Sceilg Mhichíl Expert Advisory Committee.



Fig. 17. – Site inspection at Sceilg Mhichíl held on 9<sup>th</sup> September 2021. From left to right: Dr. Connie Kelleher DHLGH Senior Archaeologist, Grellan Rourke Retired OPW Senior Architect, Alan Hayden Consultant Archaeologist, Megan Willingham Assistant Archaeologist, Fergus McCormick OPW Senior Conservation Architect, Pat O'Shea OPW Foreperson, Pauline Gleeson DHLGH Senior Archaeologist, Pat Morris OPW Foreperson, Jacqui Donnelly DHLGH Senior Architect, Dr. Colin Rynne Senior Lecturer, University College Cork, Michael O'Sullivan Consultant Geologist, Bláthmhac Ó Muirí Former OPW Architect.

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#### 5.6.1. Archaeological Works

The archaeological works on Sceilg Mhichíl in 2021 concentrated on the Upper Lighthouse complex. The OPW obtained DHLGH Ministerial Consent in early 2021 for the removal of debris and earth build-up under archaeological supervision. Consultant Archaeologist Alan Hayden was appointed by the OPW to carry out the archaeological works and produce an archaeological report at the end of the season (Appendix H). The NPWS appointed David Power from Envirico as an Ornithologist Clerk of Works. The ornithologist's role is to co-ordinate with the archaeologist in relation to archaeological works and nesting birds in the existing soil and debris.

Due to the presence of the nesting birds identified by the ornithological clerk of works, a tarpaulin protection was laid at the Upper Lighthouse to prevent birds from nesting to facilitate the top soil and debris removal. The archaeological excavations took place between May and September 2021. Some small areas were left unexcavated due to the presence of nesting birds, which were identified by the ornithologist. These areas are to be excavated in early 2022 season in the absence of nesting birds.

The archaeological excavations at the Upper Lighthouse exposed original sandstone flooring and paving that are in excellent condition. Artefacts were also discovered during the archaeological excavations and were stored at the Lower Lighthouse for possible re-use in the future. Artefacts of interest will be sent to the National Museum of Ireland. The archaeologist recorded, documented and catalogued the retrieved stones, materials and artefacts. When the archaeological works were completed, a protective covering was installed to protect the floor during the winter season.



Fig. 18. – Post-excavation plan at the Upper Lighthouse

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Fig. 19. – Exposed sandstone flooring at the Upper Lighthouse



Fig. 20. – Exposed sandstone flooring at the Upper Lighthouse

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Fig. 21. – Original bronze hinge from Upper Lighthouse buildings



Fig. 22. –Retrieved stonework from the Upper Lighthouse

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#### 5.7. Installation of Visitors Toilets

Ministerial Consent for the installation of the first visitor's toilets and associated works near the Helipad area was granted in May 2021. The OPW commissioned Malachy Walsh and Partners to produce a Natura Impact Statement report to accompany the Ministerial consent application (Appendix B). The visitor's toilets opened to the public on 24<sup>th</sup> August 2021 and are the first public toilets to be constructed on the island. They consist of 2 no. dry toilets and hand sanitation stations. The enabling works and making good of the ground were completed first on site. The toilet block was constructed in the Killarney Depot, dismantled and re-constructed on site. The timber toilet block includes a dry toilet system with a composting tank and a solar panel on the roof. It was vital to install these toilets on the island to meet the Covid-19 health and safety requirements.



Fig. 23. – Construction of the concrete base prior to the installation of the visitor toilets

