

# National Tourism and Environmental Monitoring Programme Dursey Island 2023



**Fáilte  
Ireland**

Turasóireacht Náisiúnta  
An tÚdara Eorbartha  
National Tourism  
Development Authority



# National Tourism and Environmental Monitoring Programme

## Annual Report for Dursey Island 2023

### TABLE OF CONTENTS

<b>DURSEY ISLAND – INTERESTING FINDS .....</b>	<b>1</b>
<b>1.0 INTRODUCTION .....</b>	<b>2</b>
1.1 Background .....	2
1.2 Aim of the Report.....	3
1.3 Site Description of Dursey Island .....	4
1.4 Critical Infrastructure.....	4
<b>2.0 METHODOLOGY .....</b>	<b>8</b>
2.1 Visitor Characterisation Survey .....	8
2.2 Ecological, Pathway and Habitat Condition Surveys .....	8
<b>3.0 RESULTS .....</b>	<b>10</b>
3.1 Visitor Characterization Survey .....	10
3.2 Pathways and Habitat Condition .....	18
3.3 Records of Rare, Protected and Invasive Species .....	24
3.4 Features, Signage and Hazards.....	27
3.5 Comparison with Previous Survey Results.....	29
<b>4.0 RECOMMENDATIONS .....</b>	<b>32</b>
<b>5.0 REFERENCES .....</b>	<b>33</b>

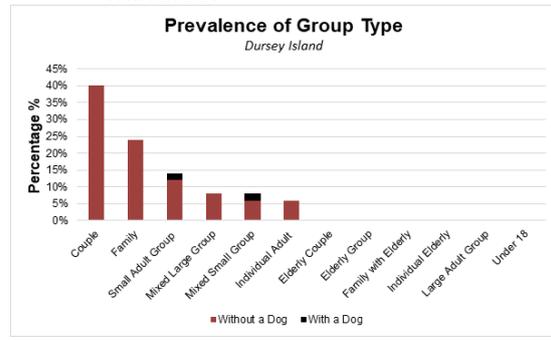
## DURSEY ISLAND – INTERESTING FINDS

### Chough – Rare Bird at Dursey Island

Dursey Island is of international importance for the breeding population of Chough (*Pyrrhocorax pyrrhocorax*). This species is listed in the EU Birds Directive as an Annex I Bird Species and is amber-listed as a Bird of Conservation Concern. They are recognized by their dark feathers and bright red bill and legs. The rocky cliffs on the island provide suitable nesting habitat. Choughs are thought to be most active early in the morning and in the evening, therefore are typically not very active when tourists are on the island (Scott, D. A. 2020).

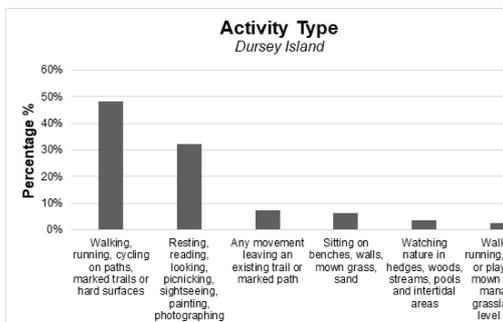
### Visitors

- 50 visitor groups visited the site between an 8-hour period.
- The average dwell time for visitor groups was 2 hours and 11 minutes.



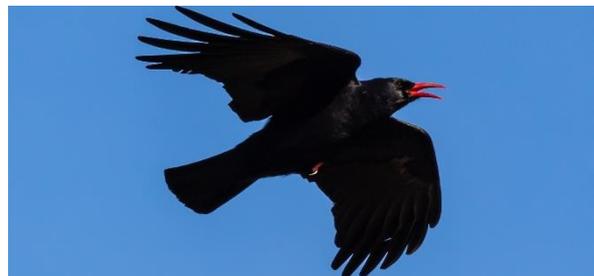
### Visitor Interaction

- 92% of the activities observed were low level activities.
- 62% of the visitor groups observed undertook activities other than just walking.



### Key Recommendations

- Provide toilet facilities at the site.
- Increase signage regarding heritage and the ecological value and biodiversity of the site.
- Replace damaged or fallen signs and trail markers with durable and weatherproof materials.



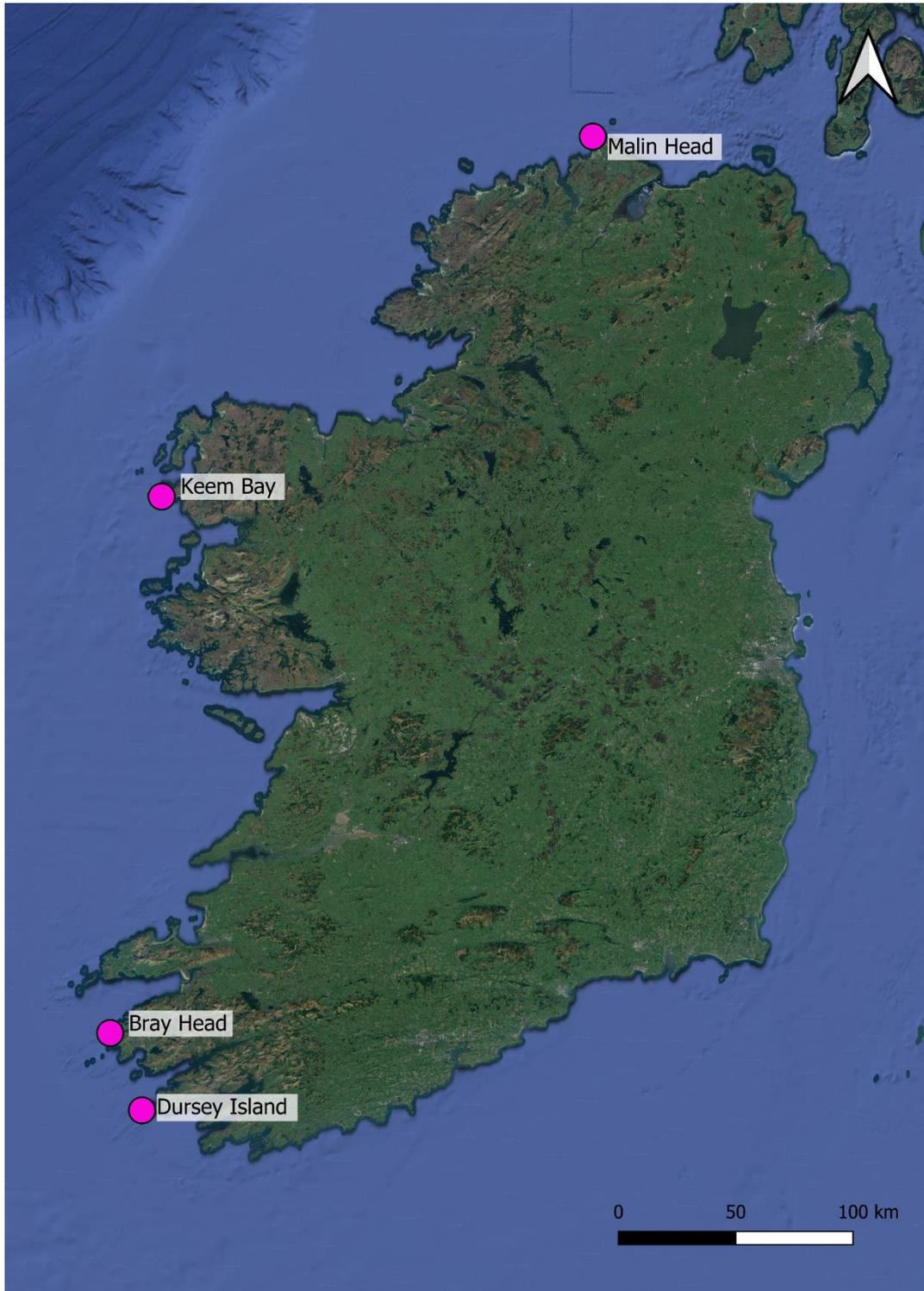
## **1.0 INTRODUCTION**

### **1.1 Background**

Roughan & O'Donovan (ROD) Consulting Engineers were appointed by Fáilte Ireland to conduct Visitor and Environmental Surveys as part of the National Environmental Surveying & Monitoring Programme. Fáilte Ireland regularly engages with environmental research that is used to make informed management decisions and produce robust guidelines to facilitate the protection of the environment. From its inception in 2014, the Wild Atlantic Way (WAW) Operational Programme Monitoring Programme has been conducting research into the impacts of tourism on the receiving environment. To date the surveys have been monitoring 57 sites and recorded the activities and effects of over 26,000 visitors to WAW discovery points.

Building on the success of the WAW environmental monitoring programme which ran from 2015-2019, Fáilte Ireland expanded the programme to a national level. From 2021 to 2022 the programme monitored 19 individual sites located in all of Fáilte Ireland's regional areas; The Wild Atlantic Way, Irelands Hidden Heartlands, Ireland's Ancient East, and Dublin. This 2023 National Monitoring report builds on environmental surveying and monitoring undertaken on behalf of Fáilte Ireland as far back as 2015.

Due to constraints with the timing of the ROD appointment in mid-2023 and the need to undertake the surveys before the end of peak summer season (i.e. end of August) it was decided that a reduced scope be implemented. Surveying was carried out at four of the sites, namely Bray Head (Valentia Island) in Co. Kerry, Malin Head in Co. Donegal, Dursey Island in Co. Cork and Keem Bay in Achill Island, Co. Mayo. Figure 1.1 below shows the locations of these sites.



**Figure 1.1 Environmental Monitoring Programme 2023 locations. Basemap provided by Google.**

## **1.2 Aim of the Report**

The purpose of the monitoring programme is as follows:

- To gain insight from an environmental perspective at popular tourism sites across Ireland;

- To obtain data on visitor numbers, visitor behaviour, path, and trail conditions etc. for each site;
- To obtain data relating to habitats, flora, and fauna for each site;
- To identify observable trends or variations among the sites;
- To identify favourable and unfavourable behaviour and practices at sites; and,
- To make recommendations where appropriate for site management for the benefit of the site, the visitor, and the natural environment.

