NATIONAL TOURISM MONITORING PROGRAMME 2021-2025

ANNUAL RESULTS FOR 2022

BRAY HEAD

for: **Fáilte Ireland**

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Document Control

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Contents

Bray Head – Interesting Finds

HIGH LEVELS OF CHOUGH FORAGING ACTIVITY

The chough – which is a red billed crow – is present on the site; this is a nationally rare and internationally protected species. It thrives where low intensity livestock farming systems occur close to suitable nesting sites on rock faces, in caves and in old buildings. In Britain and Ireland this combination is only found in the wilder and more remote west coasts and some adjacent inland areas.

KEY RECOMMENDATION

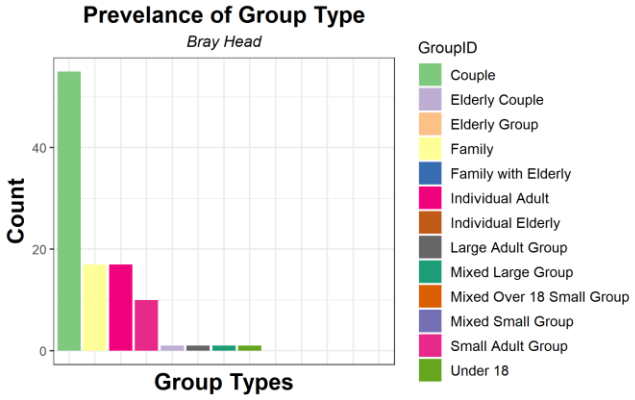
- The site is well managed in most respects related to tourism;
- It is recommended that a boardwalk or stone pathway trail be explored as future options for the site should visitor numbers continue to increase.

VISITOR INTERACTION & MANAGEMENT

- Visitor interactions on site well controlled with strong management practices in place.
- Low levels of impacts were observed on site, 2022 showed a decrease in number of impacts observed.
- Hard infrastructure path along the main track means there were few activities undertaken on site, however 2022 showed an increase in percentage of activities other than walking.
- Most of the visitors to the site stayed for at least 64 minutes – given the nature of the site being a long walkway with an option of a

VISITOR NUMBERS AND DWELL TIME

- 233 people visited the site over 8 hours
- Average dwell time of 64 minutes



Highlights:

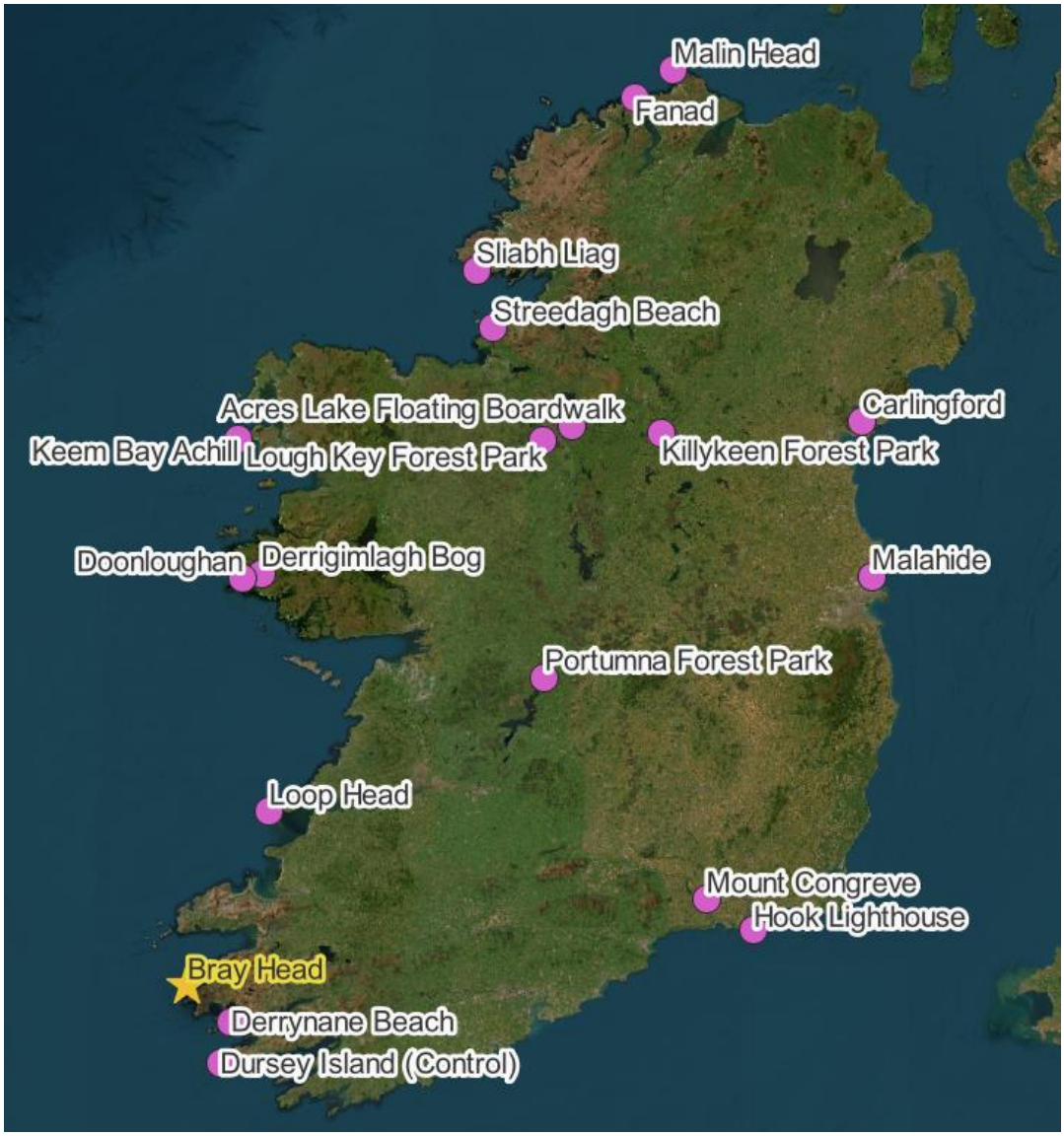
- Chough present on site
- Upper trail is showing signs of overuse
- Long site dwell time of at least 64 minutes
- Site signage is limited – missed opportunity for wildlife

