NATIONAL TOURISM MONITORING PROGRAMME 2021-2025

ANNUAL RESULTS FOR 2021

MALAHIDE

for: **Fáilte Ireland**

88 – 95 Amiens Street

Dublin 1

D01 WR86

by: **CAAS Ltd.**

1st Floor,

24-26 Ormond Quay Upper

Dublin 7

October 2022

Document Control

	Author/Reviewer	Date
Prepared by	Andrew Torsney & Callum O'Regan	Various dates to 31 July 2022
Reviewed by	Conor Skehan & Maeve Walsh	24 October 2022
Status of this version	Final	

Contents

Malahide – Interesting Finds

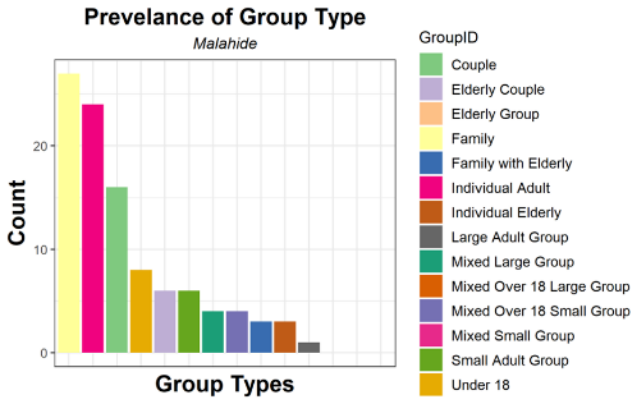
ECOLOGICAL HIGHLIGHTS

The estuary is an important wintering bird site and holds an internationally important population of Brent Goose and nationally important populations of a further 15 species.

The outer part of the estuary is mostly cut off from the sea by a large sand spit, known as 'the island'. The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (*Dwarf Eelgrass, Zostera noltii, and Narrow-leaved Eelgrass, Z. angustifolia*) in the north section of the outer estuary, along with Beaked Tasselweed (*Ruppia maritima*) and extensive mats of green algae (*Enteromorpha spp., Ulva lactuca*). Common Cord-grass (*Spartina anglica*) is also widespread in this sheltered part of the estuary.

VISITOR NUMBERS AND DWELL TIME

- 375 people visited the site over 8 hours
- Average dwell time of 52 minutes



KEY RECOMMENDATIONS

- A visitor management strategy for the site is required – to include trail network interventions within the dune system where damage is evident.
- A litter management plan is required for the site to alleviate pressures related to litter impacts.
- Dog walking off leads is a known issue for the protected bird species of the host SPA and the data identifies this as an impact occurring on site. Consideration should be given to ecological conflict resolution processes such as the appointment of a warden or the promotion of environmentally responsible behaviour.
- Dune restoration works should be established at the site.

VISITOR INTERACTION & MANAGEMENT

- Visitor interactions on site well controlled with strong management practices in place.
- Over 60% of all activities undertaken were considered to be low level activities such as photography, jogging and picnicking.
- Nearly 40% of all observable impacts by visitors was noted to be trampling of dunes and vegetation with over 10% pertaining to damage of natural features.
- Most of the visitors to the site stayed for at least 52 minutes –given the nature of the site itself as a relatively urban area.
- Majority of visitors did not read signage that was available on site.

1 Malahide

1.1 Purpose & Outputs of the Programme

Building on the success of the Wild Atlantic Way (WAW) environmental monitoring programme which ran from 2015-2019 – Fáilte Ireland has decided to expand the programme to a national level. The programme will monitor 19 individual sites located in all of Fáilte Irelands regional areas; The Wild Atlantic Way, Irelands Hidden Heartlands, Irelands Ancient East and Dublin. The programme will run for 5 years from 2021-2025.

The sites that are included in the programme vary in type from inland forest parks, to coastal sites, to privately owned attractions and diverse urban locations - can be seen below.

The purpose of the programme is as follows:

- To gain more insight from an environmental perspective as to what is happening at a variety of sites where we encourage visitors to frequent,
- To gather information (visitor behaviour, movement, path and trail conditions, surveys for birds, flora etc) for each site over the course of 5 years,
- To understand if there are observable trends and/or observable variations amongst site types over a 5-year period,
- To note good & bad practice at sites in order to;
- Make recommendations where appropriate for site management which is intended will have

sustainable benefits for the site, the visitor and the natural environment.

The Wild Atlantic Way Environmental Monitoring Programme allowed us to monitor the behaviour & movement of over 26,000 visitors, identify where there were stresses on the environment or potential future risks as well as good and bad practice.

This culminated in our ability to make useful recommendations to site owners and managers and ultimately to development a practical set of Guidelines for Visitor management (from Planning thorough to Site Operation).

It is hoped that we can build on the learnings of this previous programme and by engaging with site managers, to knowledge share, can enhance the information that we gather for each site chosen nationally for this new programme.

The key areas of focus within the data being gathered is to answer the following questions:

- How do the learning outcomes from the WAW monitoring compare when using repeat measures at fixed locations over a long period? Hence, what are the predictors of impact occurrence and severity?
- Following on from the WAW monitoring data – with the refined methods we aim to understand what activities cause which impact; and what are the factors which influence these activity choices in visitors?
- Understanding visitor movement patterns with respect to ranging behaviours – i.e., is there a distance threshold where impacts are less severe or negligible?
- Undertake pathway condition assessments to understand the relative sensitivities or tolerances of path types to visitor movements – taking note of habitat type and visitor numbers/load capacity.

These questions will be answered upon completion of the full suite of surveys and data collected annually over the course of the monitoring programme. However, each year will have annual interim reports to enable emerging findings and management recommendation to be identified and shared with the relevant stakeholders to support progressive management practices.

