National Tourism and Environmental Monitoring Programme

Portmarnock Beach 2024

Fáilte Ireland
Turasóireacht Náisúnta An tÚdara Eorbartha
National Tourism Development Authority

National Tourism and Environmental Monitoring Programme

Report for Portmarnock Beach 2024

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PORTMARNOCK – INTERESTING FINDS

Interesting Finds

Dunes habitat is present along the path from the car park to the beach and on the landside of the beach. A diverse range of flowering plants is present on the dunes including the hounds-tongue (a 'near-threatened' species pictured below), burnet rose, birds-foot trefoil, lady's bedstraw, common milkwort, restharrow, sand pansy, wild pansy, field pansy, sea spurge, and creeping willow.

Features of the Site

- Vehicle and bicycle parking, toilet facilities, and various rubbish bins are available on this site.
- There is a lifeguard station located at the beach.
- A boardwalk was under construction at the time of the survey, along with fencing to prevent access to the dunes.

Habitats

The following habitats were recorded on site:

- Buildings and Artificial Surfaces (BL3)
- Improved Amenity Grassland (GA2)
- Dry Meadows and Grassy Verges (GS2)
- Fixed Dunes (CD3)
- Sea Walls, Piers and Jetties (CC1)
- Sand Shores (LS2)
- Scrub (WS1)

Key Recommendations*

- The pathway between the car park and boardwalk should be improved to improve access to the beach and to discourage the use of informal paths.
- Dune protection fencing should put around the dune habitats to prevent people walking through them.
- There are signs at the meadow next to the car park that say "managed for wildlife". Fencing should be considered to prevent dogs accessing it and to encourage ground nesting birds.
- Sea-buckthorn (*Hippophae rhamnoides*) should be removed from the site.
- Broken and deteriorated educational signage in the car park should be repaired or replaced.

* Recommendations based on surveys conducted on 14th May 2024. Note: construction works underway at the time and some of these key recommendations may have already been considered or under development.

1.0 INTRODUCTION

1.1 Background

Roughan & O'Donovan (ROD) was 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 Monitoring Programme has been conducting research into the impacts of recreation on the receiving environment.

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 2024 National Monitoring report builds on environmental surveying and monitoring undertaken on behalf of Fáilte Ireland as far back as 2015. To date (excluding 2024 dates), these surveys have monitored a total of 57 sites and recorded the activities and effects of over 30,000 visitors at a range of popular sites including inland, urban, coastal and WAW discovery points.

The environmental surveys and monitoring in 2023 followed the methodologies used in previous years. Following the completion of the 2023 surveys, a review of the methodology was undertaken. In developing the 2024 survey methodology, ROD considered the methodology for gathering the data, the presentation of the data, and the usefulness of the data gathered. The review also considered the time required to gather the data.

Ten sites were surveyed in 2024. Figure 1.1 below shows the locations of these sites. This report is for Portmarnock Beach, Co. Dublin.

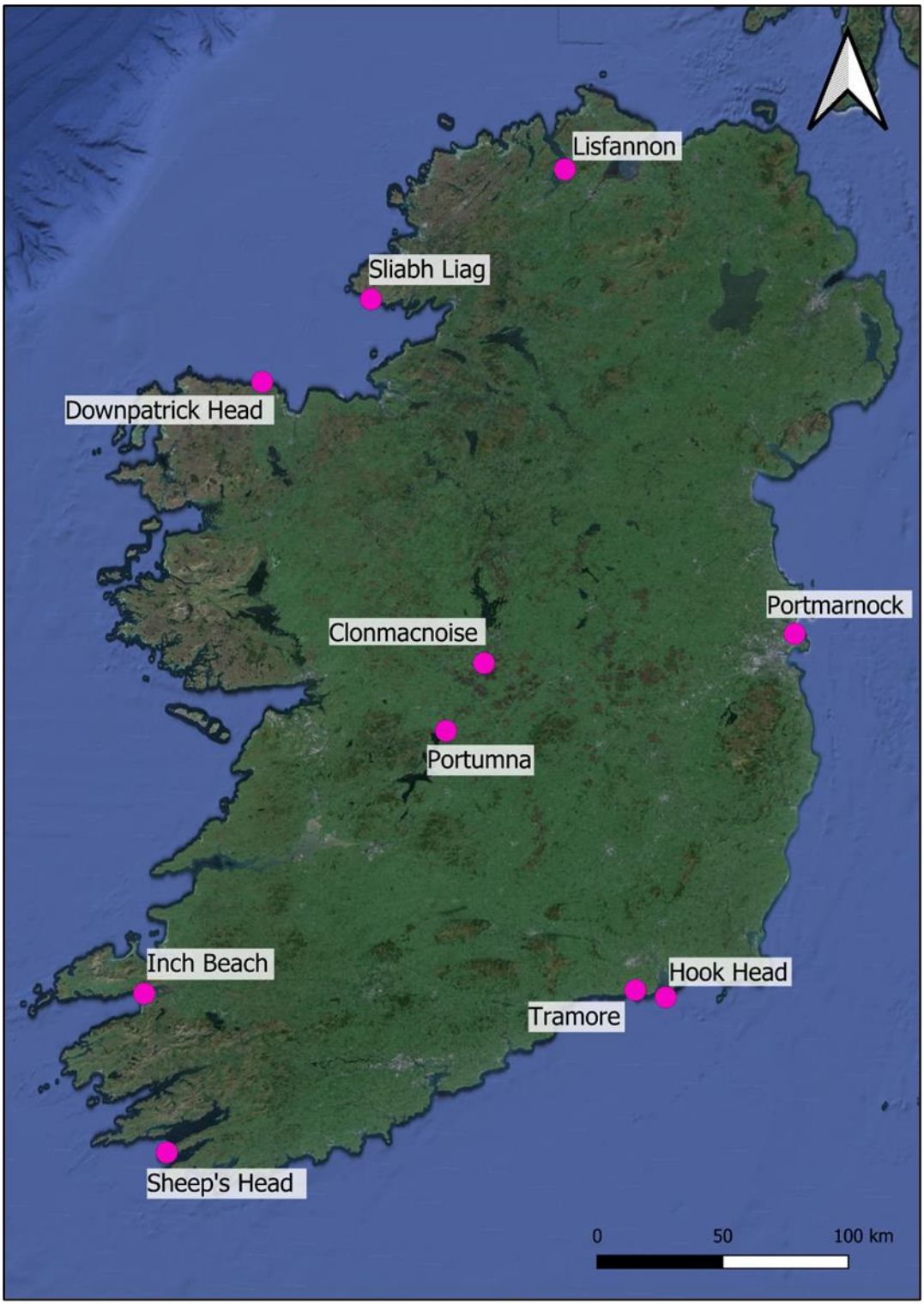


Figure 1.1 Environmental Monitoring Programme 2024 locations. Basemap provided by Google.