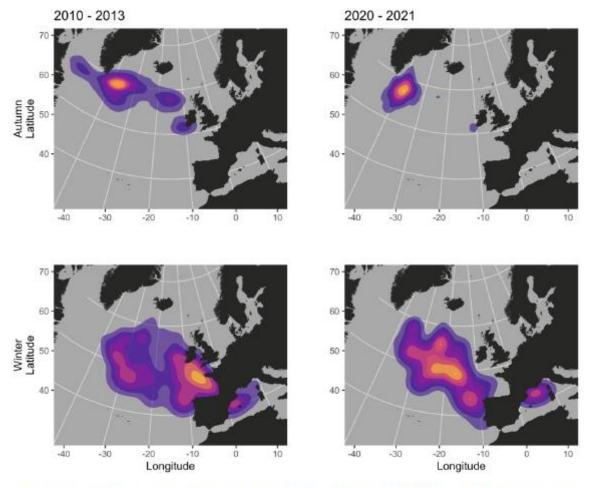


Fig. 24. – New visitors toilets completed in 2021 near the Helipad area

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### 5.8 Puffin Survey

The School of Biological, Earth & Environmental Sciences, University College Cork led by Mark Jessopp and Jamie Darby conducted a puffin survey at Sceilg Mhichíl in June and July 2021. The aim of the research was to track the movements of the breeding Sceilg Mhichíl puffin population outside the breeding season. Fourteen out of the twenty devices that were attached to the legs of puffins in 2020 were retrieved in 2021. These tags contain data on the puffins' geographic movements. A further 20 tags were deployed in 2021 with the aim of retrieving them in 2022. The research aims to quantify puffin mortality rates outside the breeding season and to monitor puffin travel patterns. It is intended that the research will assess the impact of more intense Atlantic storm cycles on the puffin population. The findings of the 2021 season were published in September 2021 (Appendix G).



The areas used by puffins from Skellig Michael in Autumn (top) and Winter (bottom). The maps on the left show areas used by puffins in 2010-2013, on the right are the areas used in 2020-2021. Though the overall migration pattern has remained similar, there has been a noticeable shift in areas used between the two periods.

Fig. 25. - Maps showing puffin locations and migration patterns. Ref. Appendix G.

5.9 National Parks and Wildlife Services (NPWS) Surveys

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The NPWS conducted surveys to monitor bird-breeding populations on the island in the 2021 season. The surveys were focused on the storm petrel and kittiwake species in particular, although all bird species were counted. The aim of the surveys was to collect empirical data on the population numbers and to compare these data sets to previous years.

The NPWS also appointed an Ornithologist Clerk of Works who co-ordinated the excavation works in conjunction with the consultant archaeologist at the Upper Lighthouse complex and identified the locations of nesting storm petrels. The OPW will endeavour to continue collaboration with the NPWS into the future for the monitoring of works.



Fig. 26. - 2020 NPWS surveys focused on kittiwake and storm petrel breeding populations.

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# 5.10 Sceilg Mhichíl 2020 – 2030 Management Plan

The final version of the Sceilg Mhichíl 2020 – 2030 Management Plan was formally launched by the DHLGH and OPW on 16<sup>th</sup> December 2021 and superseded the 2008 – 2018 Management Plan. The new Management Plan has been produced by DHLGH, in conjunction with the OPW, after being developed following consultation with local groups, non-governmental organisations and other interested parties. The plan provides information on the various aspects of the management policy for Sceilg Mhichíl, including conservation and preservation, visitor management, the legislative protections it enjoys and the development considerations necessary to protect the site into the future. Management challenges are also addressed, such as threats to the biodiversity and the impacts of climate change. It is envisaged that future works on the island will be closely monitored to assess their potential impact on wildlife.



Fig. 27. - The Management Plan 2020-2030 sets out the protocols and goals for the future repair works on Sceilg Mhichíl.

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# 5.11. OPW Architects' & Design Team Site Visits

The OPW Conservation Architects undertook eight site visits to Sceilg Mhichíl over the 2021 season, from May to September led by Fergus McCormick OPW Senior Conservation Architect. OPW Minister, Patrick O'Donovan, Minister of State at DHLGH Malcolm Noonan, and Michael MacDonagh, Chief Archaeologist DHLGH visited the site in 2021.

Additionally, an RTÉ interview was conducted on site with OPW Minister Patrick O'Donovan and OPW Senior Architect Fergus McCormick to discuss the ongoing works and the preparations for the re-opening of the site for visitors.

Works in the 2021 season included repair works to the Upper Lighthouse Road and the Lower Lighthouse, maintenance works to the monastery, the construction of visitor's toilets and archaeological excavation at the Upper Lighthouse. A site visit report was drafted with a photographic record following each site visit. The site visit reports recorded progress of all repair works and were issued following each site visit.