1.2 Methods & Surveys

The following surveys were undertaken at Malahide:

1.2.1 Visitor Characterisation Survey

Visitor characterisation surveys were undertaken at each of the monitoring sites during the weekend period between June-August. The survey at Malahide was undertaken on the 18th of June 2021, with max temperatures reaching approximately 16° C, no rainfall and low levels of wind on the day[1]. These surveys followed an 8-hour time period recording samples of visitor behaviour of an many visitors on site as possible. Visitor movement patterns, demographic data and activities undertaken were recorded for all sampled visitors. Where activities had associated impacts, these were also recorded and the relevant severity was recorded using the same coding system as with the WAW monitoring (see Appendix I for details). It is important to note that the visitor characterisation surveys are indiscriminate between visitors and local amenity use.

1.2.2 Ecological & Path Assessments

In addition to the visitor movement and behavioural records an ecological assessment and path network assessment was undertaken at each site. This consisted of mapping all tracks and trails – with records of hazards, notable damage etc. In addition to this, all habitats were mapped according to the Fossitt Habitat coding system while information on bird populations was gathered from National Biodiversity Centre Data.

[1] Weather data gathered from: https://www.met.ie/climate/available-data/historical-data

1.2.3 Other Surveys

Additional sample surveys were undertaken at Malahide to identify the species presence of wintering birds. This information can inform potential management actions related to amenity services such as lighting which could conflict with sensitive species on site.

1.3 Site Description of Malahide

Malahide is a coastal town just north of Dublin city, situated in Fingal. While quite urban, is located along the Malahide Estuary and thus adjoins both Malahide Estuary SAC and SPA. Malahide also is home to the Malahide Castle and Gardens, which is primarily used for leisure activities. It contains habitats such as sand shores and mud shores along with dry meadows and grassy verges.

Figure 1.1 Malahide

Malahide Estuary SAC

Figure 1.2 Study Area within Malahide Estuary SAC

1.4 Pathways and Features Condition Results

1.4.1 Pathway Condition

The pathways at Malahide are composed of a mix of hard infrastructure, due to the urban landscape of Malahide itself and light indentations and eroded pathways that lead to and are on the beach located at Malahide. The eroded pathways on the beach itself were mainly sand dunes which have eroded away due to trampling and walking, with mild levels of compaction seen.

Figure 1.3 Pathways identified at Malahide

Figure 1.4 Pathways at Malahide

1.4.2 Features Condition

As would be expected of a coastal visitor area such as Malahide, there are various amenities and features on site that accommodate visitors such benches, toilets, coffee trucks and a lifeguard area for water related leisure activities. Due to the urban nature of Malahide, there are also a large number of bins within the area. Along with this there are a large number of signs that call for no littering along with providing rules to be followed when visiting the beach area (Figure 1.6). There are also a small number of wildlife and nature information signs that show the importance of Malahide estuary.

Figure 1.5 Features recorded at Malahide

Figure 1.6 Features at Malahide

1.4.3 Hazards

Erosion, dumping, desire lines and unrestricted camping were all found at Malahide, along with a small number of burned areas.

Figure 1.7 Hazards recorded at Malahide

1.5 Visitor Characterisation Survey

The visitor monitoring surveys resulted in a total of 375 visitors (which represent 102 group observations). The site is most popular amongst the Family group with the dominant mode of transport being car. The average dwell time for the site was 52 minutes; with the following activities undertaken during the survey (listed in order of occurrence rate):

Activity Type
Picnicking
Dog walking (on lead)
Dog walking (off lead)
Sitting
Building sand castles
Exploring off trail
Jogging
Off road driving
Recycling
Camping
Cycling
Drawing
Football
Nappy changing on mat
Photographing
Playing Music
Sailing
Sports Match (informal)