The purpose of the visitor and environmental monitoring is to gather information on a select sample of visitors to Dursey Island on a typical Friday during the month of August. Subsequently answering the following questions:

- How many people visit Dursey Island?
- How long do visitors spend at Dursey Island?
- What is the demographic spread of visitors to Dursey Island?
- What modes of transport do visitors to Dursey Island use?
- What habitats are found on Dursey Island, and what condition are they in?
- What type of paths are present on Dursey Island, and what condition are they in?
- How is tourism impacting on the ecological integrity of Dursey Island?
- What can be done to reduce any impacts on the natural environment as a result of tourism?

### 1.3 Site Description of Dursey Island

Dursey Island is situated off the west coast of Co. Cork. It is accessible from Ballaghboy via cable car, the only cable car in Ireland. The car park on the mainland at Ballaghboy is on paved material and can hold approximately 70 cars, however this is often oversubscribed during peak season. Which often leads to cars being parked informally at the side of the road and drivers making challenging U-turn movements, which can result in traffic congestion in the area.. Informative signage on heritage features is available to visitors at the car park. A food truck was present at the time of the survey, which provided bins. The cable car ride from Ballaghboy to Dursey Island is a journey of approximately 15 minutes each way. It is also the only cable car in Europe to cross the sea, being suspended 25m above water. The cable car landing site on the island has a small car park which is used by locals. The surface is paved and it can accommodate c. 20 vehicles. The Dursey Island Loop Walk, a way marked trail, comprises a 14km looped walk, starting, and terminating at the cable car landing point on Dursey Island. The Dursey Island Signal Tower is approximately 4km from the car park. Other features on the island include Dursey Point, a scenic viewpoint on the southwestern end of the island, and the ruins of the Kilmichael Church and Graveyard. The island is also home to several archaeological remains.

Dursey Island is surrounded by the Kenmare River SAC (Special Area of Conservation) and the island is within the Beara Peninsula SPA (Special Protection Area). The Bull and The Cow Rocks SPA is approximately 220m west of Dursey Island. Dursey Island is also designated as a proposed Natural Heritage Area (pNHA). The pNHA is described in the Cork CDP 2022-2028 (CCC, 2022) as an 'Offshore island which supports exposed heathland and other maritime vegetation. Also supports breeding colonies of a number of sea birds including:

- Fulmar (*Fulmarus glacialis*)

- Chough (*Pyrrhocorax pyrrhocorax*)
- Herring Gull (*Larus argentatus*)
- Great Black-backed Gull (*Larus marinus*)
- Shag (*Phalacrocorax aristotelis*)

The island is also designated as High Value Landscape within the Cork CDP 2022-2028 (CCC, 2022). Plates 1.1 shows an image of the car park at the cable car landing point at Ballaghboy. Plates 1.2 and 1.3 show images from Dursey Island.



**Plate 1.1** Car park at cable car landing point at Ballaghboy. Dursey Island is in the background.



**Plate 1.2** Car park at cable car landing point on Dursey Island.



**Plate 1.3** Westward view of Dursey Island, with Dursey Island signal tower in the background.

## 1.4 Critical Infrastructure

Tables 1.1 - 1.3 below provide information on the infrastructure at Dursey Island. Uisce Éireann's website was used to access information on the Water Supply and Wastewater Treatment Capacity Registers for County Cork (Uisce Éireann 2023a, b). The Cork County Development Plan (CDP) 2022-2028 provided information on water supply, wastewater treatment and transport infrastructure at Dursey Island (CCC, 2022).

**Table 1.1 Dursey Island Wastewater Infrastructure**

Wastewater Treatment Plant (WWTP)	Uisce Éireann Indication of Capacity	Comment
<ul style="list-style-type: none"> <li>No toilet facilities are available on this site.</li> <li>There is no WWTP at this site.</li> <li>The nearest WWTP settlement is Castletownbere WWTP, which has capacity.</li> </ul>	N/A	There is no capacity according to the January 2021 assessment in the Cork CDP 2022.

**Table 1.2 Summary of Drinking Water infrastructure at Dursey Island**

Drinking Water	Water Resource Name (WRZ)	Uisce Éireann Indication of Capacity	Comment
Chlorination water treatment scheme and a limited public main. This does not reach the west of the island.	N/A The nearest water resource zone settlement is Castletownbere, which has potential capacity.	N/A	There is some capacity according to the January 2021 assessment in the Cork CDP 2022.

**Table 1.3 Summary of Transport infrastructure at Dursey Island**

Nearest Settlement	Current Transport Infrastructure	Comment
Castletownbere	Dursey Island can only be accessed by cable car from Ballaghboy.	In early 2022, Cork County Council undertook essential upgrade works comprising a full replacement of the support towers, which led to the closure of the cable car service, re-opening in June 2023. Cork County Council has proposed the replacement of the current cable car with two cable cars, however at the time of writing there are no plans to progress this proposal.

## 2.0 METHODOLOGY

In line with the methodology used in 2021 and 2022, the following surveys were undertaken:

- Visitor Characterisation Surveys
- Ecological Surveys
- Pathway and Habitat Condition Surveys

The survey at Dursey Island was undertaken on the 25<sup>th</sup> of August 2023. The survey was undertaken using two surveyors over an eight-hour period between 9am and 5pm. There was heavy rainfall early in the survey which cleared up for the remainder of the day. Maximum temperatures between 11.0° C and 17.0° C, with 5-10% cloud cover and a mean wind speed of 7.0 knots (Met Éireann, 2023). The survey was undertaken on a Friday and in reasonable weather conditions, to ensure that the data was comparable to previous years. The sub-sections below present the methodology used at each site.

### 2.1 Visitor Characterisation Survey

A 'visitor' refers to an individual, couple or group who arrive together. The following variables were recorded for each visitor:

- Activity Type
- Dwell Time
- Group Type
- Transport Type
- Use of Available Interpretive Signage

The visitor characterisation survey was undertaken continuously over an eight-hour period, between 9am and 5pm. The survey was undertaken across the whole island. Groups arriving at the landside car park were visible from the island and transport types were recorded by looking across the sound.

One surveyor was positioned at the car park on Dursey Island, next to the cable car landing point, and recorded each group as they arrived and left, recording the variables listed above. The second surveyor undertook the other surveys, including the survey of visitor behaviour, which was carried out by monitoring a sample of visitors. This surveyor also undertook the ecological and pathway surveys, and habitat condition assessments. The activities and impacts were recorded following the conventions presented in Appendix I.

### 2.2 Ecological, Pathway and Habitat Condition Surveys

The habitat condition survey was carried out following the methodology outlined in the 2021 report. All habitats were classified and mapped in accordance with *A Guide to Habitats in Ireland* (Fossitt, 2000) and *Best Practice Guidance for Habitat Surveying and Mapping* (Smith et al. 2011). Notes were taken on species composition, habitat condition and existing pressures. A desktop study was undertaken to identify rare and protected species and designated sites in the vicinity of each site. Incidental sightings of birds, mammals, reptiles etc. were also recorded during the survey.

The paths and desire lines at each site were surveyed and mapped, and notes were taken on substrate, details of any path construction, evidence of erosion such as braiding and path widening, and any changes in the condition when compared to previous surveys. Notes were taken on whether the paths were accessible for wheelchairs, buggies, and less able-bodied people.

Pathways were mapped and colour-coded to show the path type (e.g., tarmac, grit, desire line etc.) and condition (good/ moderate/ poor) for each 100m section. The path condition survey covered the areas on the site surveyed in 2021 and 2022, as well as any other paths on the sites. In addition to the pathway assessment, any features on site, including buildings, cairns, and dry-stone walls were documented. Notes and photographs were taken of these features to document their condition.

In addition to the information collected in 2021 and 2022, in 2023, the publicly available heatmaps (available at: <[www.strava.com/heatmap](http://www.strava.com/heatmap)>) were used to ascertain the routes being used by people with the online fitness app downloaded over the previous 2 year period. In addition to the pathway condition assessment, the heat maps provided valuable information on braiding and/or desire lines.

### 2.2.1 Habitat Condition Assessment Methodology

A rating scale was used to assess habitat conditions across all sites (See Table 2.1). The following criteria were used to assess habitat condition:

- Extent of habitat degradation;
- Impact of habitat degradation (localised or widespread);
- Potential for the habitat to recover; and
- Whether or not intervention is required.

For the purpose of this report, as was the case with the 2021 and 2022 reports, degradation is defined as any change to a habitat which reduces its viability or the viability of the species which occur there in the long-term. An assessment of the habitat condition was made every 100m of the transect. Habitat conditions were rated on a scale of 1 to 5, with 1 indicating to that there was no impact, and 5 being that there was a high impact on the habitat.

**Table 2.1 Habitat Condition Assessment Rating Scale**

Scale	Condition
1	No evidence of habitat degradation.
2	Localised habitat degradation. Habitat capable of rapid recovery.
3	Widespread habitat degradation. Habitat capable of rapid recovery.
4	Localised habitat degradation. Intervention required for full recovery.
5	Widespread habitat degradation. Intervention required for full recovery.

### 3.0 RESULTS

#### 3.1 Visitor Characterization Survey

The visitor monitoring surveys recorded a total of 50 visitor groups. The 'couple' group was the most-recorded group type at this site, with cars being the most prevalent mode of transport prior to the use of the cable car. The average dwell time for the site was over 2 hours and 11 minutes with the following activities undertaken during the survey (listed in order of occurrence rate):

- Walking, running, or cycling on paths, marked trails or hard surface.
- Resting, reading, looking, picnicking, sightseeing, painting, photographing.
- Any movement leaving an existing trail or marked path.
- Sitting on benches, walls, mown grass, sand.
- Watching nature in hedges, woods, streams, pools, and intertidal areas.
- Walking, running, cycling, or playing in mown grass, managed grassland, or level sand.

##### 3.1.1 Dwell Time

The average dwell time for visitor groups observed to the site was 2 hours and 11 minutes. The median dwell time was 2 full hours, i.e. 50% of the visitor groups observed remained at the site for less than 2 full hours. Based on the average expected time of 4 hours to complete the looped walk, only 28% of the visitor groups completed the full looped walk on the island. Figure 3.1 presents the dwell time of visitor groups.