Fig. 28. – OPW Minister Patrick O'Donovan visit to Sceilg Mhichíl on 18<sup>th</sup> June 2021

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Fig. 29. – Minister of State at DHLGH Malcolm Noonan and Chief Archaeologist Michael MacDonagh visit Sceilg Mhichíl on 29<sup>th</sup> July 2021



Fig. 30. – OPW Minister Patrick O'Donovan visit to Sceilg Mhichíl on 3<sup>rd</sup> September 2021

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Fig. 31. – Site visit carried out by OPW Senior Conservation Architect Fergus McCormick, OPW staff and consultants

Site Visit No.	Date
1	18/05/2021
2	01/06/2021
3	18/06/2021
4	08/07/2021
5	29/07/2021
6	19/08/2021
7	03/09/2021
8	09/09/2021

Table 1. – List and Dates of OPW National Monuments Architects' visits.

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# 5.12. Audio-visual Recording of 2021 Works by Crossing the Line Productions

OPW commissioned Crossing the Line Productions to film works on the island for the 2021 season. The aim of the film footage is to provide a visual record of the works during the 2021 season. An audio-visual synopsis of the 2021 works will be produced and issued to the OPW in 2022. The audio-visual files produced by Crossing the Line acts as a record of works in conjunction with site reports and photographic records.



Fig. 32. - Crossing the Line Productions filming on site at Sceilg Mhichíl.

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# 6. 2021 Challenges

### 6.1 COVID-19

Sceilg Mhichíl continued to be impacted by the socioeconomic and human health effects of COVID-19 in 2021. However, although the island was closed to visitors in 2020, Sceilg Mhichíl re-opened to the public in July 2021. This added to the challenges of adhering to the Covid-19 protocols in such a challenging location. Also, with the return of the OPW guides to the site, it was necessary to ensure social distancing and safe COVID-19 procedures to ensure the health and well-being of staff and visitors to the island. Similarly to 2020, the work force capacity of the island was reduced with social distancing measures introduced with one worker only allowed in each site hut.

### 6.1.1. Management Response

The OPW adhered to official government guidelines at all times. A COVID-19 Health and Safety Management Plan for 2021 was produced by the OPW Safety Officer implemented throughout the season (Appendix C). The plan required the appointment of a COVID-19 compliance officer, the induction of all staff in COVID-19 measures, the use of logbook and contact tracing system and the daily cleaning and disinfecting of contact surfaces. COVID-19 signs were installed in 2020 at the site entrances and disinfection stations set in place at the landing pier, site entrance and toilet hut. These were maintained in the 2021 season. All site visits observed social distancing and mask wearing procedures. Additionally, the OPW installed new visitors toilets on the island and a Covid-19 isolation hut.





Fig. 33. - Infrastructure installed in 2020 and maintained in 2021 based on recommendations of OPW COVID-19 Management Plan

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### 6.2. Rock Collapse & Climate Impact

Rock-falls have increased in frequency in the past five years, due to the effects of climate change. The high levels of precipitation are leading to soil erosion and rock falls. The substantial rock fall which occurred in 2020 resulted in the installation of a temporary crash deck at this location and at another two high risk locations on the Upper Lighthouse Road to protect OPW operatives from falling debris.

Another minor rock fall was noted to crash deck on the Lighthouse Road in July 2021. The rock was deflected into the sea but three scaffolding planks were broken and required replacing. The OPW carried out regular inspections of all temporary crash decks throughout the season to mitigate the risk of rock falls.

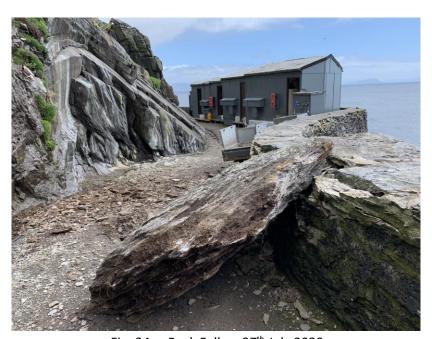


Fig. 34. – Rock Fall on 27th July 2020

#### 6.2.1. Management Response

In response to the threat to the health and safety of the workers, the OPW appointed Downes Associates as consultant structural engineers in 2021 for the design of three permanent crash decks in critical locations on the Lighthouse Road. The OPW obtained DHLGH Ministerial Consent in August 2021 for the installation of the permanent crash decks. MWP also prepared and issued to the OPW a Natura Impact Statement report for the construction of the 3 no. permanent crash decks (Appendix D).

The OPW also appointed a consultant quantity surveying firm Rogerson Reddan for the tendering process of appointing a contractor. The tender invitations were issued in 2021 but the process took longer than envisaged and there was not enough time to carry out the works. As a result, the OPW intend to re-issue tender invitations in 2022 and appoint a contractor for the installation of the crash decks.