1 Bray Head

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.

1.1.1 Looking Ahead

The National Tourism Monitoring Programme aims to assess and characterise visitor movements and impacts in 19 popular Failte Ireland tourism sites across Ireland within a 5-year period. This will be achieved through building on the methodologies and findings of the Wild Atlantic Way Environmental Monitoring Programme (2015-2019), by monitoring yearly trends in visitor numbers and movements during the high tourism season at each site. In addition to the annual visitor trend monitoring; visitor impact assessments, which examine visitor activity levels relative to condition assessments, will also be taken every two years for each site. At the end of the 5-year period, the resultant extensive data set will be analysed for long term trends and correlations between visitor numbers, visitor activity, and site condition assessments, at each site across the 5 years of the programme.

This monitoring programme will allow an examination of year-on-year shifts in visitor impact and trends, across each of Fáilte Ireland's regional areas; The Wild Atlantic Way, Irelands Hidden Heartlands, Irelands Ancient East and Dublin, resulting in an annual interim report for each year - while also assessing visitors trends, and changes in the condition of the each of the sites' habitats in relation to visitor trends, over a the entire 5-year period of the programme.

The long-term aim of the Monitoring Programme will be to inform local authorities and stakeholders to help in the design and implementation of methods that will encourage the sustainable management of visitor numbers and tourism activities, while also aiming to protect vulnerabilities of the local area's habitats in order to reduce environmental impact and enable more effective local conservation of each site.

1.2 Methods & Surveys

The following surveys were undertaken at Bray Head:

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 Bray Head was undertaken on the 16th of July 2022, with max temperatures reaching approximately 22.9° 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. It is also important to note that there was a lack of interaction with the subject matter of the surveys to ensure that there is no influence of the surveyor at all on the resultant data.

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 mammal populations was gathered from National Biodiversity Centre Data.

1.3 Site Description of Bray Head

Bray Head hosts a 7km loop walk along the coast of Valentia Island, where the vacated Bray tower (Figure 1.2) along with the perfect view of the wonderous Skellig Islands awaits at the top of the trail (Figure 1.3). The start of the Bray Head loop walk itself can be reached through walking from the car park at Foilhommerum Bay. Bray Head is located within the Iveragh Peninsula SPA and borders the Valencia Harbour/Portmagee Channel SAC and contains habitats such as montane heath and dry meadows and grassy verges.

The receiving point to the site is a carpark with picnic benches and signage relating to heritage features around the site. There is a map with waymarked trails up to the tower and surrounding hilltop.

There have been no significant changes in signage and features between the 2021 and 2022 surveys.

[1] Weather data gathered from closest available weather stations to site from: https://www.met.ie/climate/available-data/historical-data

Figure 1.1 Main trail leading to the tower at Bray Head

Figure 1.2 Tower at the main viewing point on the Bray head site

Figure 1.3 View of the Skellig's along the Bray Head trail

1.3.1 Critical Infrastructure

Table 1.1 Summary of Wastewater infrastructure at Bray Head

Wastewater Treatment Plant (WWTP)	Irish Water Indication of Capacity	Comment
No toilet facilities available on site No current WWTP on site at Bray Head Nearest settlement with WWTP in Portmagee (WWTP Reg #A0042).	Spare capacity available[2].	Due to the nature of the site as a loop walk, the implementation of wastewater facilities is not necessary. However, if wastewater facilities are implemented, there is spare capacity available

Table 1.2 Summary of Drinking Water infrastructure at Bray Head

Drinking Water	Water Resource Name (WRZ)	Irish Water Indication of Capacity	Comment
Nearest serviced settlement to Bray Head is Portmagee	Emlaghpeasta/Portmagee/Maulin	Capacity available – Level of service (LoS) improvement required[3]	Current water supply is sufficient

Table 1.3 Summary of Transport infrastructure at Bray Head

Nearest Settlement	Current Transport Infrastructure	Comment
Portmagee	Bray Head on Valentia Island is accessible by road bridge from Portmagee and also by the Talbert-Killimer ferry and Valentia Island ferry[4]	Current transport infrastructure is sufficient if visitor numbers increase

[2] https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/kerry/
[3] https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/kerry/
[4] http://docstore.kerrycoco.ie/KCCWebsite/planning/devplan/vol1updatednew.pdf

1.4 Pathways and Features Condition Results

1.4.1 Pathway Condition

The path is a mix of hard and soft trails which lead from the carpark to the main viewing point which is the tower (Figure 1.5). At and around the tower there are a number of desire lines and compaction areas – there are early signs of site overuse with some bare soil areas. The most used trail from the carpark to the tower is largely confined by two deep ditches which confine activity.