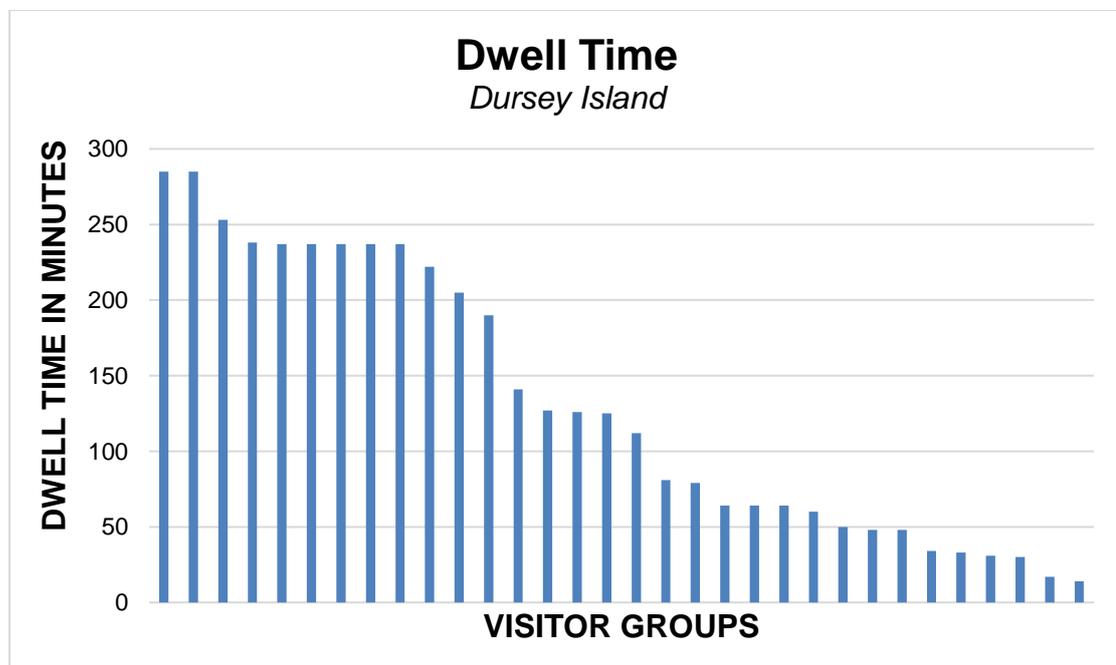


Figure 3.1 Dwell Time of Visitor Groups at Dursey Island

### 3.1.2 Prevalence of Group Type

Figure 3.2 presents the prevalence of group types observed visiting the site, with and without a dog. 'Couples' made up the largest proportion of group type with 40% of all 50 groups observed. The second largest group type was 'family' with 24%. The third largest was the 'small adult group' group type with 14%. The remaining group types observed in order of prevalence were 'mixed large group', 'mixed small group', and 'individual adult.' There were no records made for the following group types 'elderly couple', 'elderly group', 'family with elderly', 'individual elderly', 'large adult group', and 'under 18'. The 'small adult group' and 'individual adult' group types had 2% or one group each which had a dog. All groups when observed kept their dogs on leads.

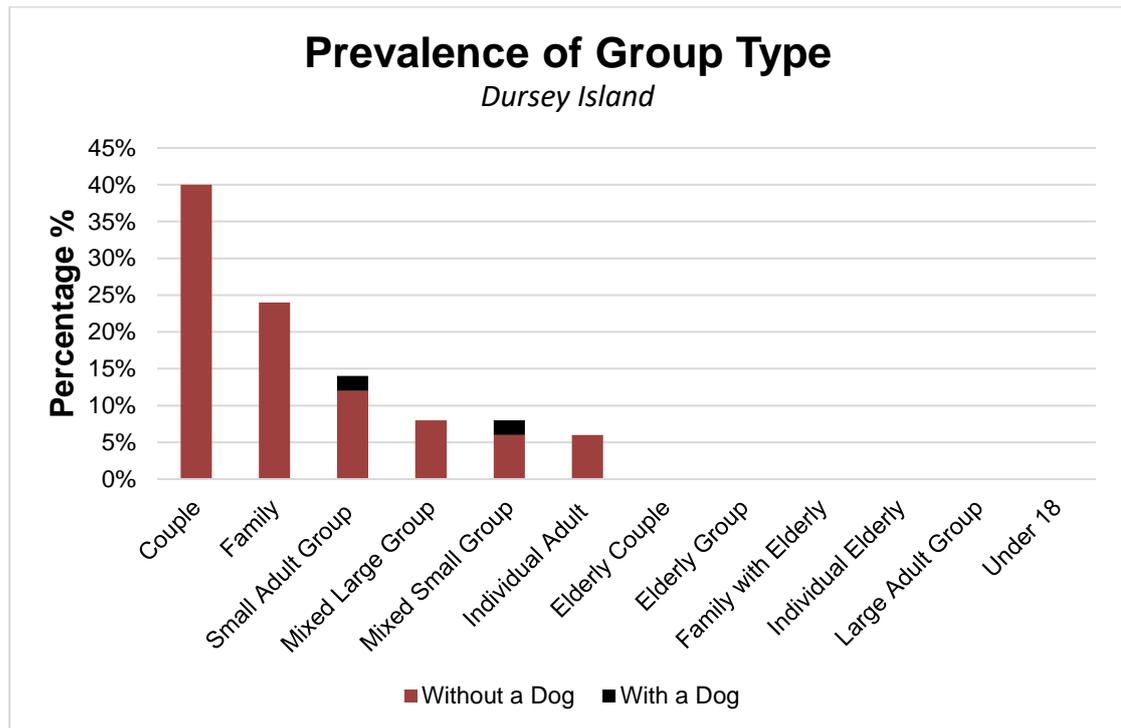


Figure 3.2 Group Types that Visited Dursey Island

### 3.1.3 Prevalence of Transport Type

Cars in combination with the cable car made up 100% of all transport modes to Dursey Island. Cable car is the only way for members of the public to reach Dursey Island. Occasional vehicular access by ferry is provided to residents when the cable car is out of service.

### 3.1.4 Read Available Signage

Figure 3.3 presents the number of visitor groups observed reading the available signage at the car park on Dursey Island, next to the cable car landing point. A higher proportion of visitor groups did not read the signage, with 58% of visitor groups not reading the signage, and only 42% of visitor groups reading the signage. However, it must be taken into consideration that a proportion of the visitor groups may be local to the area and may have previously read the signage on past visits. The signage close to the cable car landing point on Dursey Island is shown in Plate 3.1.