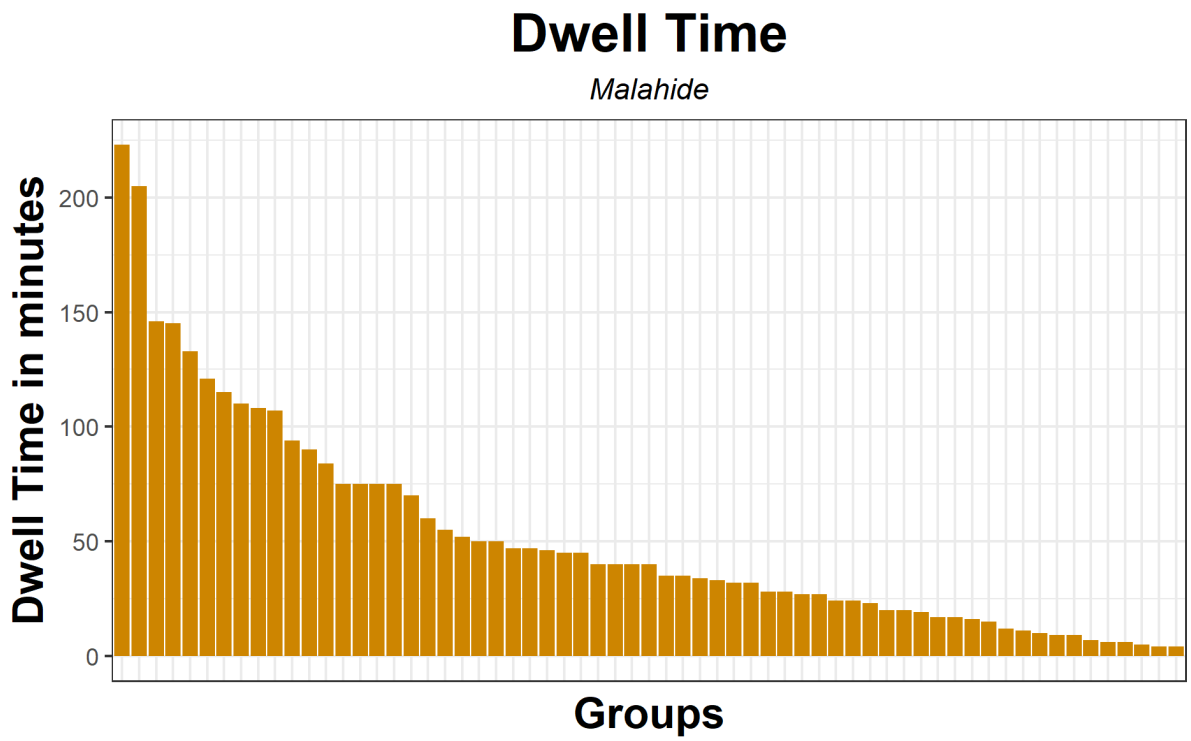


Figure 1.8 Duration of Time Spent at Malahide

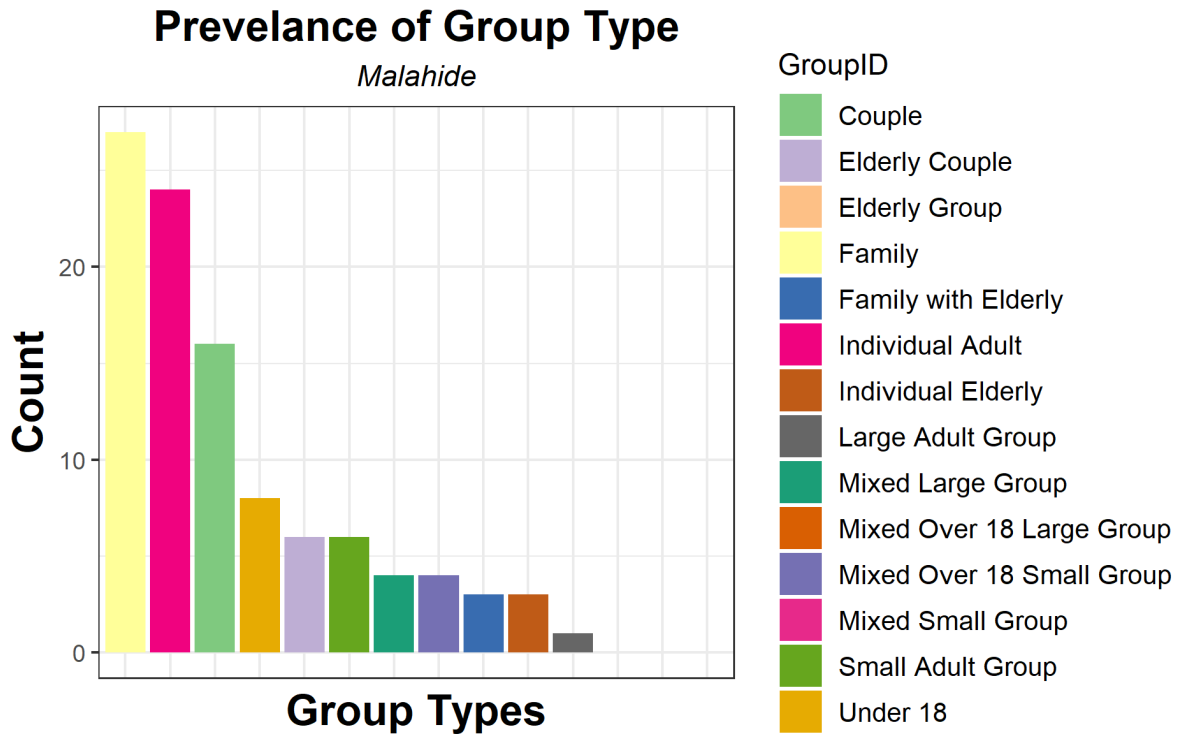


Figure 1.9 Groups of visitors that visited Malahide

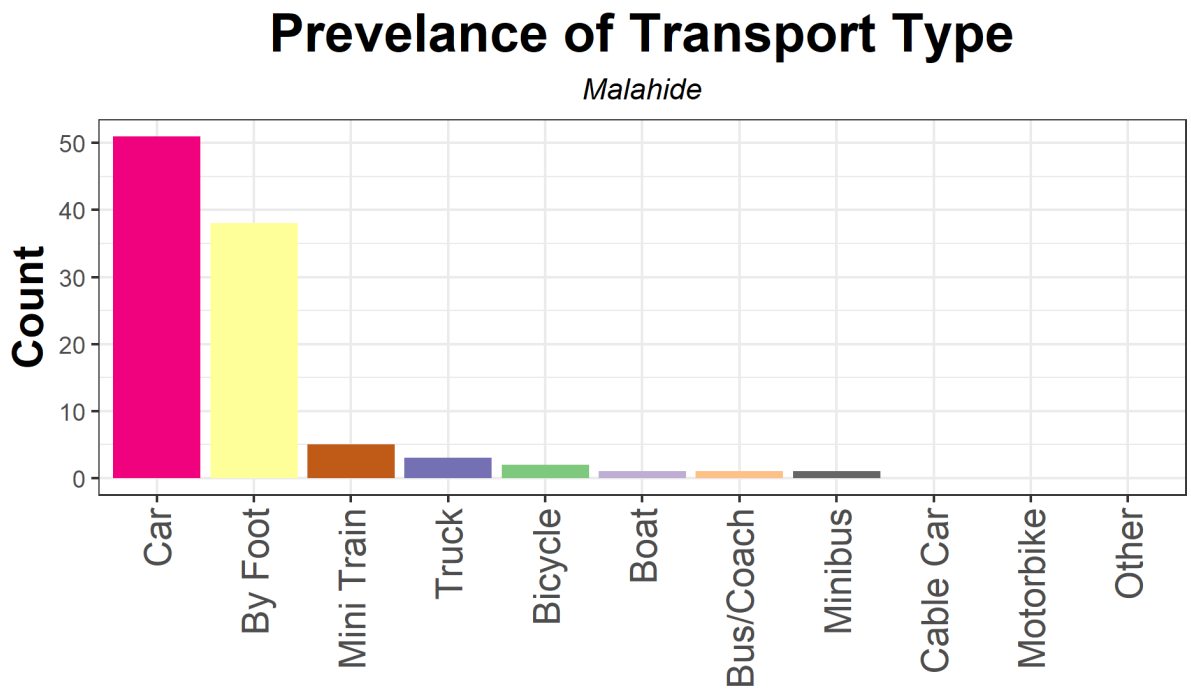


Figure 1.10 Mode of transport used to visit Malahide

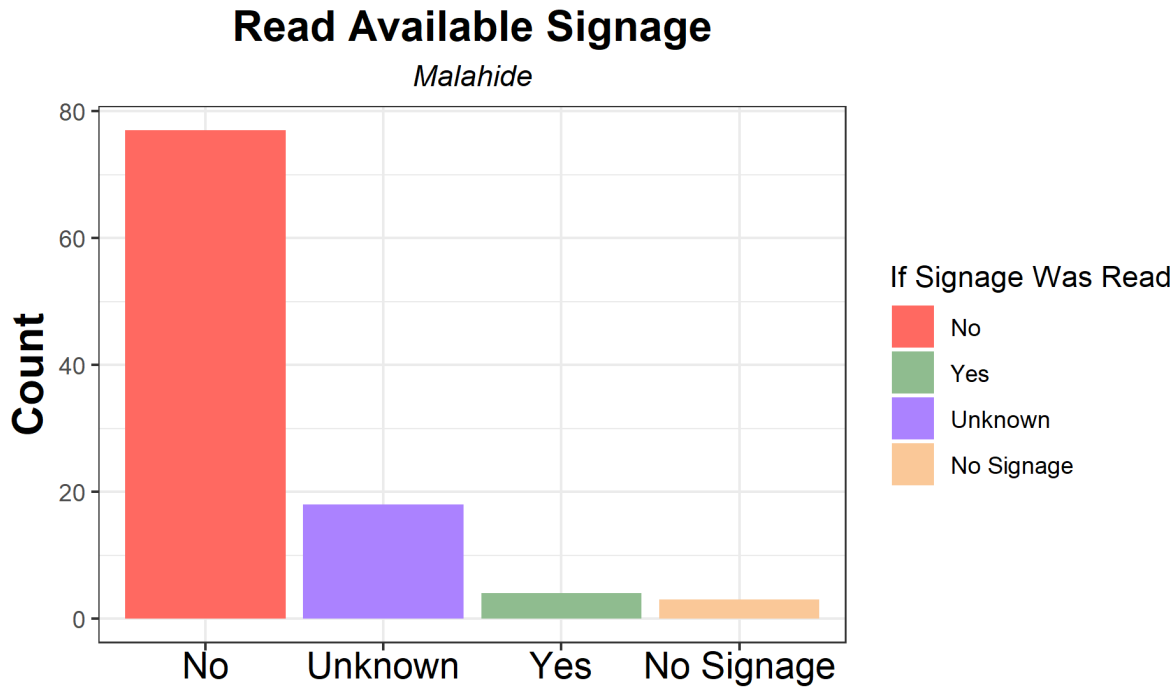


Figure 1.11 Use of Interpretive Material at Malahide

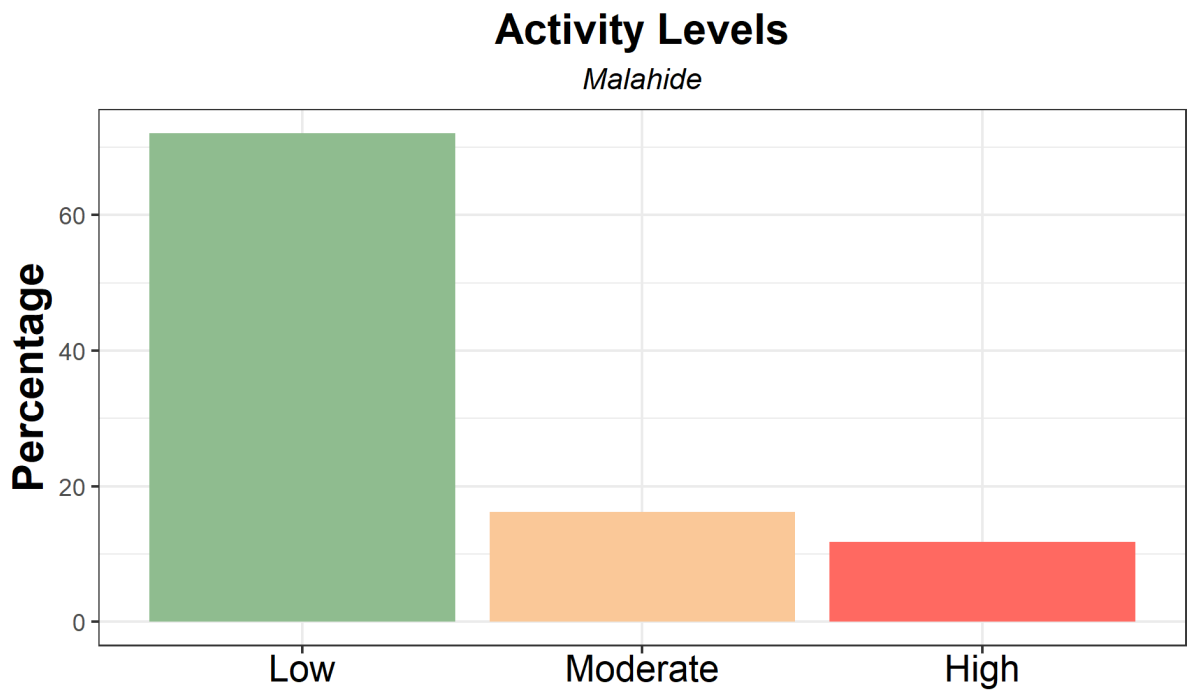


Figure 1.12 Categories of Activity Levels Observed at Malahide