1.2 Aim of the Report

The purpose of the monitoring programme is as follows:

- To gain insight from an environmental perspective at popular amenity and recreation sites across Ireland;
- To obtain data on 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 make recommendations where appropriate for site management for the benefit of the site, the visitor, and the natural environment.

1.3 Site Description of Portmarnock

Portmarnock is located in Fingal, Co. Dublin and is accessible via the Strand Road (R106) and south via the Golf Links Road and the Portmarnock Beach South Car Park. The area being surveyed for this report ("the site") consists the car park and overflow car park, the paths leading to Portmarnock Beach, and Portmarnock Beach itself. The site boundary is presented in Figure 1.2. Public toilets, informative signage, bins and bike parking facilities are available on site. Portmarnock Beach is a blue flag beach and attracts a large number of visitors throughout the year. Lifeguards are present from 11am to 7pm on Saturdays and Sundays in June, and every day from July to August.

The site borders Baldoyle Bay SAC (Special Area of Conservation) and SPA (Special Protection Area) and the North-West Irish Sea SPA.

Figure 1.1 Site boundary outlined in red. Basemap provided by Google.

1.4 Critical Infrastructure

Tables 1.1 - 1.3 below provide information on the infrastructure at Portmarnock. Uisce Éireann's website was used to access information on the Water Supply and Wastewater Treatment Capacity Registers for County Dublin (Uisce Éireann 2024a, b).

Table 1.1 Portmarnock Wastewater Infrastructure

Wastewater Treatment Plant (WWTP)	Uisce Éireann Indication of Capacity
• Toilet facilities are available on this site. • Wastewater treatment is provided by Ringsend WWTP.	• This WWTP is operating over capacity.

Table 1.2 Summary of Drinking Water Infrastructure at Portmarnock Beach

Drinking Water	Water Resource Name (WRZ)	Uisce Éireann Indication of Capacity
The nearest settlement to Portmarnock Beach is Portmarnock.	Greater Dublin Area	Capacity available (Level of service improvement required).

Table 1.3 Summary of Transport Infrastructure at Portmarnock

Nearest Settlement	Current Transport Infrastructure	Comment
Portmarnock	Portmarnock is accessed by the R106. There are two car parks on site.	The site is served by the 32B and 42 buses which stop near the White Sands Hotel.

2.0 METHODOLOGY

The following surveys were undertaken:

- Habitat survey
- Pathway condition survey
- Survey of the features, signage and hazards

The survey at Portmarnock was undertaken on the 14th of May 2024. The weather conditions were clear and dry. The sub-sections below present the methodology used.

2.1 Habitat Condition Assessment Methodology

The habitats within the site, as defined in Figure 1.1, 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 and habitat condition. Fossitt habitats corresponding to Annex I habitats were noted using the *Interpretation Manual of European Union Habitats* (EC, 2013). A desktop study was also undertaken to identify designated sites and rare and protected species in the vicinity of each site. Incidental sightings of birds, mammals, reptiles, etc. were also recorded during the site surveys.

The condition of the habitat in each polygon or line will were noted, including any damage and the likely cause of the damage. The areas along pathways are outlined by the pathway condition assessment in Section 2.2 below. 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.

2.2 Pathway Condition Assessment Methodology

The main pathways were defined during the site visit and a desk study which included a review of the Strava heat maps (www.strava.com/heatmap), and a review of the previous site monitoring reports, if available. Typically, the main paths are formalised waymarked trails or heavily trafficked pathways that are not formalised. These paths usually link the site entry points and car parks to a destination or feature of interest. The pathways were categorised into sections by type and composition. The different types of pathway are described in Table 2.1 below. The results of Visitor Characterisation Surveys undertaken by Fáilte Ireland are presented in Appendix A of this report. Each path section is described as 'satisfactory' or 'unsatisfactory' based on the condition of the path and whether or not it could accommodate the current levels of use. Indicators that a path was not suitable for the current levels of use included the presence of wet areas, erosion, trip hazards, damaged pavement, braiding, path widening and habitat loss along the path. Paths that generally facilitated unobstructed movement between locations were deemed as 'satisfactory'.

Table 2.1 Pathway Types

Pathway Type	Description
Paved Car Park	An area used for parking, wider than the road, that is paved, usually with tarmacadam.
Gravel Car Park	An area used for parking, wider than the road, that is gravel or crushed stone.
Paved Road	A road that is paved with tarmacadam or similar hard material.
Gravel Road	A road consisting of gravel or crushed stone, with no grass in the middle.
Gravel Track	A single vehicle pathway used by small numbers of vehicles. Tracks are normally paved with gravel and can have grass in the middle
Grassy Track	A single vehicle pathway used by small numbers of vehicles. These tracks are not paved and are used primarily by tractors, quads or small numbers of private vehicles.
Paved Path	A path is primarily for foot traffic. Paved paths are found in more developed areas, to cater for higher levels of traffic.
Gravel Path	A path is primarily for foot traffic and can be a single track or a track wide enough for several people to walk abreast. Gravel paths are found in more developed areas, to cater for higher levels of traffic.
Grassy Path	A path is primarily for foot traffic and can be a single track or a track wide enough for several people to walk abreast. Grassy paths are found in less developed areas, often beyond feature of interest, and are used less frequently.
Bare Ground Path	These paths occur where the vegetation had been eroded by foot traffic and is bare ground, or damages vegetation. These paths are often widespread on sites where formal waymarked trails are not provided.

2.3 Features, Signage and Hazards

Signage, features of interest, and hazards were recorded, photographed and mapped. Features includes built heritage, sculptures as well as toilets and bins. Hazards including unstable walls, broken fences or unprotected cliff tops.