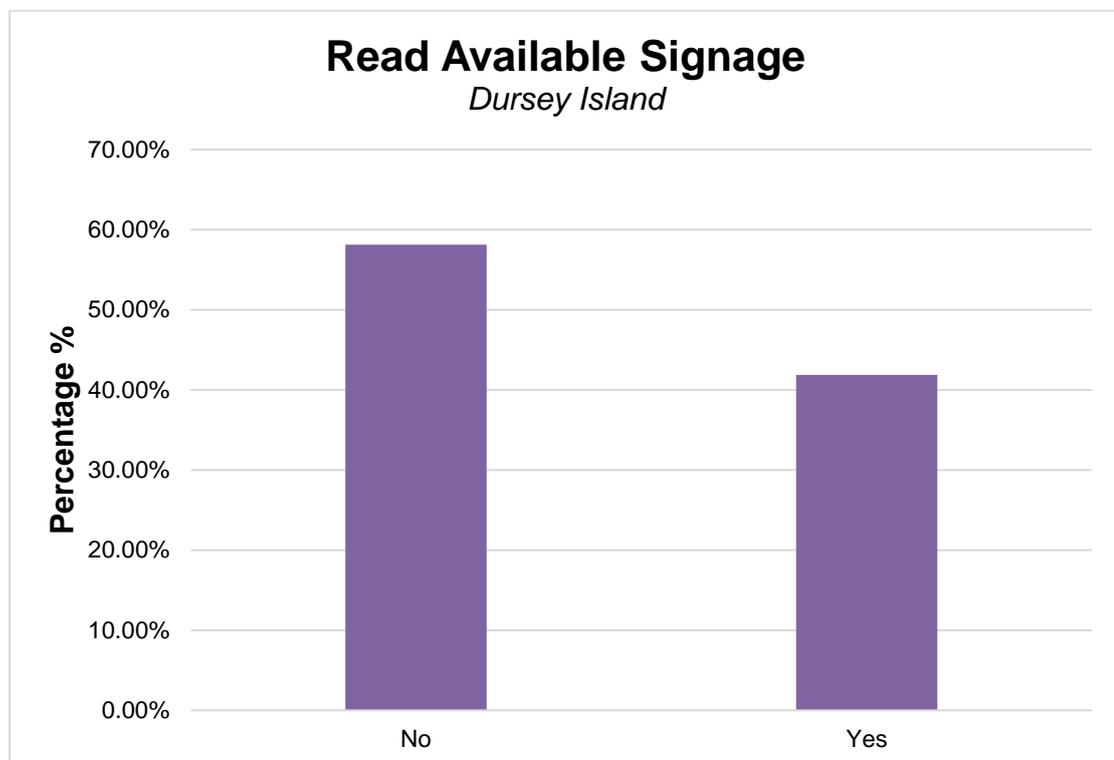


Figure 3.3 Use of Signage at Dursey Island

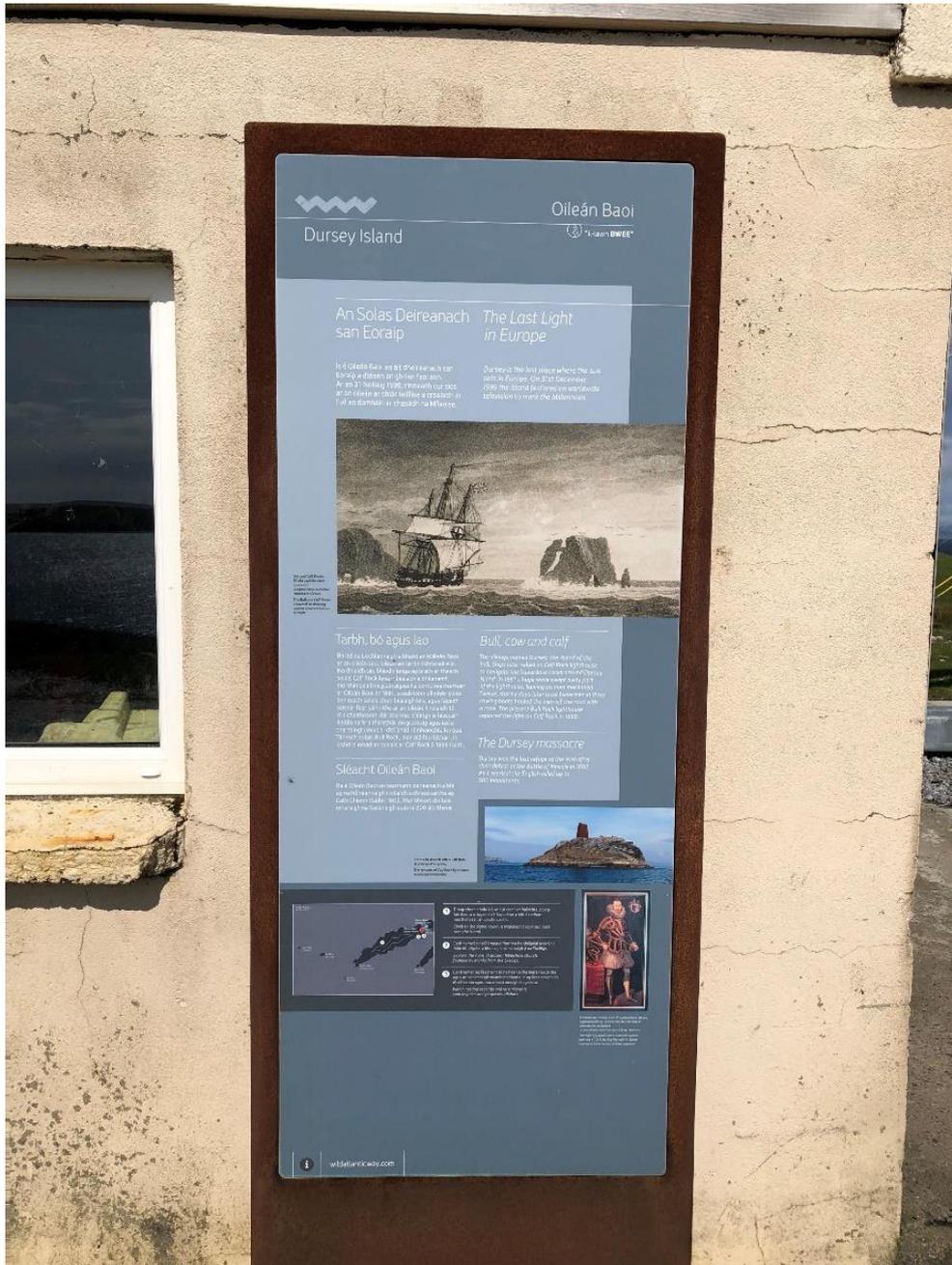
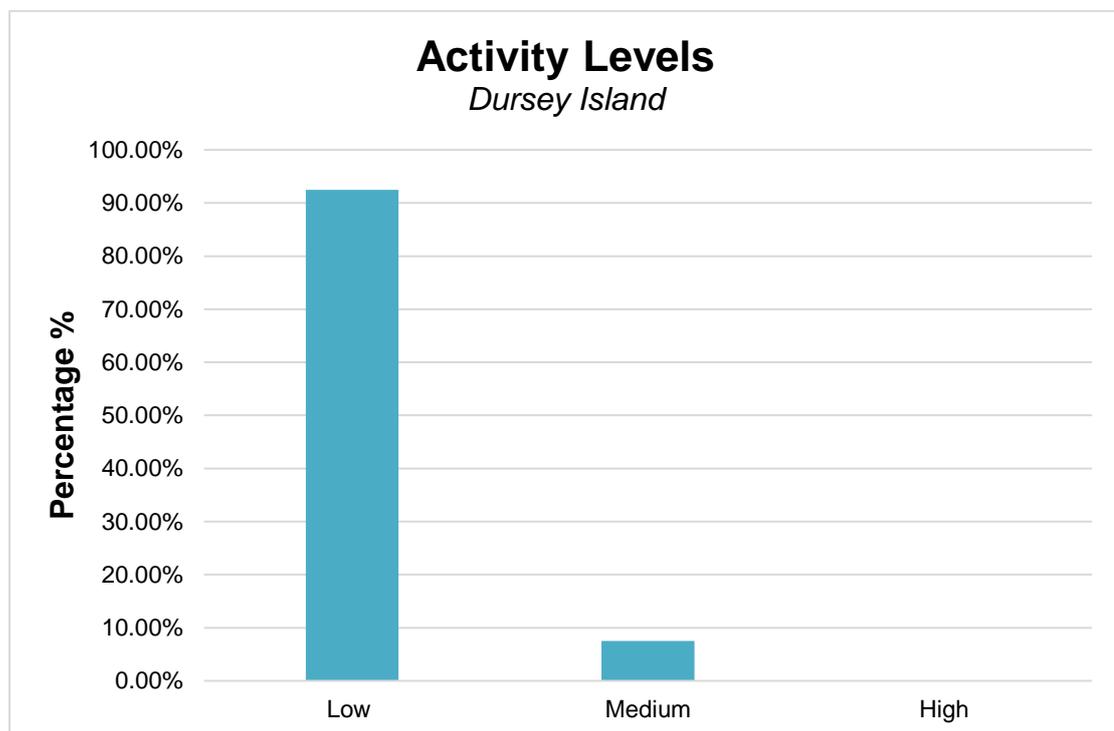


Plate 3.1 Wild Atlantic Way signage at cable car landing point on Dursey Island.

### 3.1.5 Activity Levels

Figure 3.4 presents the activity levels at Dursey Island. A sample of 42 visitor groups' activities were observed. Activity levels related to impact of an activity on the environment. The results are shown below with the activity categories as detailed in Appendix I. For example, walking on marked trails and hard surfaces is a low level activity, whereas disturbing wildlife and picking herbaceous vegetation are considered high level activities. 92.5% of the activities observed at Dursey Island were considered low level activities. The low-level activities observed included walking, sitting, resting, sightseeing, photographing, picnicking, and watching nature. Only 7.5% of the activities observed were considered medium level activities. The medium level activities observed included walking off an existing trail or marked path. No high-level activities were observed.



**Figure 3.4** Categories of Activity Level at Dursey Island

### 3.1.6 Impact Severity Levels

Figure 3.5 presents the impact severity level observed at the site. A sample of 42 visitor groups' activities were observed. Impact severity levels relates to the impact and severity of the activities undertaken at the site. The results are shown below with the activity categories as detailed in Appendix I. The survey found that 87% of the activities observed had low level impact severity on the site, low level includes no effects, desire lines on grassy and leafy vegetation, temporary disturbance of wildlife, and temporary change of character. 13% had a medium level of impact severity, medium level includes desire lines outside the existing trail or marked oath and trampling of herbaceous vegetation. No severe level of impact severity was observed.

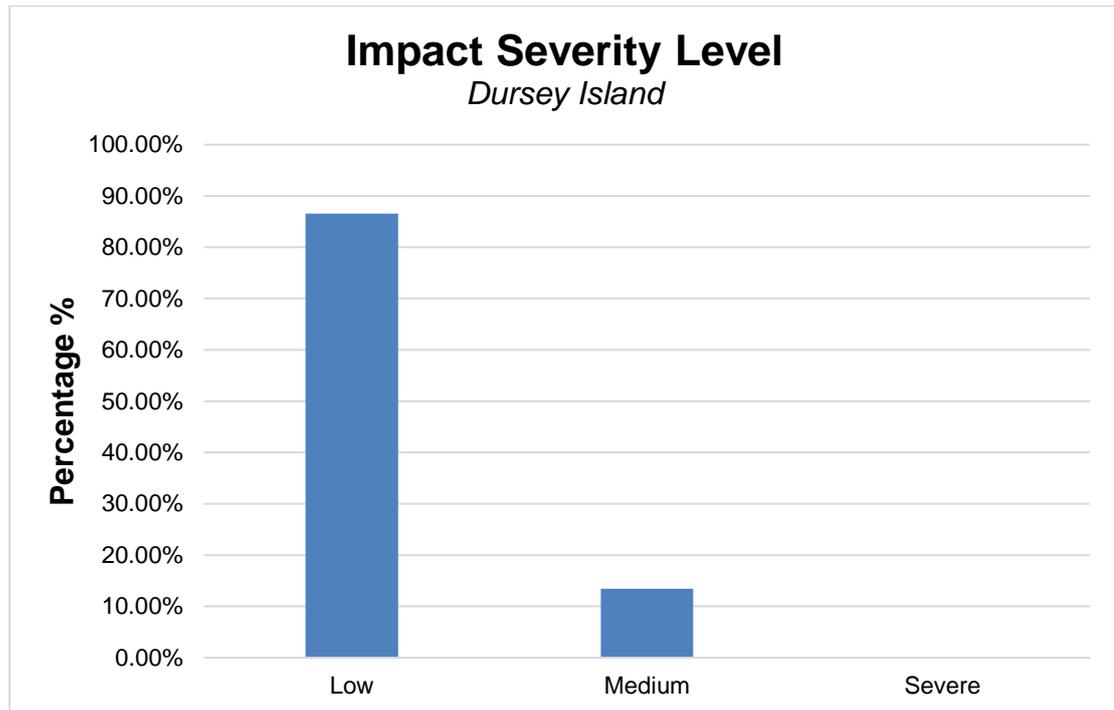


Figure 3.5 Categories of Impact Severity Level at Dursey Island

### 3.1.7 Activities Undertaken Other than Walking

Figure 3.6 presents the number of visitor groups observed undertaking activities other than just walking. The majority of visitor groups did undertake activities other than walking, representing 62% of groups. Other activities observed other than walking include sitting, resting, sightseeing, photographing, picnicking, and watching nature. While 38% of groups were observed only walking.