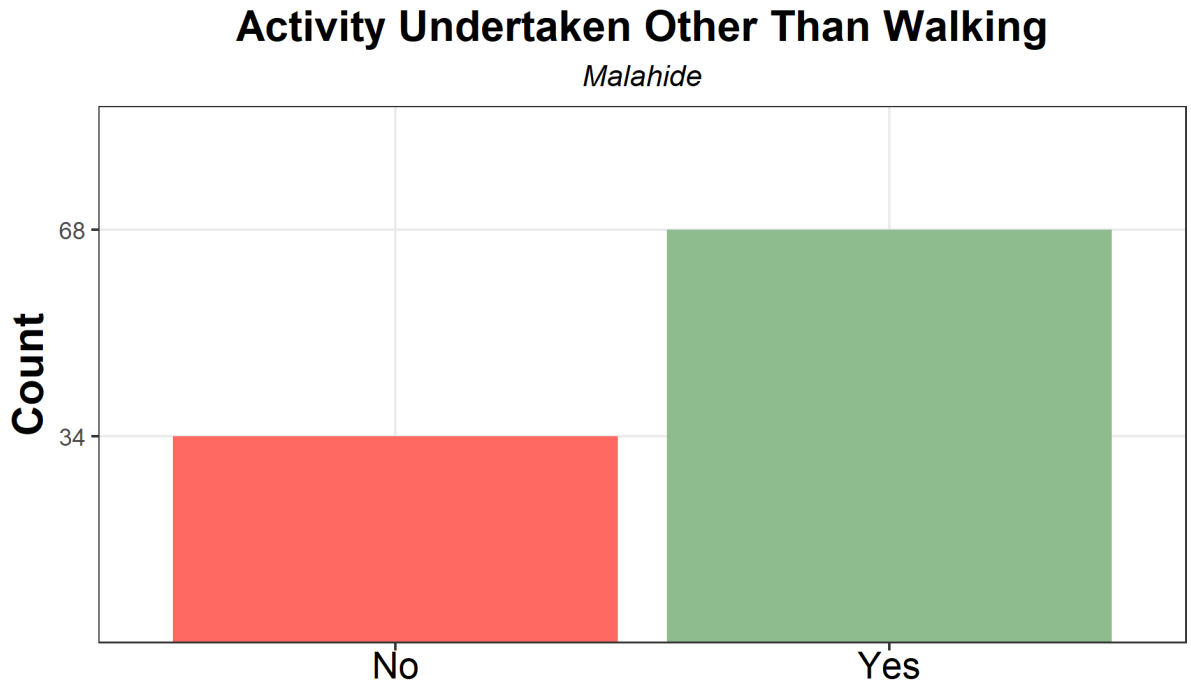


Figure 1.13 Activities undertaken other than walking

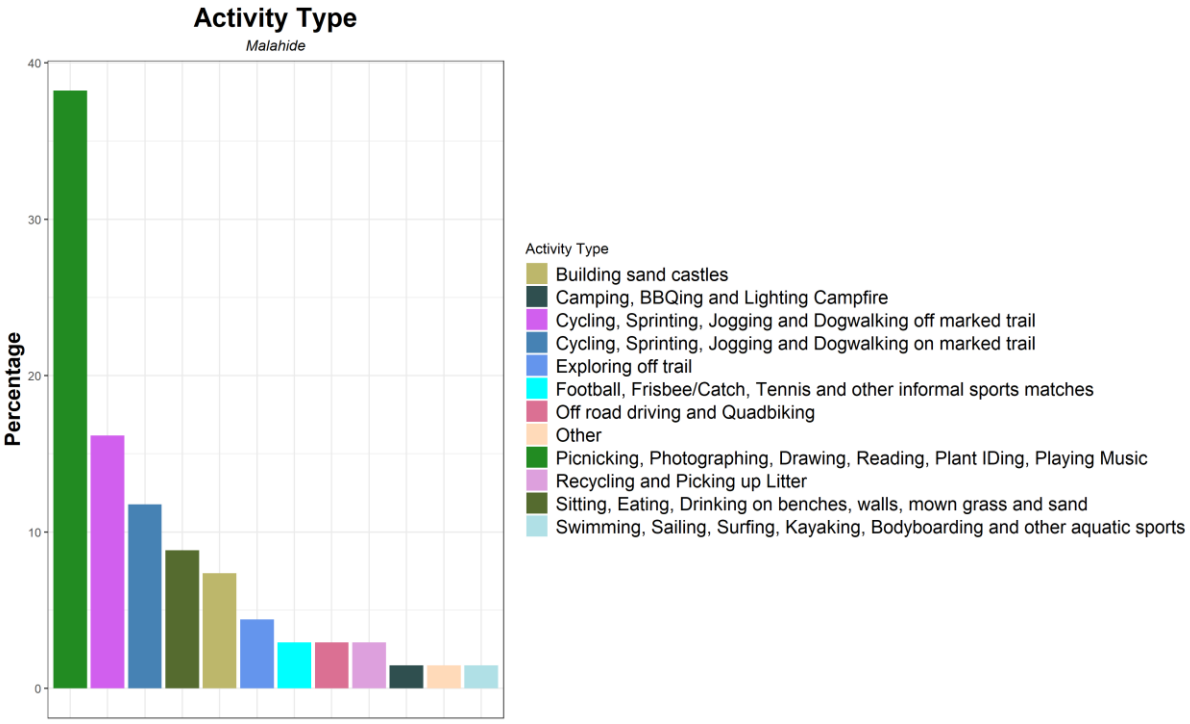


Figure 1.14 Range of Visitor Activities Observed at Malahide

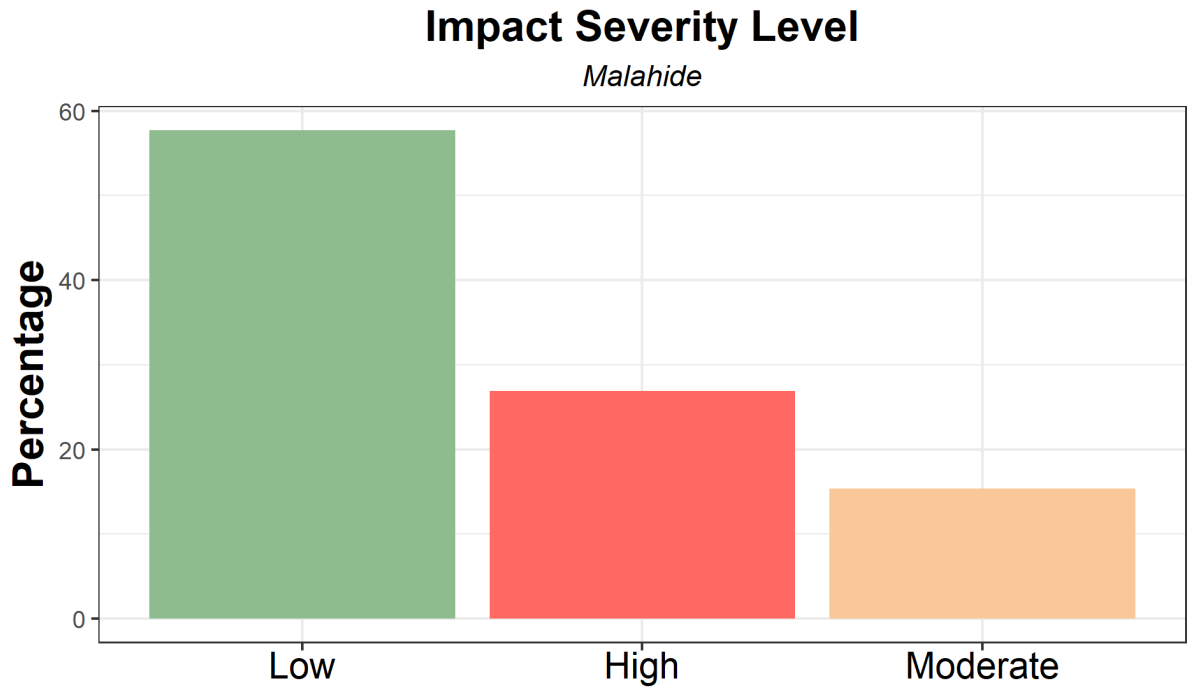


Figure 1.15 Categories of Environmental Impact Levels Observed at Malahide as a result of Visitor Activities

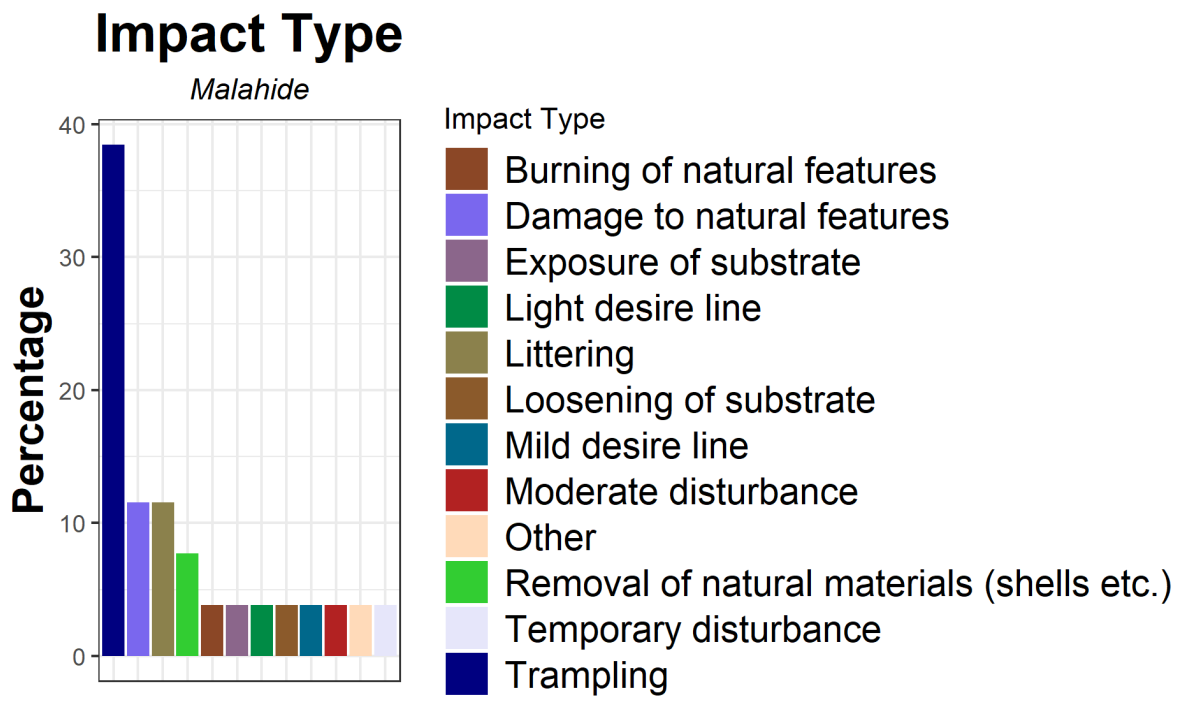


Figure 1.16 Range of Environmental Impacts Observed at Malahide

Figure 1.17 Visitor movement patterns at Malahide

Of the 102 groups recorded on site 67% of them undertook activities other than walking. These activities (identified above) resulted in 26 impacts being observed on site during the survey. Thus, 38% of activities on site resulted in impacts on the environment. The impact severity levels varied with 58% of the impacts being low, 15% of impacts being moderate, and 27% of impacts being high severity. The impacts identified for the site were:

Impact Type	Count
Burning of natural features	1
Damage to natural features	3
Exposure of substrate	1
Light desire line	1
Littering	3
Loosening of substrate	1
Mild desire line	1
Moderate disturbance	1
Other	1
Removal of natural materials (shells etc.)	2
Temporary disturbance	1
Trampling	10

1.6 Ecological Monitoring Results

1.6.1 Ecological Constraints

The species and habitats within 2km of Malahide are sensitive to hydrological changes, invasive species, land use management, pollution, anthropogenic disturbance and overgrazing.