3.0 RESULTS

3.1 Habitat Condition Assessment

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). Table 3.1 lists the habitats identified in Portmarnock along with their corresponding Annex I habitats. A habitat map in presented in Figure 3.2. It should be noted that having a corresponding Annex I habitat does not mean the Annex I habitat is automatically present.

Table 3.1 Fossitt (2000) habitats and links to Annex I habitats.

Fossitt 2000 Habitat	Corresponding Annex I habitats (Natura 2000 code)[1]
Dry Meadows and Grassy Verges (GS2)	Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) (6510)
Fixed dunes (CD3)	Fixed coastal dunes with herbaceous vegetation ("grey dunes") (2130)* Decalcified fixed dunes with *Empetrum nigrum* (2140)* Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) (2150)* Dunes with *Salix repens ssp. argentea* (*Salicion arenariae*) (2170)
Sand shores (LS2)	Mudflats and sandflats not covered by sea water at low tide (1140) Annual vegetation of drift lines (1210)
Scrub (WS1)	*Juniperus communis* formations on heaths or calcareous grasslands (5130)
Buildings and artificial surfaces (BL3)	None
Amenity Grasslands (GA2)	None
Sea walls, piers and jetties (CC1)	None

Dry meadows and grassy verge (GS2)

This habitat is present to the east of the car park and is triangular in shape. The grass has been allowed to grow and there are 'managed for wildlife' signs present in the car park, which presumably mean the areas is cut once or twice per year. The area is dominated by grasses including cock's foot, meadow foxtail, Yorkshire fog and sweet vernal grass. Herbs include meadow buttercup, ribwort plantain, curled dock, common vetch, bush vetch and germander speedwell. There is a wet areas close to the car park where rushes (Juncus spp.) and silverweed are common. Overall the area is species poor and the number of flowering plant other than grasses make up a very small component overall.

[1] * Indicates priority habitat

Fixed Dunes (CD3)

This habitat is present along the coast in a narrow strip (c. 50m wide) between the beach and the golf course, and along the path between the beach and the meadow by the car park. Along the beach, erosion is a significant problem, with numerous paths through the dunes. It is likely that the marram dunes which would have formed the boundary between the beach and the fixed dunes have been eroded. Marram grass forms the main component of the dunes, especially closer to the beach, but there is also a significant coverage of herbaceous species including creeping bent, red fescue, birds foot trefoil, wild pansy, common milkwort, hawkbit species and burnet rose.

This habitat also occurs along the path between the grassland next to the car park and the beach. Marram grass is present but to a lesser extent. Other species recorded in this habitat are burnet rose, common vetch, dandelion and bramble. The southern end of this habitat grades into scrub dominated by hawthorn and gorse. This habitat is displayed below in Plate 3.1.

Sand shores (LS2)

Portmarnock beach corresponds to the habitat LS2. The wide, sandy beach forms the eastern boundary of the study site and is between the dunes and the low tide mark. The beach is a popular destination and there were no plants growing on it at the time of the survey. The beach is designated as part of the North-west Irish Sea SPA.

Scrub (WS1)

Scrub is formed by low growing trees less than 4m high. This habitat is found along the path between the meadow and the beach and is dominated by hawthorn trees and gorse. Sea buckthorn has formed areas of scrub within the dune habitat. This is an invasive species that colonises sand dune systems and lead to the loss of sand dune habitat.

Buildings and artificial surfaces (BL3)

This habitat is found at the car park and the ramp down to the beach including the concrete plinth on which the lifeguard hut is placed during the summer months. This habitat is not of biodiversity value.

Amenity Grassland (GA1)

This habitat is found in the overflow car park and embankments around the car parks which separate them from the road and the meadow to the east. The overflow carpark spaces are reinforced with cell webbing. The grass in the areas is kept short, with some daisy and dandelion present.

Sea walls, piers and jetties (CC1)

This habitat consists of boulders that have been placed along the base of the dunes to the south of the beach access point. Although this appears to have significantly rescued the amount of erosion, when compared to the dunes to the north of the access point, in the long term the boulders will affect the rate of deposition and erosion of the dunes which are necessary for their maintenance.

Figure 3.2 Habitat map of Portmarnock. Basemap provided by Google.

3.2 Pathway Condition Assessmet

There Cark parking facilities at Portmarnock Beach south included a paved area and an overflow car park which is a mix of gravel and bare ground with cell-web reinforced parking spaces. For the purposes of this report, it is considered a gravel car park. There is a grassy path from the car park to the area fixed dunes where a boardwalk is currently under construction. This pathway is in poor condition, with path widening, braiding and an uneven surface leading to puddles forming. There are two additional well-used informal grassy paths leading from the car park to the boardwalk, each of which has less used paths leading to one another. The boardwalk leading to the beach is currently under construction and an informal grassy path has formed parallel to the boardwalk where construction is taking place. There are golf courses directly to the north and south of the study area. Figure 3.3 presents a Strava heat map for the site. Strava aggregates data from users on its app who opt-in to share their activities and locations. The pathway condition assessment map is presented in Figure 3.4 below. Plate 3.1 displays some of the pathways encountered in Portmarnock.