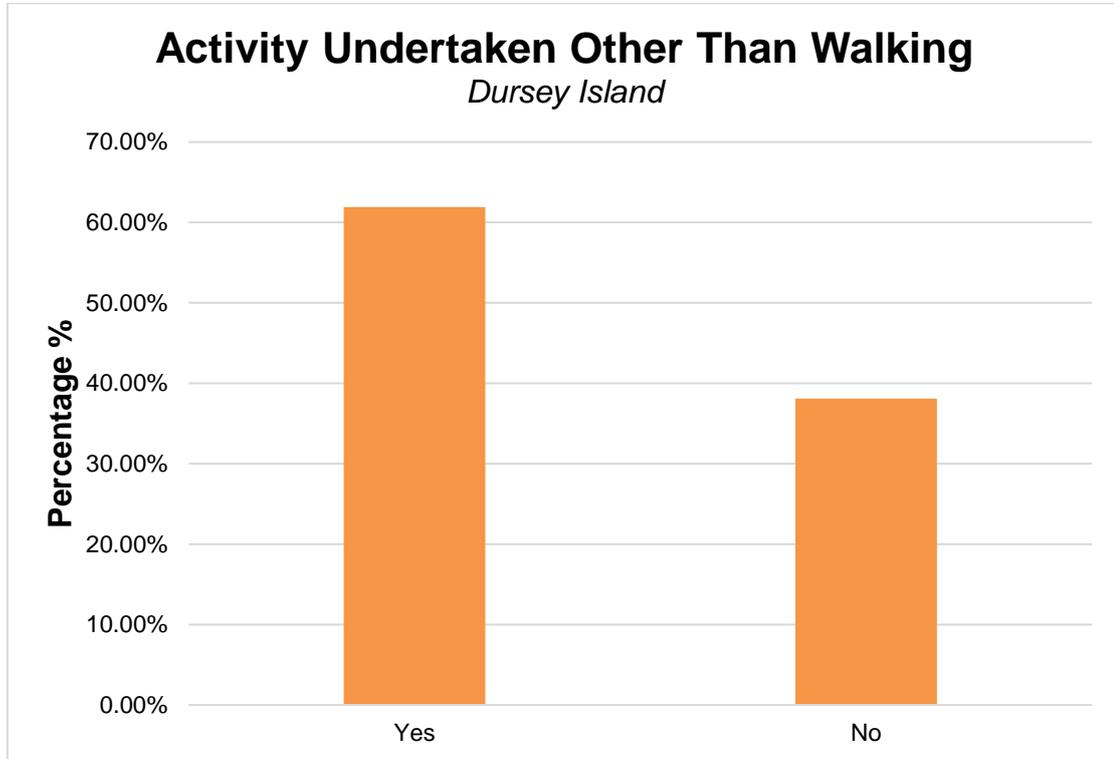
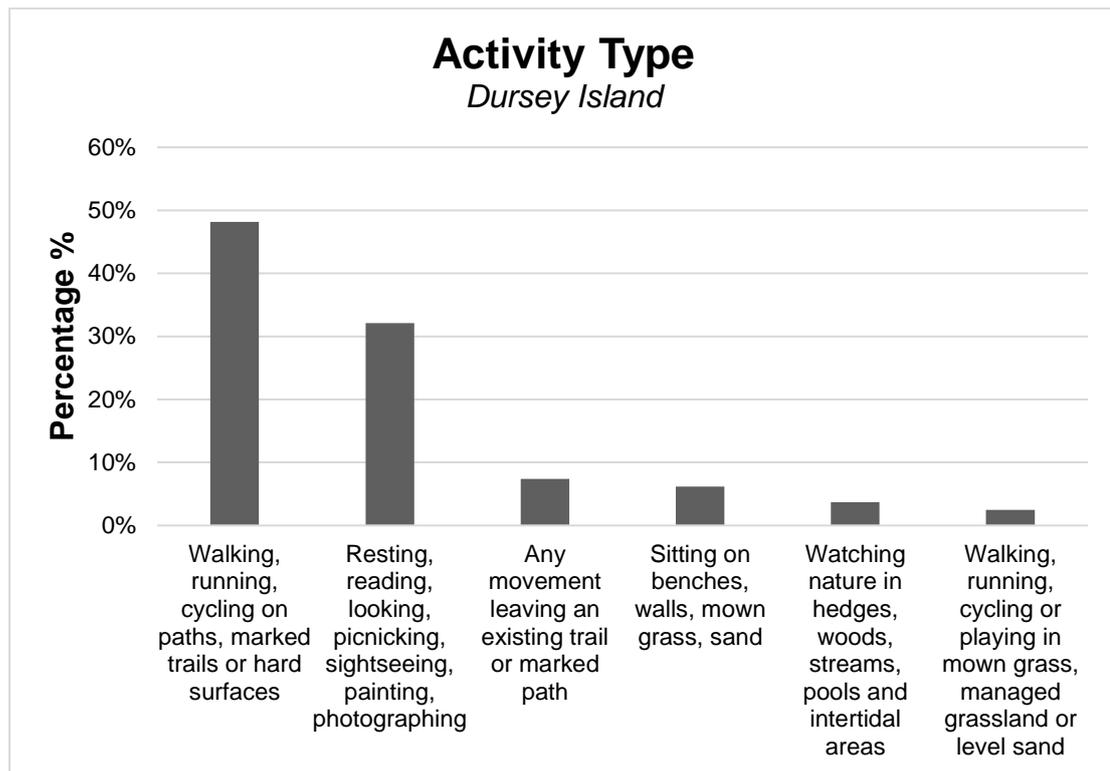


Figure 3.6 Activities Undertaken Other than Walking at Dursley Island

### 3.1.8 Activity Type

Figure 3.7 presents the percentage of visitor groups' activity types observed. A sample of 42 visitor groups' activities were observed. The survey found that 92.5% of the activities observed were low level activity types as presented in the Figure 3.4. Low level activity types observed included walking, sitting, resting, sightseeing, photographing, picnicking, and watching nature. Only 7.5% of the activities observed were a medium level activity type, which included 'any movement leaving an existing trail or marked path'.



**Figure 3.7 Activity Types at Dursey Island**

### 3.1.9 Heat Map

Figure 3.8 presents a heat map of visitor movements at the site, provided by Strava. Strava aggregates data from users on its app who opt-in to share their activities and locations. The map shows that a high level of movement occurs at the cable car crossing between the car park at Ballaghboy and Dursey Island. The map also shows high usage of the loop walk on the island. High levels of movement are also visible heading towards and around Dursey Point at the southwestern end of the island. However, it must be noted that the established looped walk does not reach Dursey Point and visitors to the island are reaching Dursey point on informal paths. Significant levels of movement are also visible between the road and Kilmichael Church and Graveyard Ruins at the eastern end of the island. Similar to Dursey point, the established loop walk does not reach the ruins and visitors are reaching the site use informal paths.



Figure 3.8 Heat map of visitor movements on Dursey Island (Strava, 2023)