The northern trail to up to the highest point is a waymarked trail. This trail is through heathland habitat and there is evident signs of damage to the habitat within the locality of the path itself. In areas of steep topography there are higher rates of erosion and bare peat sub-strata. On the downward track leading back towards the carpark the trail is highly variable up to almost 8 meters at its widest part. This shows signs of extensive dispersion.

The vegetated paths show clear signs of compaction and impact from excess visitor numbers. Interventions should be considered to ensure that future loadings of the site can be facilitated by the trail network on site.

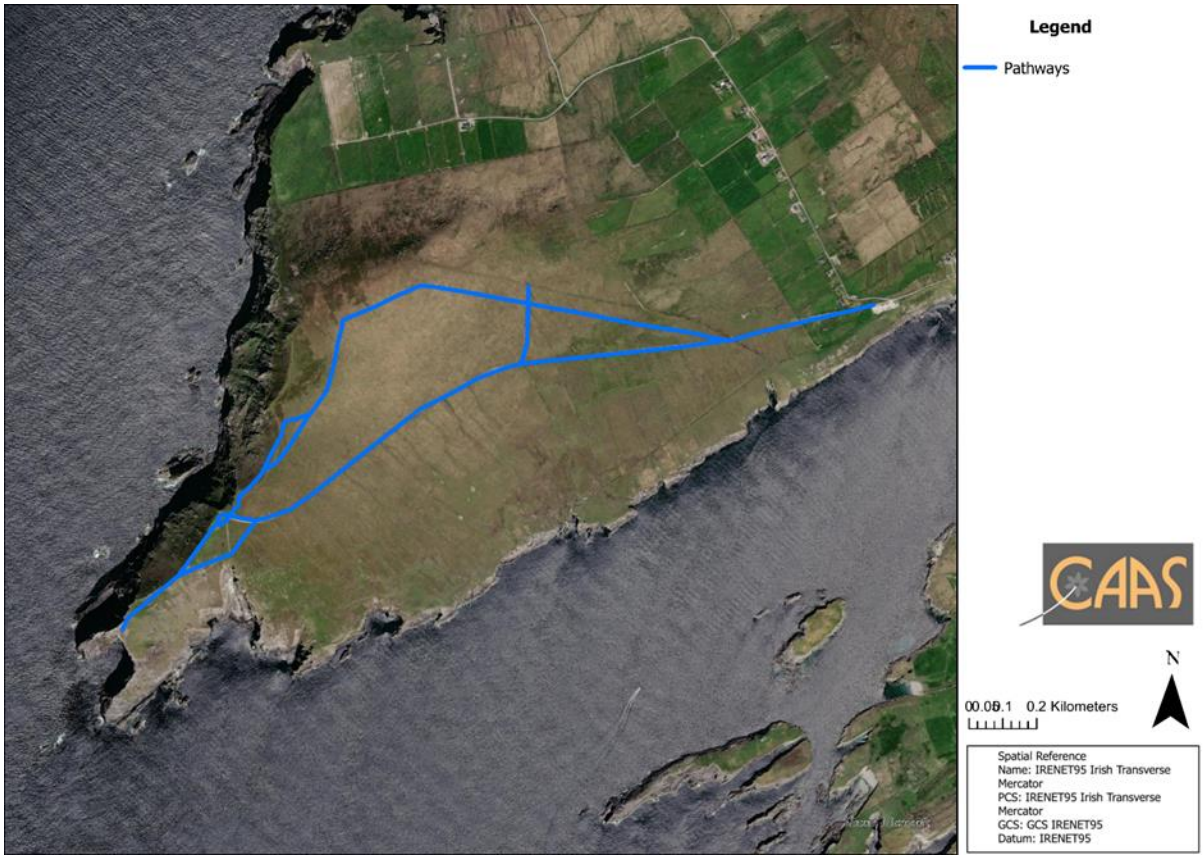


Figure 1.4 Pathways identified at Bray Head

Figure 1.5 Tower at Bray Head

1.4.2 Features Condition

The site has a number of trail markings and some facilities on site - however, there is a lack of signage related to the ecological value of the biodiversity at the site. This is seen to be a missed opportunity for environmental awareness. There area however signs and information boards which provide information on the heritage of Bray Head along with a sign designating Bray Head as part of the Wild Atlantic Way (Figure 1.7).