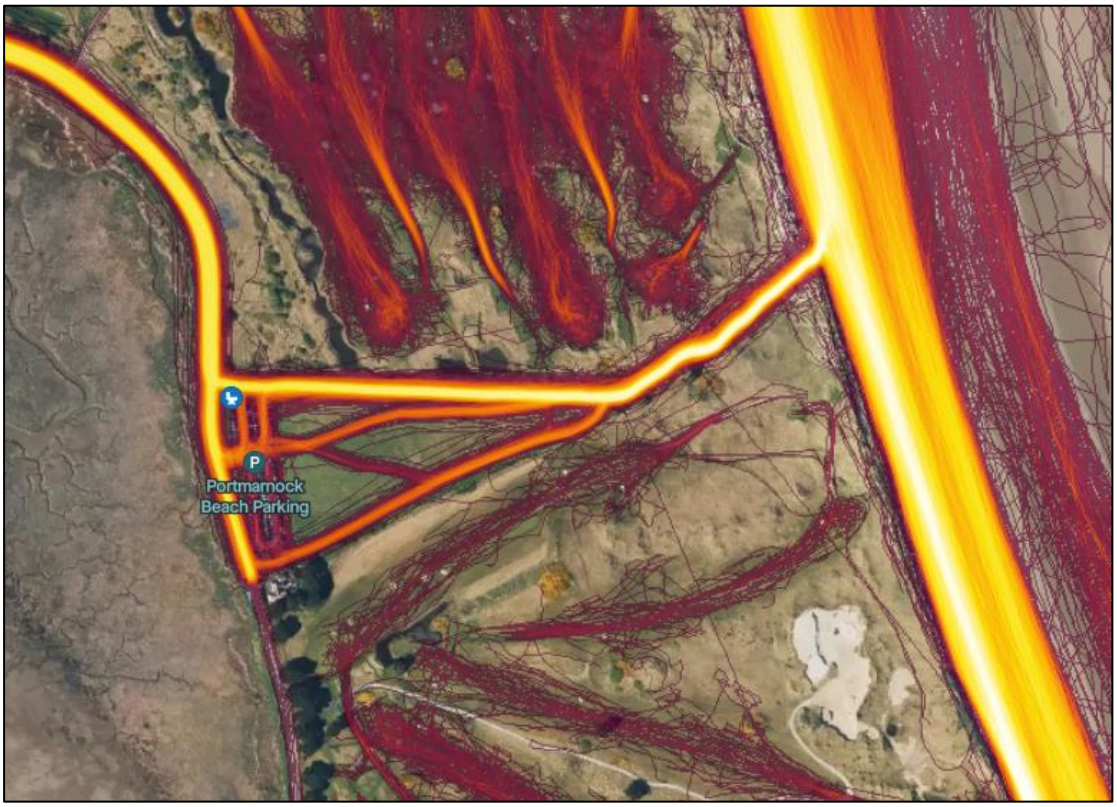
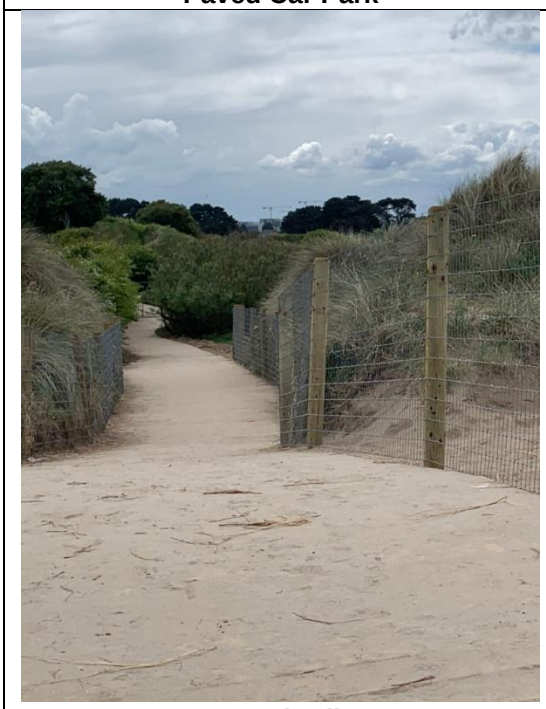


Figure 3.3 Heat map of visitor movements in Portmarnock, with the fairways clearly visible north and south of the beach access (Strava, 2024).

Figure 3.4 Pathway types and conditions present on the site. Basemap provided by Bing.

Paved Car Park

Gravel Car Park



Boardwalk

Grassy Path (Unsatisfactory)

Plate 3.1 The main pathway types recorded in Portmarnock.

3.3 Features, Signage and Hazards

3.3.1 Features and Signage

Bike parking and toilet facilities are available in the car park at Portmarnock. Bins (recycling, glass, general waste, dog waste etc.) are also available in the car park, with bins for dog waste. Clear signage directing visitors to a pathway to the beach is not present. There is educational signage in the car park which informs visitors about the biodiversity of the area. One of the signs has sustained vehicle damage, and another is sun-bleached, making it hard to read. This signage is shown in Plate 3.2 below. Instructional signage is also present which reminds visitors of the beach code. A lifeguard station is present on the beach by the boardwalk. There are also bins on the beach, however they lack labelling to instruct visitors on what each bin should be used for (i.e. recycling, glass, general waste, etc.). Signage and rope fence is present on the beach along the dunes. However, the rope has fallen and there is evidence of trampling and pathways into the dunes, as displayed below in Plate 3.4. Post and wire fencing has been erected at the seaward end of the boardwalk which provides a near-solid barrier which will ensure visitors access the beach by the boardwalk and not along the dunes. Mapping of notable features recorded on the site are displayed in Figure 3.5 below.

Plate 3.2 Damaged signage on biodiversity and environment in the car park.

Plate 3.3 **Instructional signage for site preservation by the car park.**

Figure 3.5 **The location of the damaged signage and fallen rope fencing in Portmarnock. Basemap provided by Google.**

Plate 3.4 Signage and a falling rope barrier to protect dune habitats.

3.3.2 Hazards

No hazards were identified at Portmarnock.

3.4 Ecological Constraints

3.4.1 Protected Sites

As discussed in Section 2.1, a desk study was undertaken to identify designated sites and rare and protected species in the vicinity of the site. There are three European (SACs and SPAs) and one nationally designated sites (NHAs and pNHAs) within or adjacent to Portmarnock. Information on these sites was obtained from the NPWS website and their respective Natura 2000 Standard Data Forms. These sites are described in Table 3.2 below.

Table 3.2 Designated sites within 2 km of the Portmarnock site.