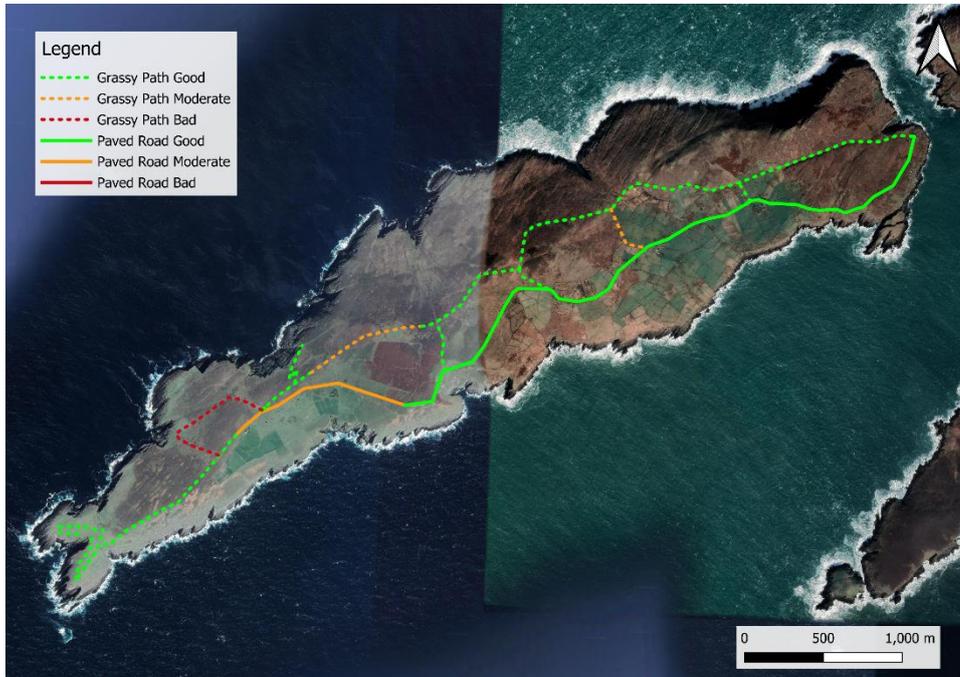
## 3.2 Pathways and Habitat Condition

### 3.2.1 Pathway Condition

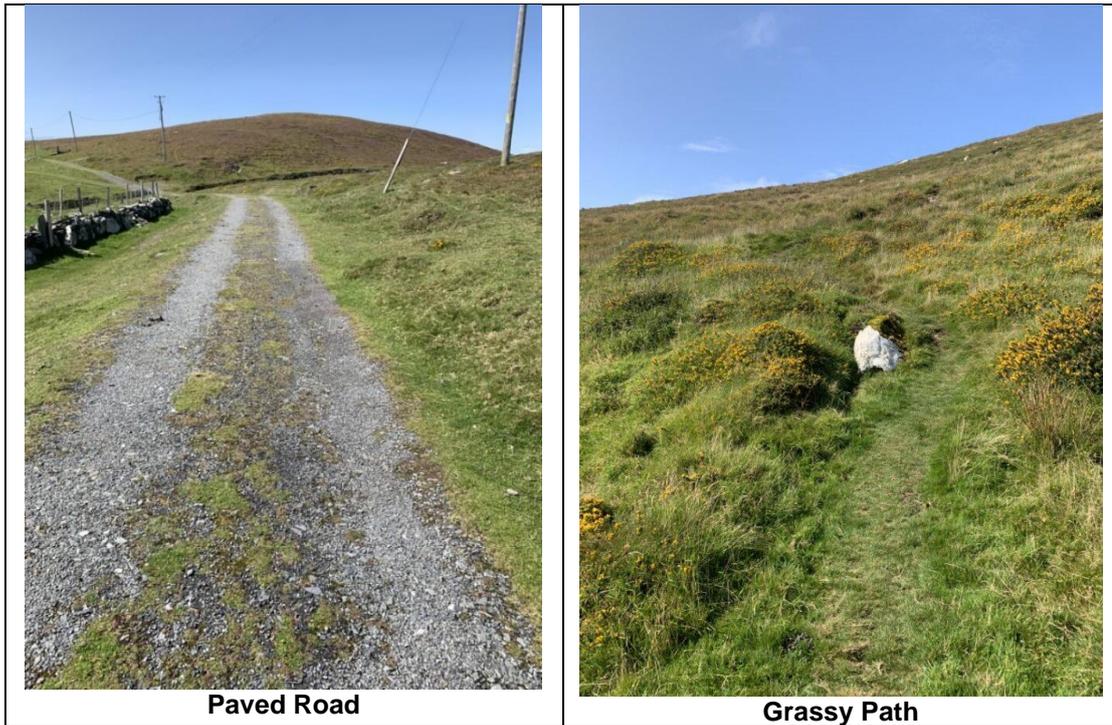
The looped walk on Dursey Island includes a mixture paved road and grassy paths. The only paved road on the Island leads from the cable car to the townland of Tilickafinna, as shown in Figure 3.9. This is part of the southern side of the looped walk. The remainder of the paths, to Dursey Point and the northern section of the loop, are grass paths. Compaction occurs on approximately 45% of the paths in varying degrees from 0% to 50%. Signs of site overuse are visible with areas of exposed and eroded soil, with 27% of the path having exposed areas.

The condition (good, moderate, bad) of the main pathway types (paved road and grassy path) are illustrated below in Figure 3.9. Examples of each of these pathway types are presented below in Plate 3.2.

Overall, the majority of the pathways were in good condition, however, a number of the pathways were in moderate to bad condition. An qualitative assessment of the paths on the island has concluded that given the low levels of use (See Plate 3.5), any formalisation of the paths would lead to greater habitat degradation and habitat loss than is currently occurring, and therefore the formalisation of paths has not been recommended. It should be noted that no major desire lines were mapped, but many small desire lines were noted as impacts, and as such, are discussed in the sub-sections below.

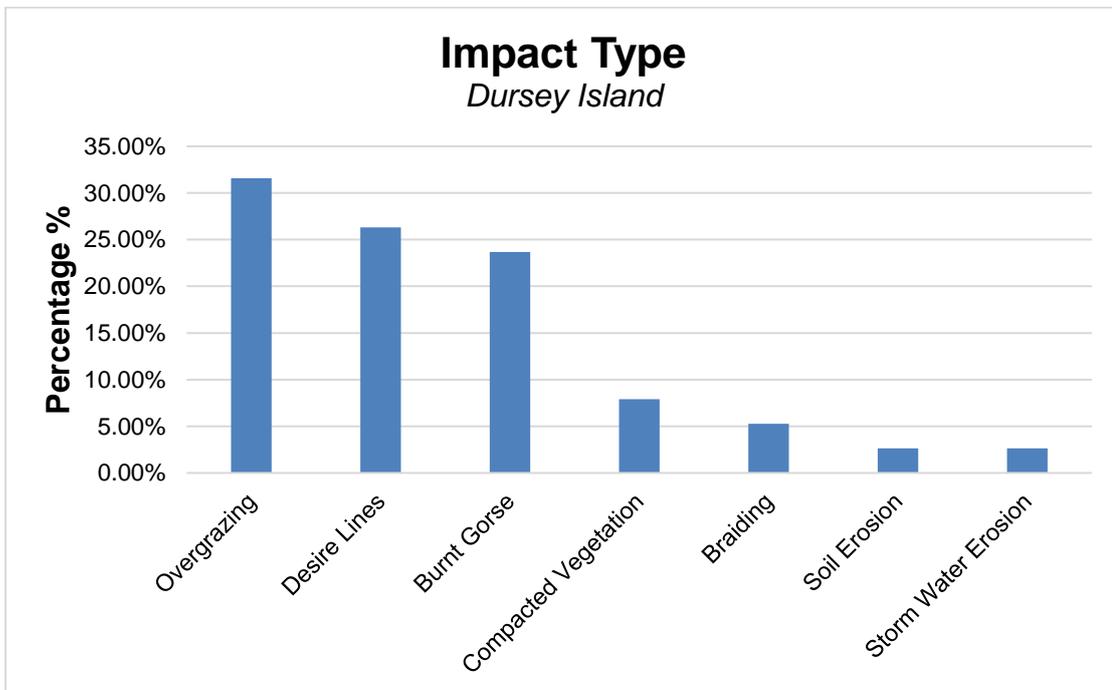


**Figure 3.9** Colour-coded condition of the main pathway types recorded on the site. Basemap provided by Google



**Plate 3.2** The main pathway types recorded on Dursley Island.

Figure 3.10 represents the pathway impact type at the site. The types of impact observed was overgrazing at 31%, desire lines at 26%, burnt gorse at 24%, compacting vegetation at 8%, and braiding at 5% of the impact types observed. Soil erosion and storm water erosion both made up made up 3% of the impact types observed. Further details of the impacts are provided in Section 3.2.2.



**Figure 3.10** Impacts on Pathway Condition

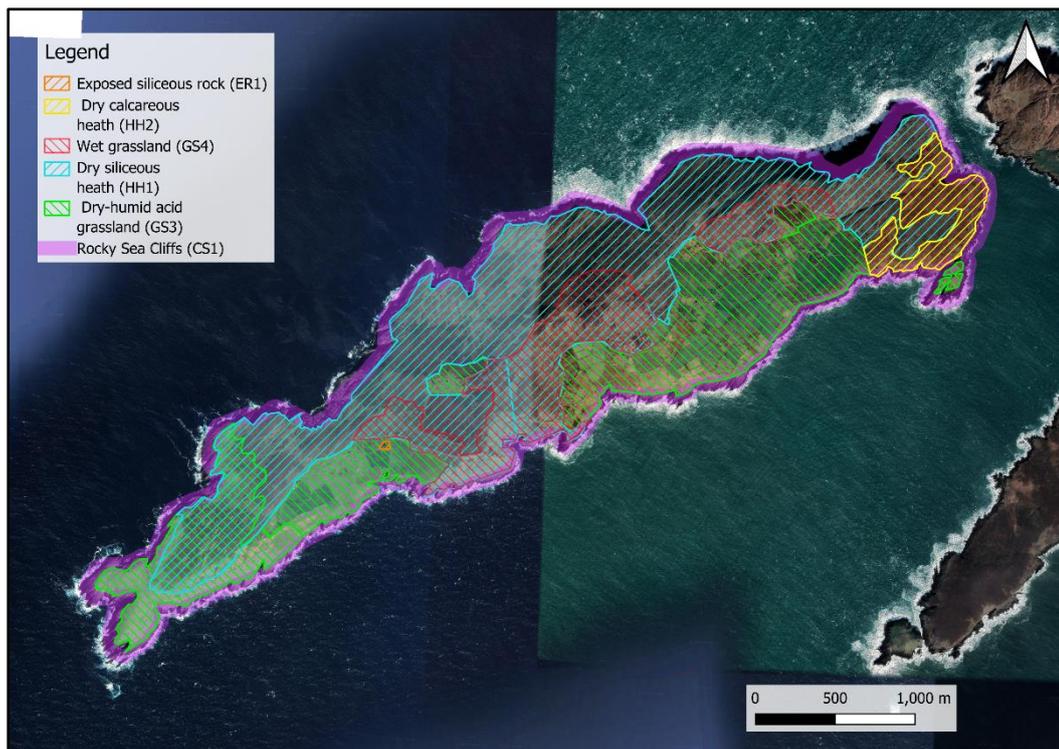
### 3.2.2 Habitat Condition

Habitats were surveyed during the optimum habitat survey season i.e., April to September (Smith et al., 2011). Habitats were classified according to *A Guide to Habitats in Ireland* (Fossitt, 2000). Habitats identified on Dursey Island are listed below and mapped in Figure 3.11:

- Rocky Sea Cliffs (CS1)
- Exposed Siliceous Rock (ER1)
- Dry-humid Acid Grassland (GS3)
- Wet Grassland (GS4)
- Dry Siliceous Heath (HH1)
- Dry Calcareous Heath (HH2)

The habitat condition assessment follows a rating scale (see Table 2.1), that has been designed specifically for this monitoring programme as a standardised, repeatable measurement for assessing habitat condition across all Fáilte Ireland sites.

There are a range of habitats present on site (see Figure 3.11). Habitat damage of varying degrees was reported on approximately 45% of the transect walked by surveyors. Damage percentage ranged from approximately 0% to 75% of the area damaged. Out of the 44 no. 100m sample stations located pathways, 55% of samples contained no evidence of any habitat degradation. 34% of samples contained localised habitat degradation, capable of rapid recovery, while the remaining 11% contained widespread. habitat degradation, capable of rapid recovery. No samples contained any levels of habitat degradation that would require intervention to allow full recovery. The causes of the damage were identified to be tourist movements, storm water, scrub management and livestock (sheep) and overgrazing. Overgrazing was recorded on 27% of samples, and was prevalent in all areas, but less so in the areas of hard infrastructure on the southernmost pathways (the second half of the transect). Burnt gorse was recorded on 20.5% of samples and was noted intermittently on the northern most pathways (the first half of the transect).



**Figure 3.11** Habitat Map of Dursey Island. Basemap provided by Google

Dursey Island supports a range of rare and protected habitats and species. Table 3.1 below presents the species recorded incidentally during the ecological surveys on Dursey Island.