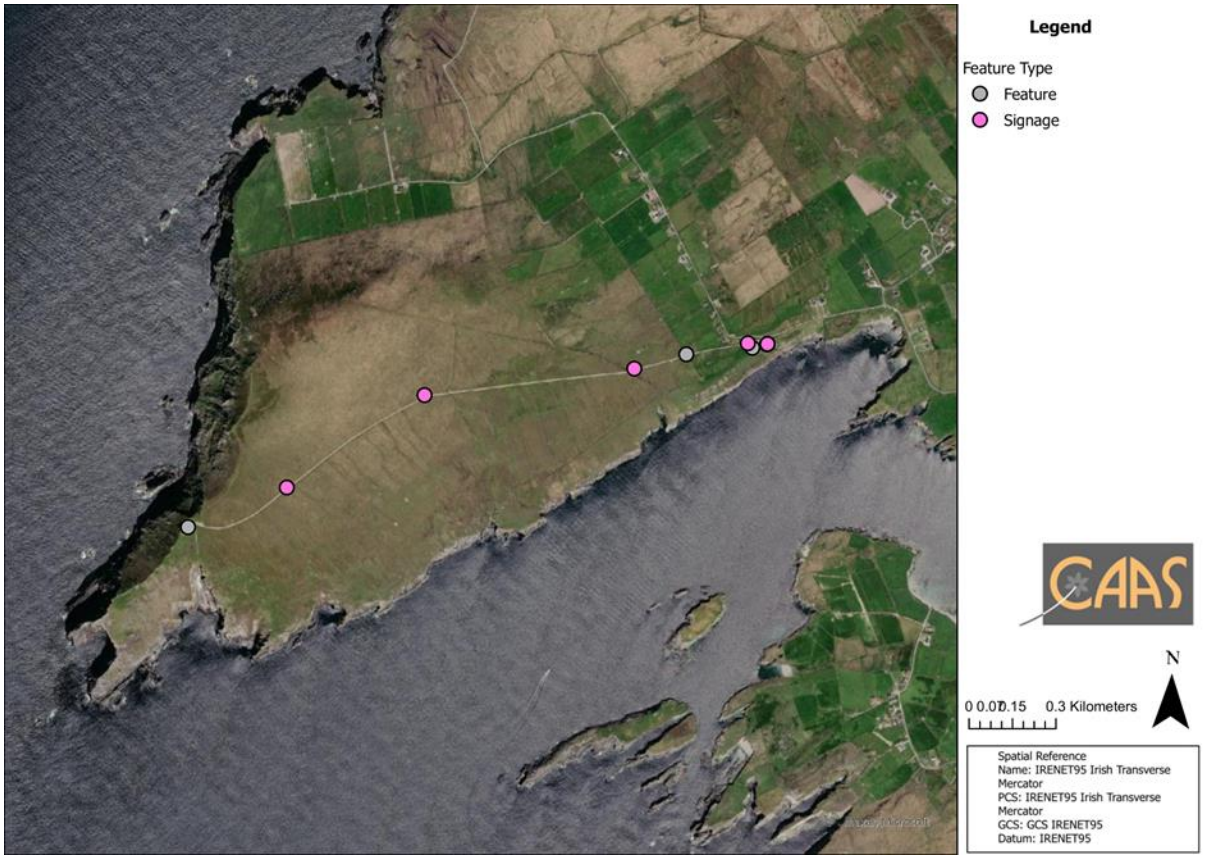


Figure 1.6 Features recorded at Bray Head – these features are way mark signs and information signage

Figure 1.7 Features noted at Bray Head

1.4.3 Hazards

There is erosion on some pathways along Bray Head (Figure 1.8) however, the hazard mapping identified no obvious safety issues or hazards for the site.

Figure 1.8 Example of erosion at Bray Head

1.5 Visitor Characterisation Survey

The visitor monitoring surveys resulted in a total of 233 visitors, an increase from 206 in 2021 (which represent 103 sample group observations, which is an increase in 3). The site is most popular amongst the couple group with the dominant mode of transport being car. The average dwell time for the site was 64 minutes, an increase of 16 minutes when compared to 2021; with the following activities undertaken during the survey (listed in order of occurrence rate):

Activity Type
Exploring off trail
Photographing
Picnicking
Dog walking (on lead)
Cycling
Jogging