Table 1.1 Designated sites within 2km of Malahide and relevant ecological receptors

Site Code	Site Name	Distance (km)	Site Type	Qualifying Feature
[000205]	Malahide Estuary SAC	0.01	SAC	Salicornia and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], Mediterranean salt meadows (*Juncetalia maritimi*) [1410], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330], Shifting dunes along the shoreline with *Ammophila arenaria* - white dunes [2120]
[000205]	Malahide Estuary pNHA	0.02	pNHA	
[004025]	Malahide Estuary SPA	0.02	SPA	Pintail (*Anas acuta*) [A054], Knot (*Calidris canutus*) [A143], Black-tailed Godwit (*Limosa limosa*) [A156], Shelduck (*Tadorna tadorna*) [A048], Dunlin (*Calidris alpina*) [A149], Red-breasted Merganser (*Mergus serrator*) [A069], Goldeneye (*Bucephala clangula*) [A067], Grey Plover (*Pluvialis squatarola*) [A141], Oystercatcher (*Haematopus ostralegus*) [A130], Great Crested Grebe (*Podiceps cristatus*) [A005], Golden Plover (*Pluvialis apricaria*) [A140], Redshank (*Tringa totanus*) [A162], Wetland and Waterbirds [A999], Bar-tailed Godwit (*Limosa lapponica*) [A157], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]

1.6.2 Habitat Descriptions

The habitats of Malahide are typical of an urban, coastal area. The majority of Malahide itself is made up of buildings and artificial surfaces (Fossitt Code BL3) with patches of amenity grassland (Fossitt Code GA2) and scattered tress and parkland (Fossitt Code WD5). Malahide Estuary is an estuary (Fossitt Code MW4), designated as an SAC, is located at Malahide and therefore there are coastal habitats such as marram dunes (Fossitt Code CD2) which align with the Annex I habitat for which the SAC is designated (Fixed coastal dunes with herbaceous vegetation – grey dunes [2130]).

The outer part of the estuary is mostly cut off from the sea by a large sand spit, known as 'the Island'. The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (*Dwarf Eelgrass, Zostera noltii, and Narrow-leaved Eelgrass, Z. angustifolia*) in the north

section of the outer estuary, along with Beaked Tasselweed (*Ruppia maritima*) and extensive mats of green algae (*Enteromorpha spp., Ulva lactuca*). Common Cord-grass (*Spartina anglica*) is also widespread in this sheltered part of the estuary.

Damage to the dunes from visitor movements is evident, there is an extensive trail network in the dune system with considerable levels of substrate exposure.

Figure 1.18 Habitats present at Malahide

1.6.3 Condition Assessment

There are a range of habitats present on site, the assessment of habitat condition identified that the overall habitat quality[2] following the assessment scale was "1" which means the majority of the habitats have no evidence of any negative impact on the habitats or other ecological features. There were 9 recorded incidents of damage to habitats occurring off the marked paths on site. The causes of the damage were identified to be erosion from walkers and pollution.

1.6.4 Wintering Bird Survey

Mute Swans, Oystercatchers, Redshanks, Greenshanks and Herring Gulls were all observed on site during the survey work. Malahide estuary is resident to a range of protected species such as the light bellied brent guess which are known to forage in the estuary itself daily.

The estuary is an important wintering bird site and holds an internationally important population of Brent Goose and internationally important populations of a further 15 species.

Table 1.2 Results of the wintering bird survey conducted at Malahide

Common name	Scientific name	Record count
Eurasian Oystercatcher	*Haematopus ostralegus*	36
Common Greenshank	*Tringa nebularia*	12
Mute Swan	*Cygnus olor*	2
Herring Gull	*Larus argentatus*	10

[2] This value was calculated using the methods set out in Appendix II

Table 1.3 List of wintering birds that have been recorded at NBDC Hectad O24

Taxonomic group	Common name	Scientific name	Record count
Bird	Alcidae	*Alcidae*	1
Bird	American Bittern	*Botaurus lentiginosus*	1
Bird	American Golden Plover	*Pluvialis dominica*	2
Bird	Arctic Tern	*Sterna paradisaea*	6
Bird	Atlantic Puffin	*Fratercula arctica*	10
Bird	Bar-tailed Godwit	*Limosa lapponica*	10
Bird	Black Brant	*Branta bernicla subsp. nigricans*	4
Bird	Black Guillemot	*Cepphus grylle*	15
Bird	Black-headed Gull	*Larus ridibundus*	31
Bird	Black-legged Kittiwake	*Rissa tridactyla*	44
Bird	Black-necked Grebe	*Podiceps nigricollis*	1
Bird	Black-tailed Godwit	*Limosa limosa*	15
Bird	Black-throated Diver	*Gavia arctica*	2
Bird	Bonaparte's Gull	*Larus philadelphia*	1
Bird	Branta bernicla subsp. hrota	*Branta bernicla subsp. hrota*	14
Bird	Brent Goose	*Branta bernicla*	28
Bird	Canada Goose	*Branta canadensis*	1
Bird	Caspian Tern	*Hydroprogne caspia*	1
Bird	Common Coot	*Fulica atra*	6
Bird	Common Eider	*Somateria mollissima*	1
Bird	Common Goldeneye	*Bucephala clangula*	9
Bird	Common Greenshank	*Tringa nebularia*	12
Bird	Common Guillemot	*Uria aalge*	24
Bird	Common Kingfisher	*Alcedo atthis*	8
Bird	Common Moorhen	*Gallinula chloropus*	26
Bird	Common Pochard	*Aythya ferina*	6
Bird	Common Redshank	*Tringa totanus*	25
Bird	Common Sandpiper	*Actitis hypoleucos*	3
Bird	Common Scoter	*Melanitta nigra*	11
Bird	Common Shelduck	*Tadorna tadorna*	36
Bird	Common Snipe	*Gallinago gallinago*	15
Bird	Common Tern	*Sterna hirundo*	3
Bird	Curlew Sandpiper	*Calidris ferruginea*	1
Bird	Dunlin	*Calidris alpina*	14
Bird	Eurasian Curlew	*Numenius arquata*	29
Bird	Eurasian Dotterel	*Charadrius morinellus*	1
Bird	Eurasian Oystercatcher	*Haematopus ostralegus*	38
Bird	Eurasian Spoonbill	*Platalea leucorodia*	1
Bird	Eurasian Teal	*Anas crecca*	17
Bird	Eurasian Wigeon	*Anas penelope*	18
Bird	Eurasian Woodcock	*Scolopax rusticola*	2
Bird	European Golden Plover	*Pluvialis apricaria*	8
Bird	European Shag	*Phalacrocorax aristotelis*	29
Bird	Ferruginous Duck	*Aythya nyroca*	1
Bird	Forster's Tern	*Sterna forsteri*	1
Bird	Gadwall	*Anas strepera*	2
Bird	Gavia	*Gavia*	1
Bird	Glaucous Gull	*Larus hyperboreus*	1
Bird	Glossy Ibis	*Plegadis falcinellus*	1
Bird	Great Black-backed Gull	*Larus marinus*	32
Bird	Great Cormorant	*Phalacrocorax carbo*	31
Bird	Great Crested Grebe	*Podiceps cristatus*	13
Bird	Great Northern Diver	*Gavia immer*	7
Bird	Greater Scaup	*Aythya marila*	3
Bird	Green Sandpiper	*Tringa ochropus*	2
Bird	Grey Heron	*Ardea cinerea*	31