Site Name [Site Code]	Qualifying Interests	Distance (km) from Site	Pressures and Threats (those related to recreation are in bold)
European Designated Sites			
Baldoyle Bay SAC [000199]	• Mudflats and sandflats not covered by seawater at low tide [1140] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] • Mediterranean salt meadows (*Juncetalia maritime*) [1410]	Within site boundary	• Hunting • **Golf course** • Reclamation of land from sea, estuary or marsh • **Non-motorized nautical sports** • Roads, motorways • Eutrophication (natural) • **Walking, horseriding and non-motorised vehicles** • Discharges • Invasive non-native species • Urbanised areas, human habitation
Baldoyle Bay SPA [004016]	• Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] • Shelduck (*Tadorna tadorna*) [A048] • Ringed Plover (*Charadrius hiaticula*) [A137] • Golden Plover (*Pluvialis apricaria*) [A140] • Grey Plover (*Pluvialis squatarola*) [A141] • Bar-tailed Godwit (*Limosa lapponica*) [A157] • Wetland and Waterbirds [A999]	Within site boundary	• **Walking, horseriding and non-motorised vehicles** • Fertilisation • Invasive non-native species • Reclamation of land from sea, estuary or marsh • Eutrophication (natural) • Hunting • Roads, motorways • **Golf course**

North-West Irish Sea SPA	• Red-throated Diver (*Gavia stellata*) [A001] • Great Northern Diver (*Gavia immer*) [A003] • Fulmar (*Fulmarus glacialis*) [A009] • Manx Shearwater (*Puffinus puffinus*) [A013] • Cormorant (*Phalacrocorax carbo*) [A017] • Shag (*Phalacrocorax aristotelis*) [A018] • Common Scoter (*Melanitta nigra*) [A065] • Little Gull (*Larus minutus*) [A177] • Black-headed Gull (*Chroicocephalus ridibundus*) [A179] • Common Gull (*Larus canus*) [A182] • Lesser Black-backed Gull (*Larus fuscus*) [A183] • Herring Gull (*Larus argentatus*) [A184] • Great Black-backed Gull (*Larus marinus*) [A187] • Kittiwake (*Rissa tridactyla*) [A188] • Roseate Tern (*Sterna dougallii)* [A192] • Common Tern (*Sterna hirundo*) [A193] • Arctic Tern (*Sterna paradisaea*) [A194] • Little Tern (*Sterna albifrons*) [A195] • Guillemot (*Uria aalge*) [A199] • Razorbill (*Alca torda*) [A200] • Puffin (*Fratercula arctica*) [A204]	Within site boundary	This site has not been formally designated, and no threats and pressures have been published. The threats and pressures for similar SPAs include nautical sports, industrial shipping, fishing, invasive species and wind energy development.

Nationally Designated Sites			
Baldoyle Bay pNHA [000199]	No site description available. Refer to Baldoyle Bay SAC and SPA above.	Within site boundary	No site description available. Refer to Baldoyle Bay SAC and SPA above.
Sluice River Marsh pNHA [001763]	• Freshwater marsh habitat	1.3km northwest	This site is used to graze horses, and hunting may occur here in the winter season. Malahide Golf Course is situated on the other side of the Sluice River.
Malahide Estuary pNHA [000205]	No site description available.	1.5km north	No site description available.

3.4.2 Incidental Species Recorded

Portmarnock supports a range of habitats and species. Table 3.3 below presents the bird species recorded during the ecological surveys at Portmarnock, along with their Birds of Conservation Concern (BoCCI) status (2020–2026).

Table 3.3 Incidental Species Records

Scientific Name	Common Name
Red Status	
Larus argentatus	Herring Gull
Anthus pratensis	Meadow Pipit
Amber	
Sterna hirundo	Common Tern
Phalacrocorax carbo	Cormorant
Linaria cannabina	Linnet
Erithacus rubecula	Robin
Riparia riparia	Sand Martin
Alauda arvensis	Skylark
Sturnus vulgaris	Starling
Saxicola torquatus	Stonechat
Hirundo rustica	Swallow
Green	
Turdus merula	Blackbird
Fringilla coelebs	Chaffinch
Carduelis carduelis	Goldfinch
Ardea cinerea	Grey Heron
Corvus corone	Hooded Crow
Pica pica	Magpie
Motacilla alba yarrelli	Pied Wagtail
Columba palumbus	Woodpigeon

3.4.3 Records of Rare, Protected and Invasive Species

Records of rare, protected, and invasive species from the past ten years from Hectads O24L and O24K 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 in the past decade from Hectads O24L & O24K from NBDC database.

Scientific name	Common Name	Date of last record	Status*
Terrestrial Mammals			
Erinaceus europaeus	Hedgehog	09/09/2021	WA
Lutra lutra	Otter	28/11/2017	Annex II, IV HD; WA
Marine Mammals			
Delphinus delphis	Common Dolphin	20/04/2020	Annex IV HD; WA
Phocoena phocoena	Common Porpoise	04/01/2021	Annex II, IV HD; OSPAR Convention; WA
Halichoerus grypus	Grey Seal	22/10/2022	Annex II, V HD; WA
Birds			
Limosa limosa	Black-tailed Godwit	10/04/2020	WA; Amber List
Melanitta nigra	Common Scoter	12/03/2021	Annex II, III BD; WA; Red List
Numenius arquata	Curlew	30/06/2021	Annex II BD; WA; Red List
Morus bassanus	Gannet	13/03/2021	WA; Amber List
Podiceps cristatus	Great Crested Grebe	12/03/2021	WA; Amber List
Gavia immer	Great Northern Diver	12/03/2021	Annex I BD; WA
Tringa nebularia	Greenshank	10/04/2020	WA; Amber List
Carduelis cannabina	Linnet	10/04/2020	WA; Amber List
Falco columbarius	Merlin	30/03/2023	Annex I BD; WA; Amber List
Cygnus olor	Mute Swan	07/05/2021	WA; Amber List
Gavia stellata	Red-throated Diver	12/03/2021	Annex I BD; WA; Amber List
Charadrius hiaticula	Ringed Plover	12/03/2021	WA; Amber List
Riparia riparia	Sand Martin	23/04/2021	WA; Amber List
Sterna sandvicensis	Sandwich Tern	12/03/2021	Annex I BD; WA; Amber List