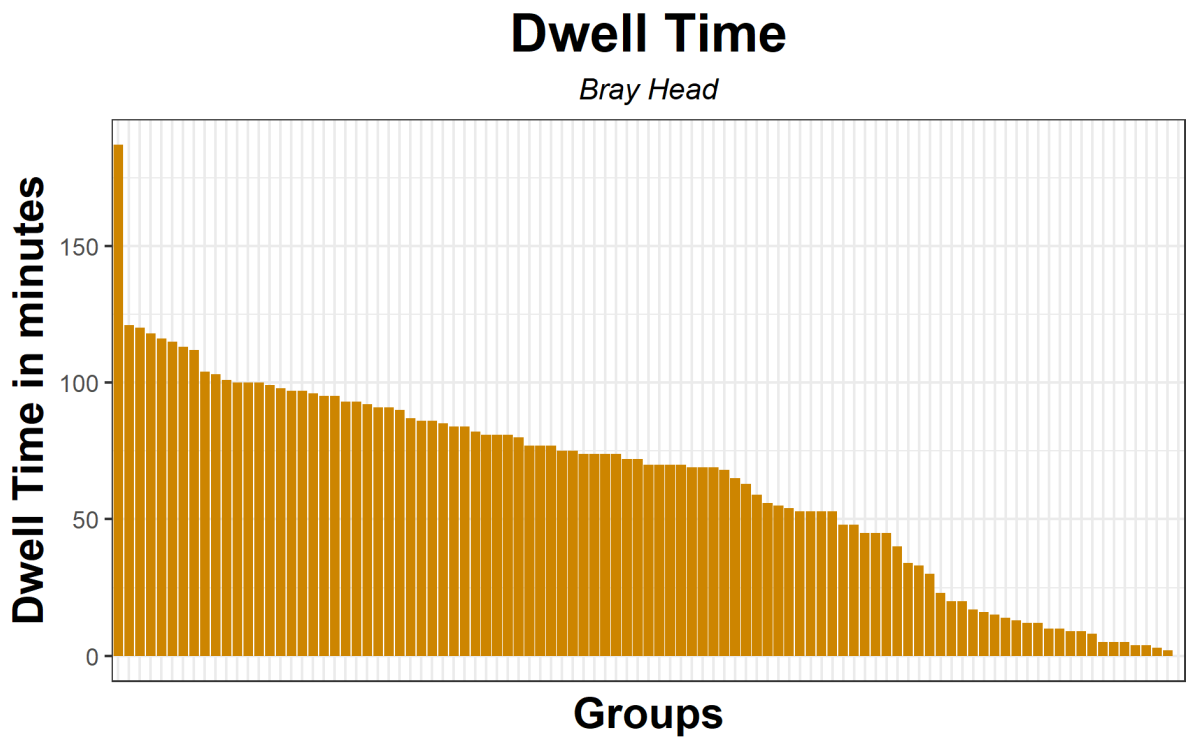


Figure 1.9 Duration of Time Spent at Bray Head

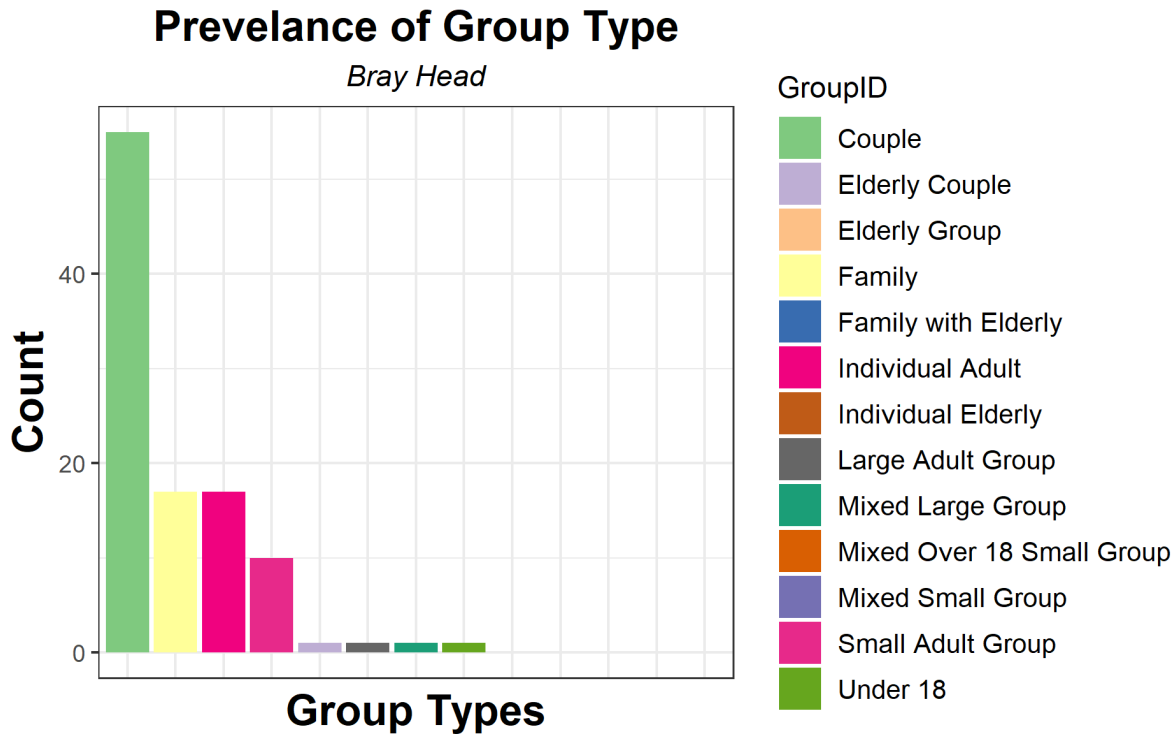


Figure 1.10 Groups of visitors that visited Bray Head

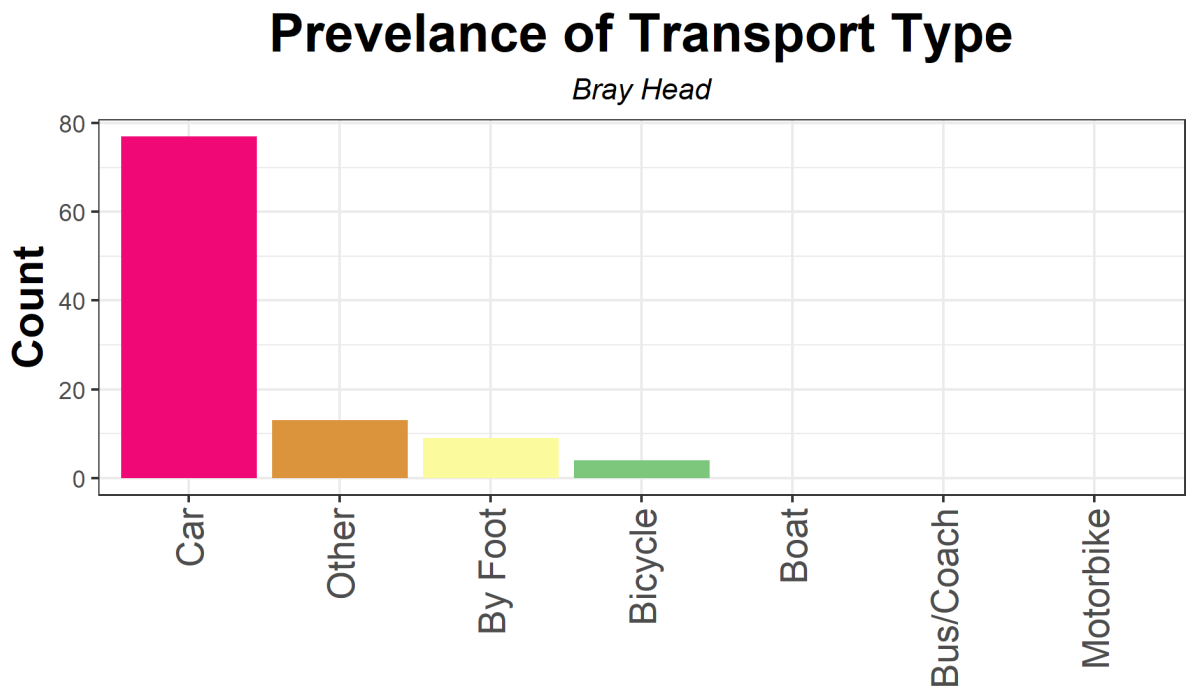


Figure 1.11 Mode of transport used to visit Bray Head