**Table 3.1** Incidental Species Records

Scientific Name	Common Name
<i>Alauda arvensis</i>	Sky Lark
<i>Anthus pratensis</i>	Meadow Pipit
<i>Corvus corax</i>	Raven
<i>Delichon urbicum</i>	House Martin
<i>Hirundo rustica</i>	Swallow
<i>Morus bassanus</i>	Gannet
<i>Phalacrocorax carbo</i>	Cormorant
<i>Pyrhocorax pyrrhocorax</i>	Chough
<i>Saxicola rubicola</i>	Stonechat

### 3.2.3 Ecological Constraints

As previously discussed, there are a number of European (SACs and SPAs) and Nationally (pNHAs) designated sites within or adjacent to Dursey Head. Information on these sites was obtained from the NPWS website and their respective Natura 2000 Standard Data Forms (NPWS, 2023). These sites are described in Table 3.2 below.

**Table 3.2** Designated sites within 2 km of Dursey Island

Site Name [Site Code]	Qualifying Interests	Distance (km) from Site	Pressures and Threats (taken from the relevant Natura 2000 data forms) (those related to tourism are in bold)
<b>European Designated Sites</b>			
Beara Peninsula SPA [004155]	<ul style="list-style-type: none"> <li>• Fulmar (<i>Fulmarus glacialis</i>) [A009]</li> <li>• Chough (<i>Pyrhocorax pyrrhocorax</i>) [A346]</li> </ul>	Within site boundary	No threats or pressures
Kenmare River SAC [002158]	<ul style="list-style-type: none"> <li>• Large shallow inlets and bays [1160]</li> <li>• Reefs [1170]</li> <li>• Perennial vegetation of stony banks [1220]</li> <li>• Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>• Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>• Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> <li>• European dry heaths [4030]</li> <li>• <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130]</li> <li>• <i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i> [6130]</li> <li>• Submerged or partially submerged sea caves [8330]</li> <li>• <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014]</li> <li>• <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</li> <li>• <i>Lutra lutra</i> (Otter) [1355]</li> <li>• <i>Phoca vitulina</i> (Harbour Seal) [1365]</li> </ul>	Surrounds the site	<ul style="list-style-type: none"> <li>• Marine and Freshwater Aquaculture</li> <li>• Marine water pollution</li> <li>• Non intensive grazing</li> <li>• Invasive non-native species</li> <li>• Abandonment of pastoral systems, lack of grazing</li> <li>• Fishing and harvesting aquatic resources</li> <li>• <b>Paths, tracks, cycling tracks</b></li> <li>• <b>Pollution to surface waters (limnic &amp; terrestrial, marine &amp; brackish)</b></li> <li>• Urbanised areas, human habitation</li> <li>• Burning down</li> <li>• <b>Walking, horseriding and non-motorised vehicles</b></li> <li>• <b>Nautical sports</b></li> <li>• Fertilisation</li> </ul>

The Bull and The Cow Rocks SPA [004066]	<ul style="list-style-type: none"> <li>Storm Petrel (<i>Hydrobates pelagicus</i>) [A014]</li> <li>Gannet (<i>Morus bassanus</i>) [A016]</li> <li>Puffin (<i>Fratercula arctica</i>) [A204]</li> </ul>	220m west	No threats or pressures
<b>National Designated Sites</b>			
Dursey Island pNHA [000086]	<ul style="list-style-type: none"> <li>Fulmar</li> <li>Chough</li> </ul>	Within site boundary	<ul style="list-style-type: none"> <li>n/a</li> </ul>
Garinish Point pNHA [001986]	No site description available	190m northeast	<ul style="list-style-type: none"> <li>n/a</li> </ul>

### 3.3 Records of Rare, Protected and Invasive Species

Records of rare, protected, and invasive species from the past ten years from Hectads V43P, V43U, V43Z, V44K, V44Q, V44V, V54A, and V54B were obtained the National Biodiversity Data Centre (NBDC) online database. These records are presented in Table 3.3 below.

**Table 3.3 Rare, protected, and invasive species recorded from Hectad V43P, V43U, V43Z, V44K, V44Q, V44V, V54A & V54B from NBDC database.**

Scientific name	Common Name	Date of last record	Status*
<b>Mammals</b>			
<i>Balaenoptera acutorostrata</i>	Minke Whale	09/08/2017	Annex IV HD; WA
<i>Delphinus delphis</i>	Common Dolphin	19/06/2017	Annex IV HD; WA
<i>Grampus griseus</i>	Risso's Dolphin	23/07/2020	Annex IV HD; WA
<i>Lutra lutra</i>	European Otter	01/01/2017	Annex II, IV HD; WA
<i>Phocoena phocoena</i>	Common Porpoise	02/05/2021	Annex II, IV HD; WA
<i>Sorex minutus</i>	Eurasian Pygmy Shrew	13/05/2017	WA
<i>Tursiops truncatus</i>	Bottle-nosed Dolphin	14/05/2018	Annex II, IV HD; WA
<b>Birds</b>			
<i>Sturnus vulgaris</i>	Common Starling	11/06/2020	WA; Amber List
<i>Alauda arvensis</i>	Sky Lark	11/06/2020	WA; Amber List
<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	02/02/2018	WA; Amber List
<i>Larus fuscus</i>	Lesser Black-backed Gull	11/06/2020	WA; Amber List
<i>Morus bassanus</i>	Northern Gannet	02/02/2018	WA; Amber List
<i>Oenanthe oenanthe</i>	Northern Wheatear	01/05/2021	WA; Amber List
<i>Phalacrocorax carbo</i>	Great Cormorant	18/08/2021	WA; Amber List
<i>Pyrhacorax pyrrhacorax</i>	Red-billed Chough	11/06/2020	Annex I BD; WA; Amber List
<b>Reptiles &amp; Amphibians</b>			
<i>Zootoca vivipara</i>	Common Lizard	12/10/2019	WA
<b>Fish and Aquatic Fauna</b>			
<i>Cetorhinus maximus</i>	Basking Shark	08/04/2020	Threatened Species: OSPAR Convention; WA
<b>Invertebrates</b>			
<i>Geomalacus (Geomalacus) maculosus</i>	Kerry Slug	03/11/2015	Annex II, IV HD; WA
<b>Flora</b>			
<i>Stachys officinalis</i>	Betony	02/05/2021	Flora (Protection) Order 2022
<b>Invasive Species</b>			
<i>Allium triquetrum</i>	Three-cornered Garlic	01/05/2021	Invasive species, S.I. 477/2011

---

<i>Cervus nippon</i>	Sika Deer	24/03/2013	Invasive species, S.I. 477/2012
----------------------	-----------	------------	---------------------------------

---

\*Abbreviations: Annex II/IV/V (non-avian species) = Habitats Directive (HD); Annex I, II, III = Birds Directive (BD); Red/Amber List = Birds of Conservation Concern in Ireland 2020-2026 (BOCCI) (Gilbert et al., 2021).

### 3.4 Features, Signage and Hazards

#### 3.4.1 Features and Signage

The looped walk on Dursey Island is a way-marked trail. Signage relating to historic and cultural heritage of Dursey Island are available at the landing points on both the mainland at Ballaghboy and at Dursey Island. There is no signage relating to the biodiversity. A map illustrating the locations of signage and features is presented in Figure 3.12. Examples of signage and features on the site are shown in Plates 3.3-3.5.



**Figure 3.12 Features and signage mapped at Dursey Island. Basemap provided by Google**

Dursey Island is identified as a High Value Landscape within the Cork CDP 2022-2028 (CCC, 2022). The site has a number of significant historic and cultural heritage features along with several archaeological remains. The Dursey Island cable car opened in 1969 and in early 2022, Cork County Council undertook essential upgrade works comprising a full replacement of the support towers, which led to the closure of the cable car service, re-opening in June 2023. Cork County Council has also proposed the replacement of the current cable car with two cable cars, however at the time of writing there are no plans to progress this proposal.

Kilmichael Church and Graveyard Ruins at the eastern end of the island appears on the National Sites and Monuments Records, record numbers CO126-012005 and CO126-012003, respectively. The site is a significant historic and cultural heritage feature for Dursey Island. Informative signage on the history of the ruins is also available to visitors. However, there is no formal path to access the ruins from the looped walk to the north of the site.

The Dursey Island Signal Tower is a former Napoleonic tower which was constructed between 1800 and 1810. It is a protected structure on the National Inventory of

Architectural Heritage, registration number 20912601. The tower is along the northern trail of the looped walk.

Dursey Point, at the western end of the island, contains the remains of a World War Two lookout. Plates 3.2-3.4 show examples of signage and features at Dursey Island.



Plate 3.3 Fallen signage indicating walks, prohibition of dogs and littering (L) and Trail Marker Signage (R) at Dursey Island



Plate 3.4 Dursey Island Cable Car (L) and Kilmichael Church and Graveyard Ruins (R)



**Plate 3.5 View of Dursey Island Signal Tower**

### **3.4.2 Hazards**

No specific hazards were recorded, although, as an island in the Atlantic Ocean, the weather is changeable and there are cliffs around the island.

### **3.5 Comparison with Previous Survey Results**

Due to the upgrades and renovations being completed on the Dursey Island cable car system in 2022, a visitor characterisation survey for this year was not conducted. The comparisons below are made against the 2021 visitor characterisation survey for Dursey Island.

### Visitor Numbers

The 2023 survey recorded 50 visitor groups. This increased from 39 visitor groups recorded in 2021. Although this is a significant increase, it should be noted that the surveys were carried out over a single day, and there could be a number of variables leading to this change such as weather and the easing effects of the Covid-19 pandemic on travel and sporting or music events which could have led to this change.

### Dwell Time

The average dwell time in the 2023 Survey was 2 hours and 11 minutes, whereas the average dwell time observed in the 2021 Survey was 2 hours and 37 minutes. This is a decrease of 16%. However, the reasons above could have affected the result.

### Prevalence of Group Type

'Couples' made up the highest proportion of group types in both 2023 and 2021. The 'family' group type was the second largest proportion in both years. 'Small adult group' was the third largest proportion in both years. The results are presented in Table 3.4.