Anas crecca	Teal	10/04/2020	Annex II, III BD; WA; Amber List
Oenanthe oenanthe	Wheatear	10/04/2020	WA; Amber List
Anas penelope	Wigeon	10/04/2020	Annex II, III BD; WA; Amber List
Scolopax rusticola	Woodcock	16/12/2022	Annex II, III BD; WA; Amber List
Reptiles & Amphibians			
Rana temporaria	Common Frog	29/05/2020	Annex V HD; WA
Cartilaginous Fish			
Raja clavata	Thornback Ray	13/03/2018	OSPAR Convention
Invertebrates			
Nucella lapillus	Dog Whelk	22/10/2023	OSPAR Convention
Arctica islandica	Icelandic Cyprine	24/03/2019	OSPAR Convention
Invasive Species			
Sciurus carolinensis	Grey Squirrel	13/07/2022	Invasive Species; S.I. 477/2011
Crassostrea gigas	Portuguese Oyster	08/01/2022	High Impact Invasive Species
Lonicera japonica	Japanese Honeysuckle	04/08/2020	Medium Impact Invasive Species
Rosa rugosa	Japanese Rose	06/08/2023	Medium Impact Invasive Species
Clematis vitalba	Traveller's-joy	04/08/2020	Medium Impact Invasive Species
Petasites fragrans	Winter Heliotrope	19/11/2017	Invasive Species

**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).*

4.0 RECOMMENDATIONS

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

- Chestnut-pale or similar fencing should be considered along the dunes to prevent people from walking through them, which has led to erosion and habitat loss. On similar sites in Ireland, chestnut pale fencing has been used to protect and restore dunes.
- Fencing should be considered around the meadow prevent dogs from entering it. Signage indicating that the area is being managed for wildlife should also be put up with a notice that dogs should not be allowed in the area. Grazing could be considered. Grazing is used on a number of sites in Fingal including Howth Head as a measure to promote biodiversity.
- The extension of the boardwalk from the beach all the way to the car park should be considered to improve access, particular for disabled people and people with buggies.
- The repair or replacement of the existing damaged signage should be considered. Where signage is being implemented, teleological signage (signage with instruction and justification for the instruction) should be used.
- Sea-buckthorn (*Hippophae rhamnoides*), a species which is invasive on dune systems, was recorded in the dunes to the south of the beach access point. A programme for the eradication of this species should be considered.

5.0 REFERENCES

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APPENDIX A
Fáilte Ireland Visitor Characterisation Survey

Portmarnock Beach – Visitor Monitoring Assessment

June 2024

Contents

1.0 Introduction:

Background

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 Monitoring Programme has been conducting research into the impacts of tourism on the receiving environment. These 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. The environmental monitoring builds on environmental surveying and monitoring undertaken on behalf of Fáilte Ireland as far back as 2015, and to date (excluding the 2024 data), the surveys have monitored a total of 66 sites and recorded the activities and effects of over 30,000 visitors at a range of tourism sites (including inland, urban, coastal and WAW discovery points).

2.0 Visitor Characterisation Survey Methodology:

• Visitor Characterisation Surveys

The visitor characterisation survey was undertaken by the Fáilte Ireland Planning and Environmental team at Portmarnock Beach to supplement and be appended to the National Environmental Monitoring Programme 2024 Report undertaken by Roughan O'Donovan Consulting Engineers. The survey was undertaken on the 12th of June 2024 from 17.30-19.00 on a sunny and breezy Wednesday evening. The survey was undertaken adjacent to the newly constructed boardwalk at the location of the temporary Portmarnock Beach South Lifeguard Station.

For the purposes of this assessment a 'visitor' refers to an individual, couple or group who arrive together. The following variables were recorded for each visitor:

• Activity Type

• Group Type

• Transport Type

• Activity Levels; and

• Impact Severity Levels.

3.0 Results:

3.1 Visitor Characterization Survey:

The visitor monitoring survey undertaken on the 12th of June 2024 from 17.30-19.00 on a sunny and breezy Wednesday evening. A total of 48 No. visitor groups comprising 70 No. Individuals were recorded. This site during the survey period was most popular amongst the 'Individual Adult' group followed by the 'small adult' and 'couple' groups. The following activities undertaken by groups during the survey are listed in order of occurrence rate below:

- Walking, running, cycling or playing on paths, hard trails or marked surfaces,
- Sitting on benches, walls, mown grass or sand,
- Swimming, sailing, surfing in water, and
- Any movement leaving an existing trail or marked path / Climbing on walls, loose stones, sand, soil etc..

3.2 Prevalence of Group Type

Figure 1 presents the prevalence of group types observed visiting the site, either without a dog or with a dog. 'Individual Adult' made up the largest proportion of group type with 61% of visitor groups observed. The second largest group type was 'small adult group' with 17%. The third largest was the 'couple' group type with 10%. The remaining group types observed in order of prevalence were 'family', 'Under 18' and 'Individual elderly'. All group types apart from family and 'individual elderly' groups were observed with a dog with the highest proportion with dogs being the 'individual adult' group. Of the 'individual adult' group observed with dogs over 70% were observed 'off lead'.