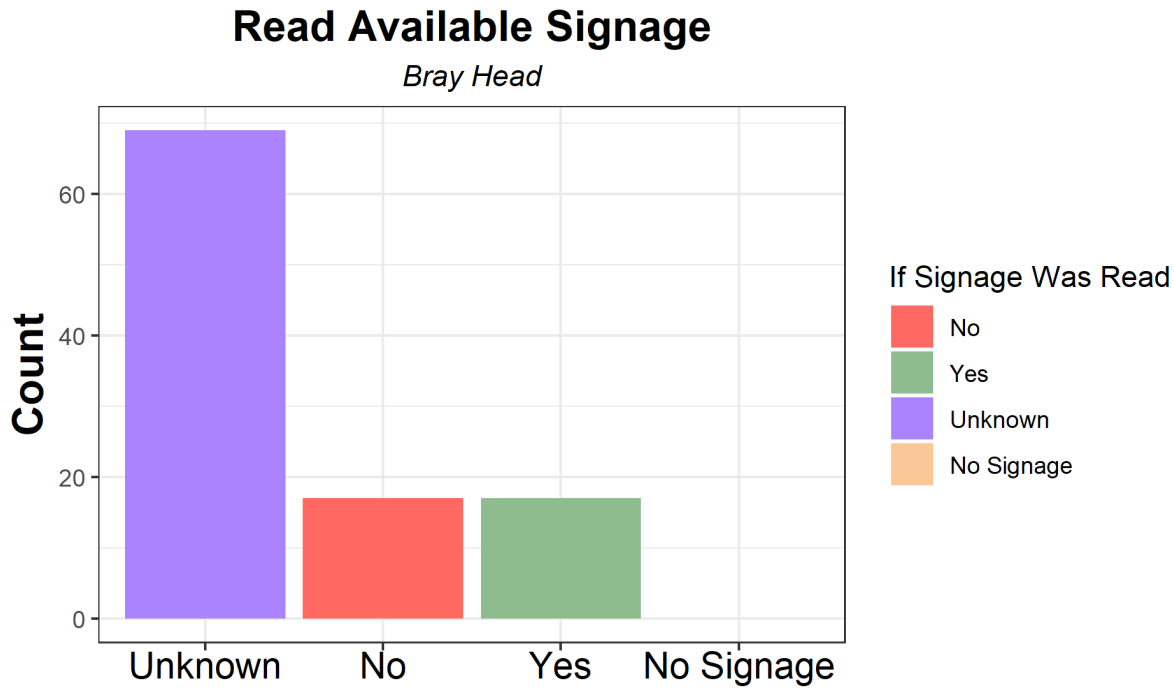


Figure 1.12 Use of Interpretive Material at Bray Head

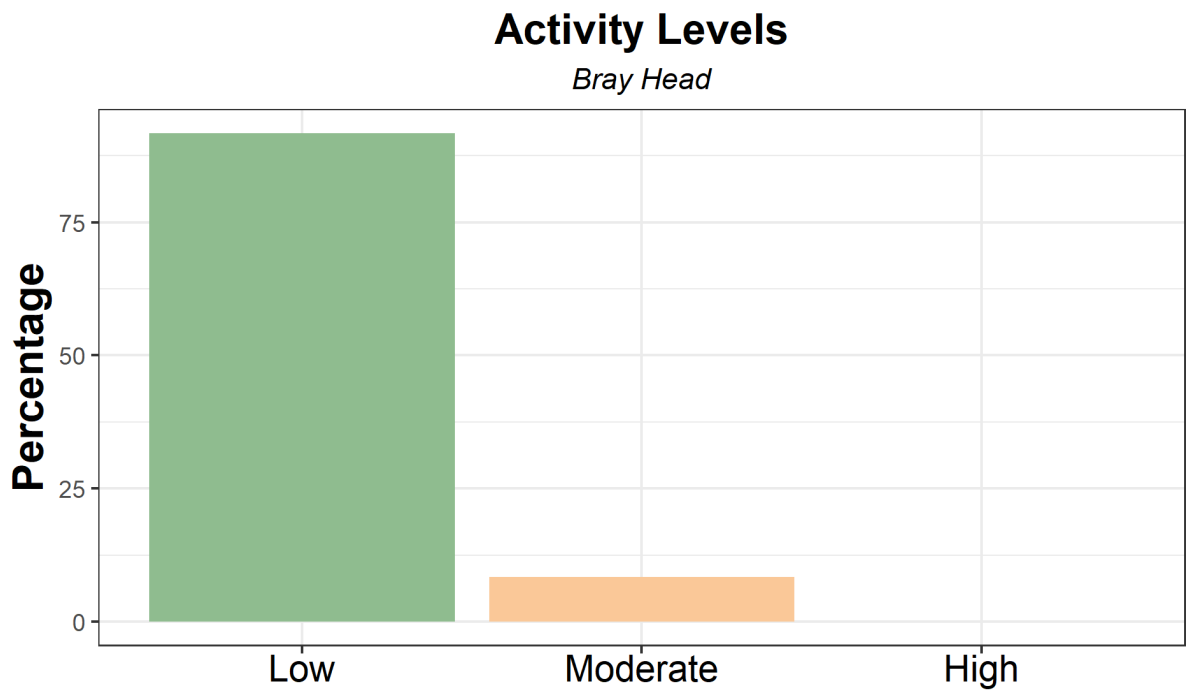


Figure 1.13 Categories of Activity Levels Observed at Bray Head

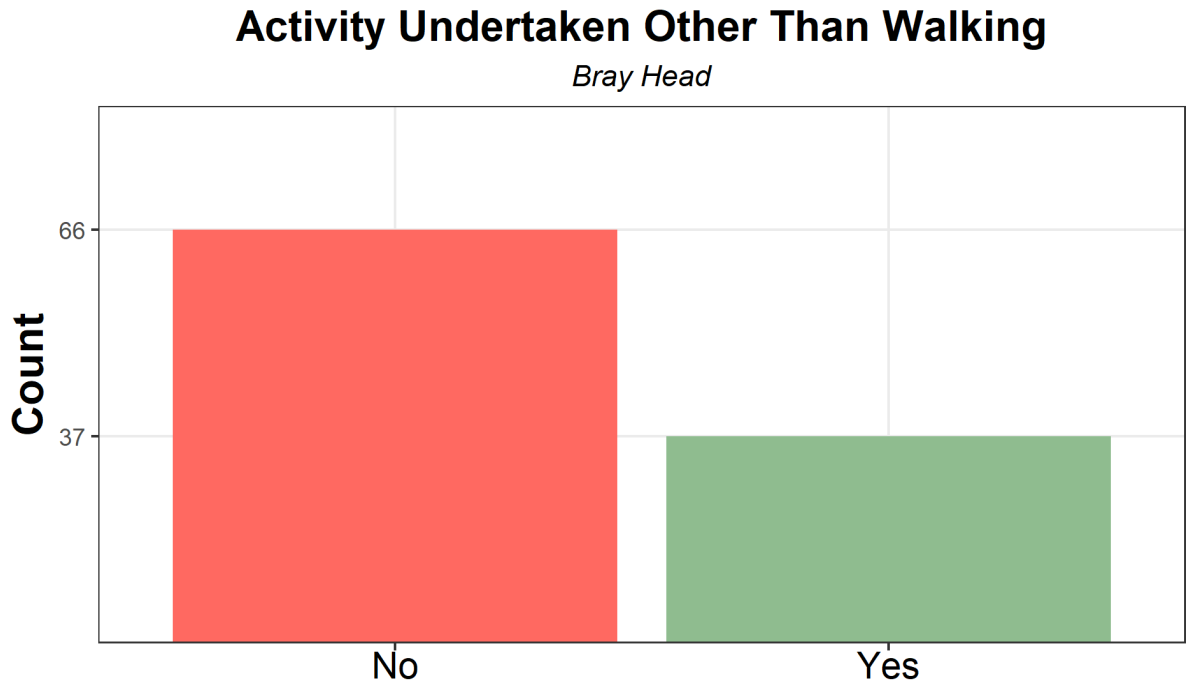


Figure 1.14 Activities undertaken other than walking