Taxonomic group	Common name	Scientific name	Record count
Bird	Grey Plover	*Pluvialis squatarola*	8
Bird	Greylag Goose	*Anser anser*	2
Bird	Herring Gull	*Larus argentatus*	42
Bird	Jack Snipe	*Lymnocryptes minimus*	3
Bird	Kentish Plover	*Charadrius alexandrinus*	1
Bird	Larus	*Larus*	2
Bird	Lesser Black-backed Gull	*Larus fuscus*	21
Bird	Little Auk	*Alle alle*	1
Bird	Little Egret	*Egretta garzetta*	22
Bird	Little Grebe	*Tachybaptus ruficollis*	14
Bird	Little Gull	*Larus minutus*	4
Bird	Little Stint	*Calidris minuta*	1
Bird	Little Tern	*Sternula albifrons*	3
Bird	Long-tailed Duck	*Clangula hyemalis*	3
Bird	Long-tailed Tit	*Aegithalos caudatus*	21
Bird	Mallard	*Anas platyrhynchos*	38
Bird	Manx Shearwater	*Puffinus puffinus*	4
Bird	Mediterranean Gull	*Larus melanocephalus*	6
Bird	Mew Gull	*Larus canus*	24
Bird	Mute Swan	*Cygnus olor*	24
Bird	Northern Fulmar	*Fulmarus glacialis*	13
Bird	Northern Gannet	*Morus bassanus*	32
Bird	Northern Lapwing	*Vanellus vanellus*	18
Bird	Northern Pintail	*Anas acuta*	9
Bird	Northern Shoveler	*Anas clypeata*	6
Bird	Phalacrocoracidae	*Phalacrocoracidae*	17
Bird	Pied Avocet	*Recurvirostra avosetta*	1
Bird	Pink-footed Goose	*Anser brachyrhynchus*	2
Bird	Purple Sandpiper	*Calidris maritima*	2
Bird	Razorbill	*Alca torda*	16
Bird	Red Knot	*Calidris canutus*	9
Bird	Red-breasted Merganser	*Mergus serrator*	9
Bird	Red-necked Grebe	*Podiceps grisegena*	1
Bird	Red-throated Diver	*Gavia stellata*	8
Bird	Ring-billed Gull	*Larus delawarensis*	2
Bird	Ringed Plover	*Charadrius hiaticula*	19
Bird	Roseate Tern	*Sterna dougallii*	1
Bird	Ruddy Duck	*Oxyura jamaicensis*	1
Bird	Ruddy Turnstone	*Arenaria interpres*	15
Bird	Ruff	*Philomachus pugnax*	3
Bird	Sanderling	*Calidris alba*	11
Bird	Sandwich Tern	*Sterna sandvicensis*	5
Bird	Slavonian Grebe	*Podiceps auritus*	3
Bird	Spotted Redshank	*Tringa erythropus*	1
Bird	Stone-curlew	*Burhinus oedicnemus*	1
Bird	Surf Scoter	*Melanitta perspicillata*	1
Bird	Tufted Duck	*Aythya fuligula*	5
Bird	Velvet Scoter	*Melanitta fusca*	2
Bird	Water Rail	*Rallus aquaticus*	3
Bird	Whimbrel	*Numenius phaeopus*	2
Bird	Whooper Swan	*Cygnus cygnus*	6

1.7 Recommendations

- A visitor management strategy for the site is required – to include trail network interventions within the dune system where damage is evident.
- A litter management plan is required for the site to alleviate pressures related to litter impacts.
- Dog walking off leads is a known issue for the protected bird species of the host SPA and the data identifies this as an impact occurring on site. Consideration should be given to ecological conflict resolution processes such as the appointment of a warden or the promotion of environmentally responsible behaviour.
- Dune restoration works should be established at the site.

Appendix I

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

Appendix I Activity and impact code index used for recording visitor behaviours on site

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

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[3]. 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 any change that reduces the long-term viability habitats and its qualifying interests [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 metres intervals along the selected pathways, an assessment of habitat condition is made, using an established rating scale of 1 to 5; 1 being no impact and 5 being high impact. Each rating is then translated into a condition assessment, as displayed in Table II - 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 then recorded and reported as the resultant overall rating of the assessed habitat condition assessment for each site.

Table II-1 Habitat rating scale and condition assessment

Scale	Condition
1	No evidence of any habitat degradation observed.
2	Localised habitat degradation, but slight and capable of rapid recovery.
3	Widespread habitat degradation, but slight and capable of rapid recovery.
4	Localised habitat degradation, requiring intervention to allow full recovery.
5	Widespread habitat degradation, requiring intervention to allow full recovery.

[3] 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.