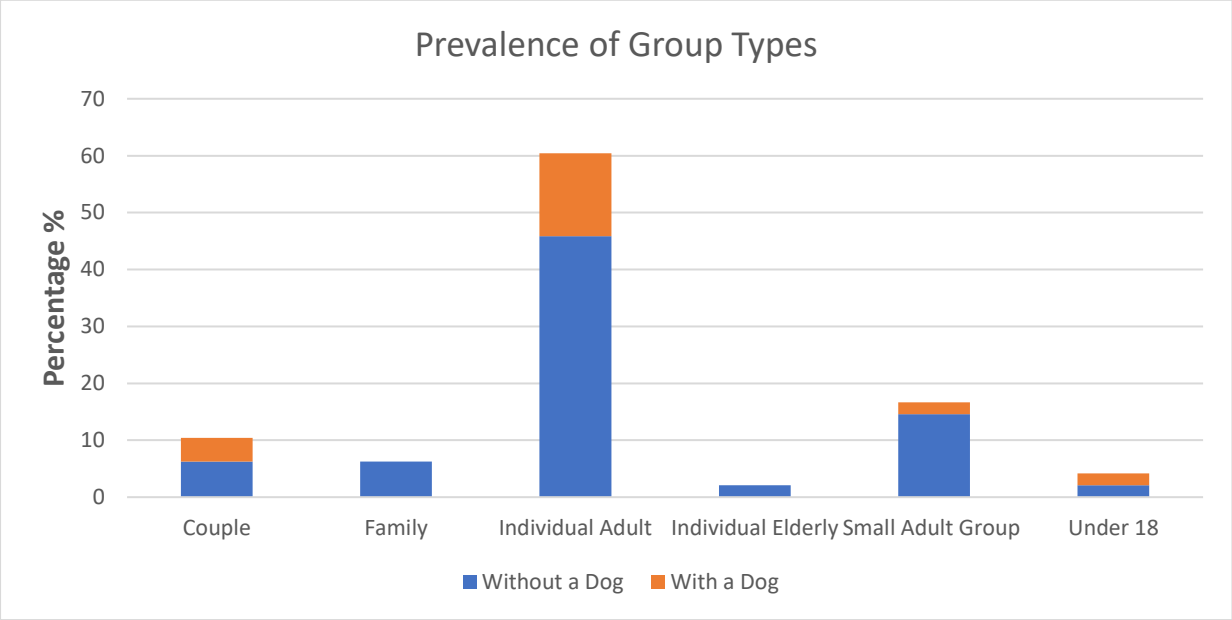


Figure 1: Prevalence of Group Type

3.3 Prevalence of Transport Type

Given the survey location on Portmarnock Beach, the main mode of transport observed was 'on foot' accounting for 96% of visitor groups observed visiting the site. This included groups observed walking from the south beach carpark (including those who may have arrived at the carpark by car) and groups observed walking southwards along the beach from the Portmarnock village direction.

The remaining 4% of visitor groups arrived by bike and were observed cycling the beach or parking their bikes adjacent to the rocks and boulders.

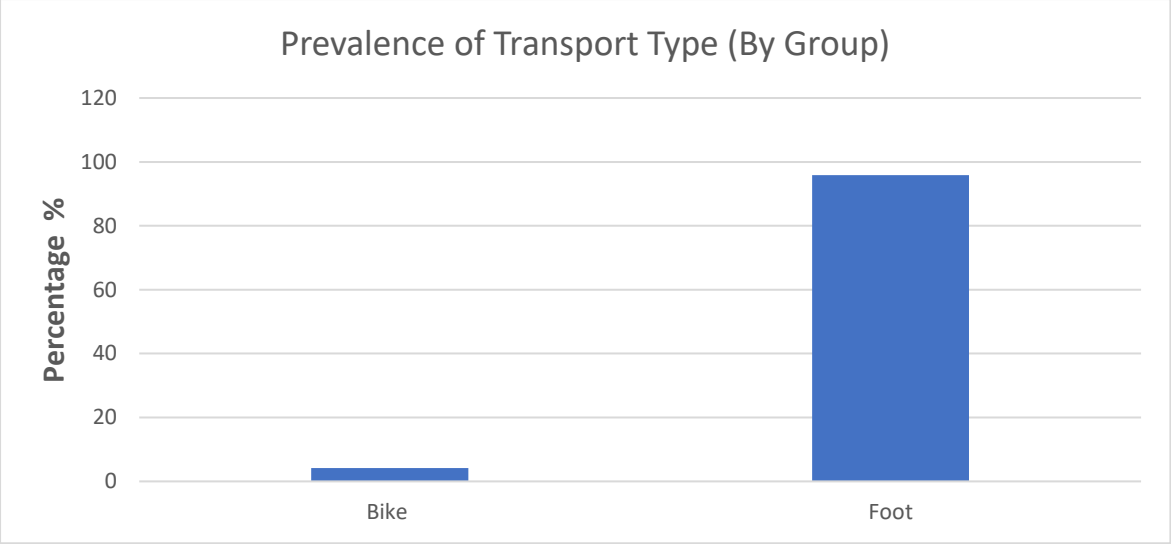


Figure 2: Prevalence of Transport Type (By Group)

3.4 Activity Levels

Figure 3 below presents the activity levels at Portmarnock Beach. A sample of 48 visitor groups' activities were observed. The results from this are shown below in Figure 3. Activity categories are detailed in Appendix I. Activities such as Walking, running or playing on level sands is a low-level activity, whereas disturbing wildlife and picking herbaceous vegetation are considered high level activities. 98% of the activities observed at Portmarnock were considered low level activities comprising walking, running or swimming on Portmarnock beach. The remaining 2% comprised medium level activity and included groups walking through sand dunes leaving existing trails or marked paths.

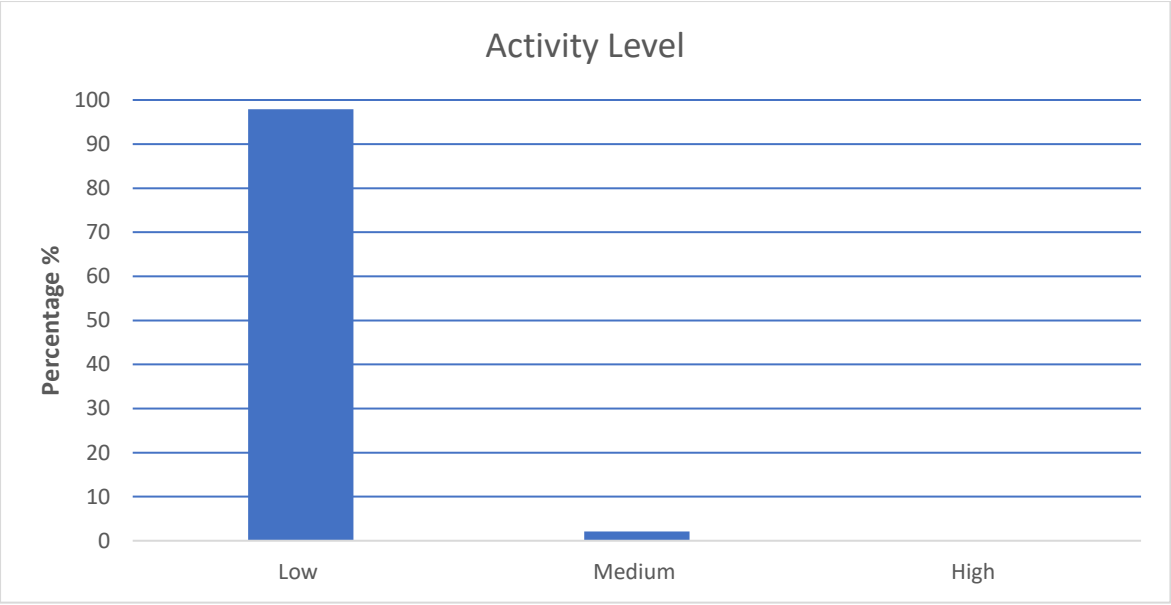


Figure 3: Activity Level

3.5 Impact Severity Levels

Figure 4 presents the impact severity level observed at the site. A sample of 48 visitor groups' activities were observed. Impact severity level relates to the damage of an activity on the site. The levels of impact severity are detailed in Appendix I. Similar to the impact type above, the survey found that

98% of the activities observed had low level impact severity on the site. Medium level severity levels included desire lines or tracks visible outside of marked paths or existing trails.