The installation of permanent, well-designed and robust crash decks is critical for the safety and wellbeing of OPW workers on site and for the future access and use of the upper lighthouse road by visitors. The viability of the island as an accessible tourist location is dependent on safe access conditions on the Lighthouse roads.

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Fig. 35. – Temporary crash deck location A near site huts and installed following rock-fall.





Fig. 36. – Temporary crash deck location B & C on the Upper Lighthouse Road.

The OPW are also considering repair and enhancement works to future proof the landing pier against the effects of climate change. Measures will need to be discussed and agreed, including the possibility of constructing a wall on the pier to protect visitors from increased swells and higher tides. There is a more long-term strategy of increasing the height of the pier to accommodate predicted sea level rises due to climate change.

OPW are in discussion with Met Éireann, the Irish national meteorological organisation, to install a proposed weather station on the site to provide an accurate record of weather events and to monitor changing climatic patterns.

The OPW appointed Carrig Conservation to carry out a climate change vulnerability assessment of Sceilg Mhichíl. Stakeholders and community workshops will be carried out in 2022 and the results will be published in 2023.

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#### 6.3. Security

OPW guides typically have a full-time presence on the island throughout the tourist season. They are housed on the island and provide an informal security presence. Unauthorised landings outside the tourist season are undocumented and unquantified. OPW operatives work on the island from Monday to Friday. Due to the lack of a guide presence in the 2020 season, the site was exposed to unauthorised landings and excursions during the weekends. No damage was reported. A number of attempted landings were discouraged by operatives during the working week. The OPW has a number of signs in place warning unauthorised trespassers of the dangers posed to them; however, this alone is not enough of a deterrent. An unauthorised drone was also noted on one of the site visits. This occurred during the peak of the nesting season and could have caused potential stress to nesting seabirds.

# 6.3.1. Management Response

The OPW will endeavour to provide greater security to the site. The OPW are proposing to install CCTV and solar panels on the store building at the pier. An application for DHLGH Ministerial Consent will be submitted in 2022 for the proposed works. Technical information is being provided by OPW M&E Engineering section to accompany the Ministerial consent application. A Natura Impact Statement Document will be commissioned from a specialist environmental consultant to accompany the consent application.



Fig. 37. – Proposed location of CCTV on the building at the pier

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# 7. 2022 Objectives

The objectives for the 2022 season can be summarised as follows:

- Collaborating with DHLGH on the drafting of the Twin Lighthouse Conservation Plan to inform future works, mitigation strategies and research frameworks for the lighthouse structures.
- The installation of new OPW workers composting toilets in the compound of the Lower Lighthouse.
- Continuation of the repair of the Upper Lighthouse road and seawall under archaeological supervision.
- Repair works to the Upper Lighthouse buildings and entrance gate pier.
- Repair works to the Upper Lighthouse sea wall.
- PCA surveyors to re-survey the Upper lighthouse following archaeological excavations completed in 2021.
- The installation of three permanent crash decks on site.
- The installation of CCTV on the building at the pier (subject to Ministerial consent approval).
- Conducting the Climate Vulnerability Assessment (CVA) for Sceilg Mhichíl.
- The continued monitoring of the movement at the monastery enclosure retaining wall.
- Ongoing wildlife surveys.
- Ongoing filming of the repair works.



Fig. 38. – Proposed repairs to Upper Lighthouse sea wall in 2022 Season

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# 8. Bibliography

- Department of Housing, Local Government and Heritage; Officer of Public Works; (2021). *Sceilg Mhichíl World Heritage Property Management Plan 2020-30*. Dublin: Department of Housing, Local Government and Heritage.
- Bourke, E., Hayden, A. R., & Lynch, A. (2011). Skellig Michael, Co. Kerry: the monastery and South Peak, Archaeological stratigraphic report: excavations 1986 - 2010. Dublin: Department of Arts, Heritage and the Gaeltacht.
- Department of Environment, Heritage and Local Government; Office of Public Works;. (2008). *Skellig Michael Heritage Site Management Plan 2008 2018*. Dublin: Department of Environment, Heritage and Local Government.
- Rourke, G. D. (2002). Preserving the Monuments on Skellig Michael for the Future. *Antiquity 76.292*, pp. 542-552.

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