**Table 3.4 Prevalence of Group Type 2021 vs 2023**

Group Type	2021	2023
Couple	30.77%	40%
Family	25.64%	24%
Small Adult Group	15.38%	14%
Mixed Large Group	10.26%	8%
Mixed Small Group	0%	8%
Individual Adult	5.13%	6%
Large Adult Group	10.26%	0%
Elderly Group	2.56%	0%
Elderly Couple	0%	0%
Family with Elderly	0%	0%
Individual Elderly	0%	0%
Under 18	0%	0%

### Prevalence of Transport Type

The only point of access to Dursey Island is via cable car from Ballaghboy. Occasional vehicular access by ferry is provided to residents when the cable car is out of service. As expected, 100% of the access to Dursey Island was by cable car in 2023 and 2021. 100% of the visitor groups took cars to reach the cable car in 2023, the 2021 report did not specify how groups reached the cable car landing site car park at Ballaghboy.

### Read Available Signage

The 2023 Survey found an increase in the proportion of visitor groups observed reading the signage at 42%, when compared to 2021 at 33%. However, it should be considered that the team that conducted the survey in 2021 included an 'unknown' variable in their graph.

### Activity Levels

Low activity levels make up 90% of the activity levels observed in both 2023 and 2021. Subsequently moderate or medium activity levels made up under 10% of the activity levels observed in both years. However, it should be taken into account that as two different teams conducted the surveys in each year there is potential for discrepancies in the assigning of activity levels observed.

### **Activities Undertaken Other than Walking**

The majority of visitor groups did undertake activities other than walking. 62% of visitor groups observed undertook activities other than walking in 2023, and 56% did the same in 2021. Activities other than walking included running, sitting, picnicking, resting, sightseeing, photographing, picnicking, and watching nature.

### **Activity Type**

The 2023 and 2021 surveys noted similar activity types at varying proportions. However, the 2021 Survey included 'flying drone' and 'other' as activities which were not recorded in 2023. The 2023 Survey included 'any movement leaving an existing train or marked path' and 'walking, running, cycling or playing in mown grass, managed grassland or level sand' as activities which were not recorded in 2021.

### **Impact Severity Level**

Impact severity levels relates to the impact and severity of the activities undertaken at the site. 87% of the groups observed had low level impact severity on the site and just 13% had a medium level of impact severity. Similar impact severity levels were recorded in 2021. Example of impact severity levels are presented in Appendix I.

### **Impact Type**

The 2021 survey did not record any observable impacts. However, it did note signs of trampling, compaction, and erosion. The 2023 survey noted various impact types including overgrazing, desire lines, burnt gorse, compacted vegetation, braiding, soil erosion and storm water erosion. However, it should be taken into account that as two different teams conducted the surveys in each year there is potential for discrepancies in the assigning of impact types observed.

## 4.0 RECOMMENDATIONS

Based on the information discussed and displayed above, the following recommendations are made:

- Trail marking signage should be provided along the looped walk. This would reduce the amount of walking off trail, which occurs because of the lack of signage. The waymarked trail should also incorporate informational signage on the features on the island.
- Fáilte Ireland should investigate the potential to support the provision of public toilet facilities on Dursey Island. Environmentally friendly toilet facilities that utilise composting, and do not need water and wastewater connections should be considered.
- Appropriate land management is recommended to promote sustainable farming practices and reduce overgrazing. This would lead to improved habitat quality and resilience.
- Increased signage regarding heritage, and the ecological value and biodiversity of the site would be beneficial, as it would give tourists a better appreciation for the site and the habitats found there.
- Teleological signage (signage with instruction and justification for the instruction) regarding the need to stay on paths would also be beneficial, to protect habitat quality and resilience.
- Signage relating to keeping dogs on leads should also be provided at the Ballaghboy cable car landing point, which should note the risk to livestock and birds.
- Signs and trail markers which have become damaged or have fallen over (see Plate 3.3) should be reinstated with durable and weatherproof materials.

## 5.0 REFERENCES

Cork County Council (CCC). (2022) *Cork County Development Plan 2022 – 2028 Volume 2*.

Cork County Council (CCC). (2022) *Cork County Development Plan 2022 – 2028 Volume 5*.

Fossitt, J. 2000 *A Guide to Habitats in Ireland*. Heritage Council of Ireland.

Met Éireann (2023) *Historical Data* < [Historical Data - Met Éireann - The Irish Meteorological Service](#) > [Accessed October 2023] Met Éireann, Dublin.

National Biodiversity Data Centre (NBDC) (2023) *Biodiversity Maps* <<https://maps.biodiversityireland.ie>> [Accessed October 2023]. National Biodiversity Data Centre, Waterford.

National Parks & Wildlife Service (NPWS) (2023). *Protected Sites*. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

Scott, D. A. (2020). *Red-billed Choughs and the proposed new Cable Car on Dursey Island – Some observations and comments*.

Smith, G, F., O'Donoghue, P., O'Hora, K. & Delaney, E. 2011 *Best Practice Guidance for Habitat Survey and Mapping*. Heritage Council of Ireland.

Strava (2023) *Strava Global Heatmap* <[www.strava.com/heatmap](http://www.strava.com/heatmap)> [Accessed October 2023]

Uisce Éireann. (2023a) *Wastewater Treatment Capacity Register (Cork)*. Settlements with Waste Water Discharge Authorisations.

Uisce Éireann. (2023b) *Water Supply Capacity Register (Cork)*. 10-Year Water Supply Capacity Register.

## Appendix I

Activities		
<b>Category 1 Low Level</b>		
Walking, running or cycling on paths, marked trails or hard surfaces		LA 1
Walking, running, cycling or playing in mown grass, managed grassland or level sand		LA 2
Sitting on benches, walls, mown grass, sand		LA 3
Swimming, sailing, surfing, kayaking in water		LA 4
Resting, reading, looking, picnicking, sightseeing, painting, photographing		LA 5
Vehicular movement on roads and parking areas		LA 6
Watching nature in hedges, woods, streams, pools and intertidal areas		LA 7
<b>Category 2 Medium Level</b>		
Powered movement through water		MA 1
Any movement leaving an existing trail or marked path		MA 2
Any movement leaving a trail through leafy vegetation		MA 3
Any movement leaving a trail through woody vegetation		MA 4
Climbing on walls, loose stones, sand, soil etc.		MA 5
Fishing		MA 6
<b>Category 3 High Level</b>		
Walking through wet/muddy soil		HA 1
Scrambling on steep or loose slopes		HA 2
Off road vehicular movement		HA 3
Disturbance of wildlife		HA 4
Deliberate building or moving or knocking site materials - parts of monuments, walls, stones, sand etc.		HA 5
Picking herbaceous vegetation		HA 6

<b>Impacts</b>		
<b>Category 1 Low Impact</b>		
No identifiable effect		LIE 1
Desire lines or trails visible on grass and leafy vegetation		LIE 2
Temporary disturbance (including chasing and feeding) of insects, fish, amphibian, reptiles, insects, birds and mammals		LIE 3
Temporary change of character - due to the appearance or nature of activities (noise, crowds, etc.)		LIE 4
General/light littering		LIE 5
<b>Category 2 Medium Impact</b>		
Desire lines or tracks visible outside of existing trail or marked path		MIE 1
Trampling of herbaceous vegetation		MIE 2
Damage to woody vegetation		MIE 3
Incidentally moving or knocking site materials - parts of monuments, walls, stones, sand, rooted vegetation, flora, fauna etc.		MIE 4
Addition/alteration of site features, transient emissions, noise		MIE 5
Transient disturbance, emissions, noise		MIE 6
Disturbance of wildlife		MIE 7
<b>Category 3 Severe Impact</b>		
Direct interference with site material - parts of monuments, walls, stones, sand, rooted vegetation, flora, fauna etc.		SIE 1
Removal of material - parts of monuments, walls, stones, sand, rooted vegetation, flora, fauna etc.		SIE 2
Vandalism or graffiti		SIE 3
Destruction of structures, vegetation or fauna		SIE 4
Heavy littering or dumping quantities of waste		SIE 5
Burning materials or lighting a fire		SIE 6
Injuring, killing or taking wildlife		SIE 7

## Appendix II

### Habitat Condition Assessment Methodology

A rating scale has been designed for this monitoring programme as a standardised, repeatable measurement for assessing habitat condition across all sites<sup>1</sup>. For the purposes of this monitoring programme, habitat condition is assessed at every site by the surveyor examining four core criteria:

1. The extent to which habitat degradation (due to human activity), if any, is observed;
2. If habitat degradation is observed, the degree to which the impact is localised or widespread;
3. The potential ability for the habitat to recover (related to scale of degradation); and,
4. The requirement for intervention (related to the degree of the previous 3 elements).

For these assessments the term 'degradation' is taken to mean that any change that reduces the long-term viability of habitats and their qualifying interest (i.e. flora and fauna). Degradation can include readily visible evidence of factors such as surface erosion or compaction, vegetation loss, crowd disturbance (noise), disturbance by pets, littering, burning or pollution. Based on these four criteria, each site is walked along transects established by the principal pathways that are used for visitor access and movement through each site. At 100 metre intervals along the selected pathways, an assessment of habitat condition is made, using an established rating scale of 1 to 5 with 1 being no impact and 5 being high impact. Each rating is then translated into a condition assessment, as displayed in Table 1 below.

These ratings are gathered for each site and are then grouped; from which the mode is taken (i.e., the rating that occurs most frequently). This is then recorded and reported as the resultant overall rating of the assessed habitat condition for each site.

Scale	Condition
1	No evidence of habitat degradation
2	Localised habitat degradation. Habitat capable of rapid recovery.
3	Widespread habitat degradation. Habitat capable of rapid recovery.
4	Localised habitat degradation. Intervention required for full recovery.
5	Widespread habitat degradation. Intervention required for full recovery.

<sup>1</sup> Note: Where possible, the same surveyor is used across multiple sites, but in some instances, different surveyors survey different sites. This can lead to a human variation in the assigning of the rating scale for impact. However, there will be sufficient repetition of the data through the several years of the monitoring programme to account for any variations in human interpretation on this scale.



**Fáilte  
Ireland**

Turasóireacht Náisiúnta  
An tÚdara Eorbartha  
National Tourism  
Development Authority