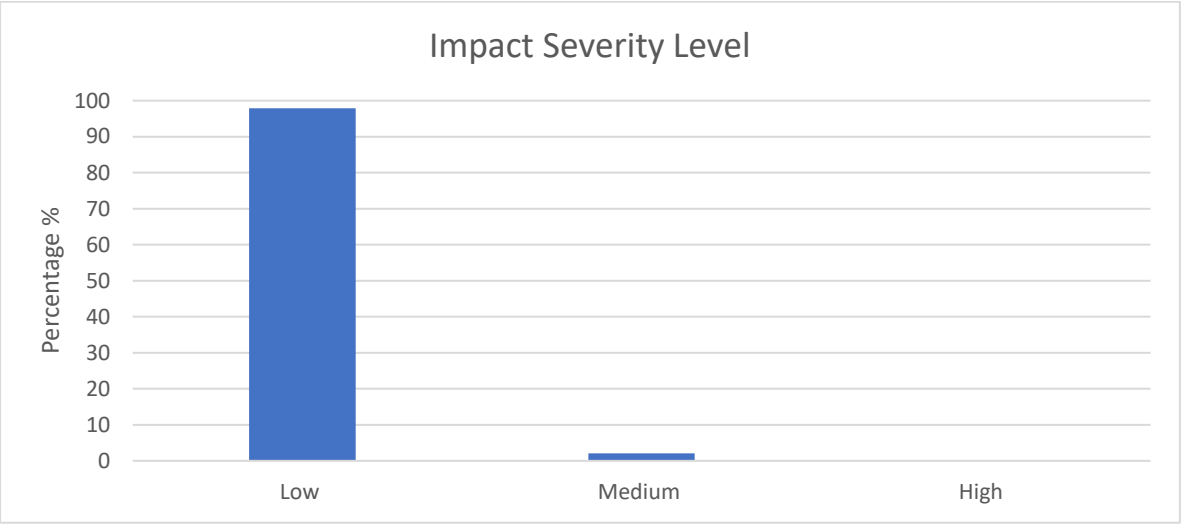
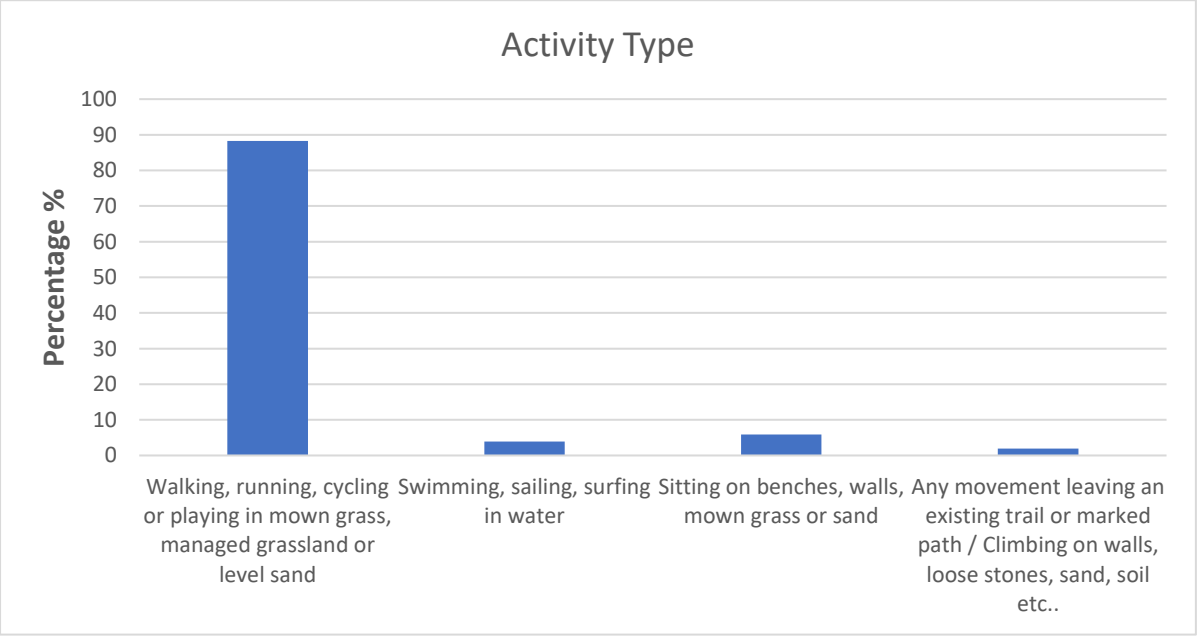


Figure 4: Impact Severity Levels

3.6 Activity Types

Figure 5 presents the Activity Types observed at the site. A sample of 48 visitor groups' activities were observed. the survey found that 88% of the activities observed comprised a mix walking, running, cycling or playing in level sand. 6% comprised sitting on benches, walls, mown grass or sand with the remaining 4% comprising swimming in the sea. The remaining 2% (1 visitor group) were observed climbing over the boulders from the high exposed sand dune areas.



4.0 Observations

The site survey coincided with the completion of a newly constructed boardwalk (and dune protection fencing) linking the South beach Carpark and the temporary lifeguard hut as detailed in photographs below from the survey 12th June 2024.

Appendix 1 – Activity & Impact Codes

Activities		
Category 1 Low Level		
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
Category 2 Medium Level		
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
Category 3 High Level		
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

Impacts		
Category 1 Low Impact		
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
Category 2 Medium Impact		
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
Category 3 Severe Impact		
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

Fáilte Ireland
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