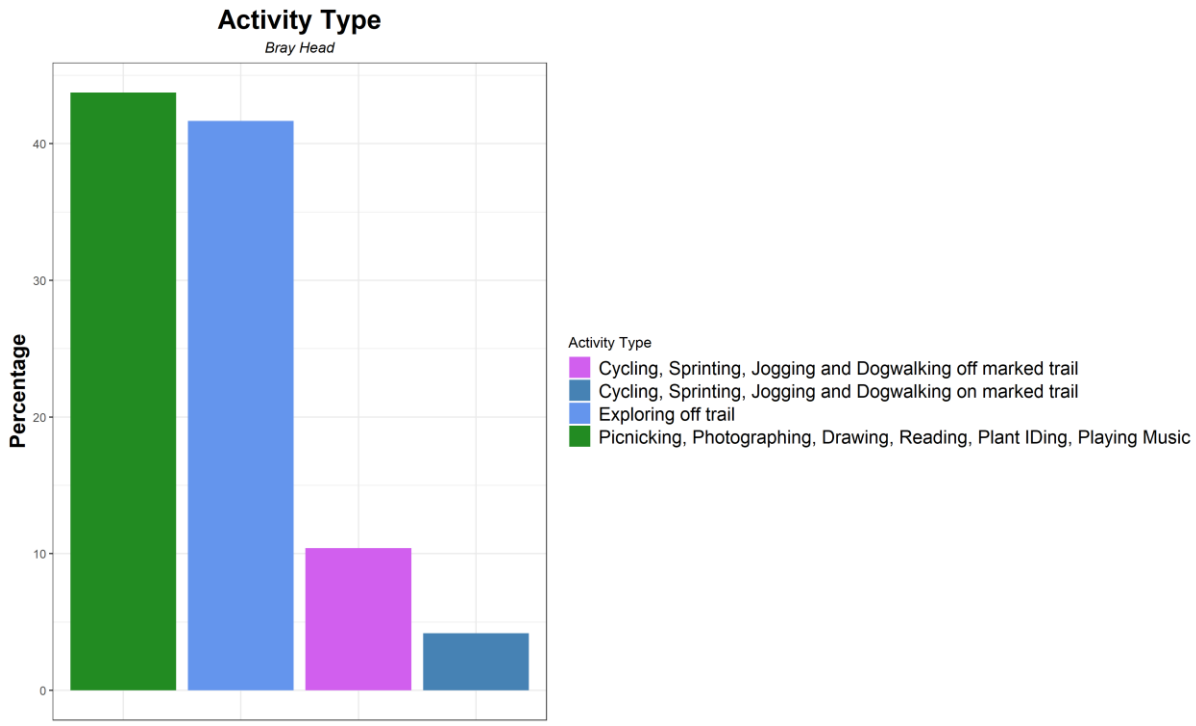


Figure 1.15 Range of Visitor Activities Observed at Bray Head

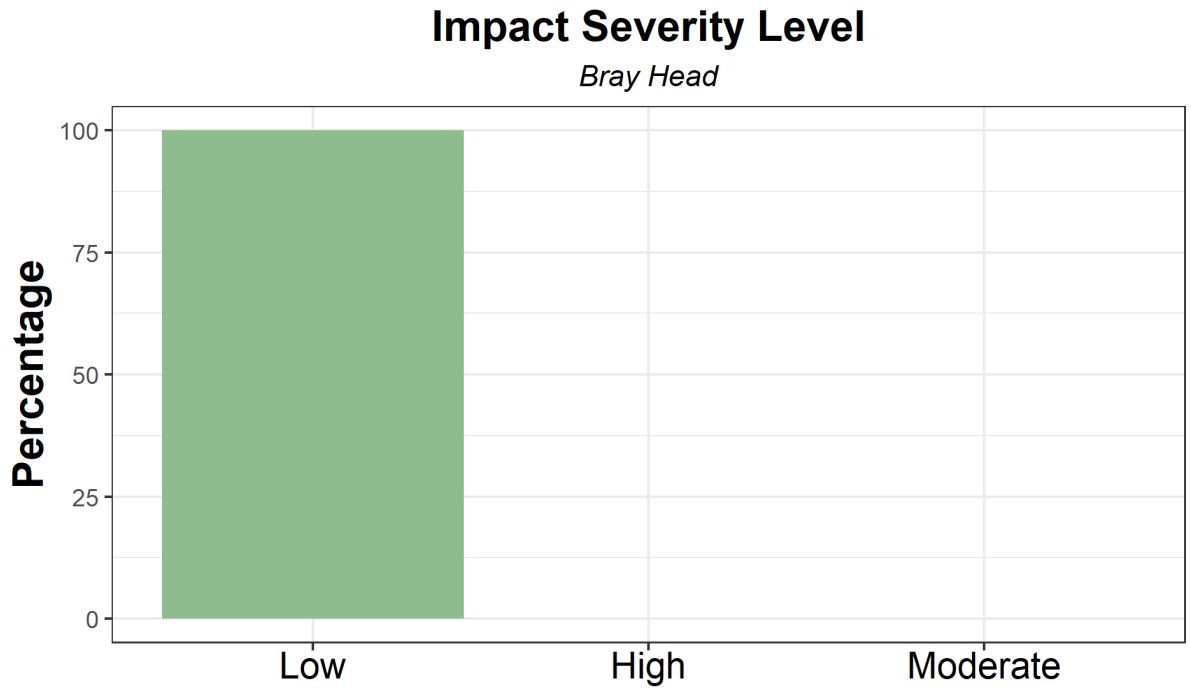


Figure 1.16 Categories of Environmental Impact Levels Observed at Bray Head as a result of Visitor Activities[5]

[5] Impact severity was measures as a categorical variable which has a range of impact factors that are pre-determined; such as injuring, killing or taking wildlife as a severe impact (high) and temporary disturbance of wildlife being a low impact. These are explained fully in the method section above.

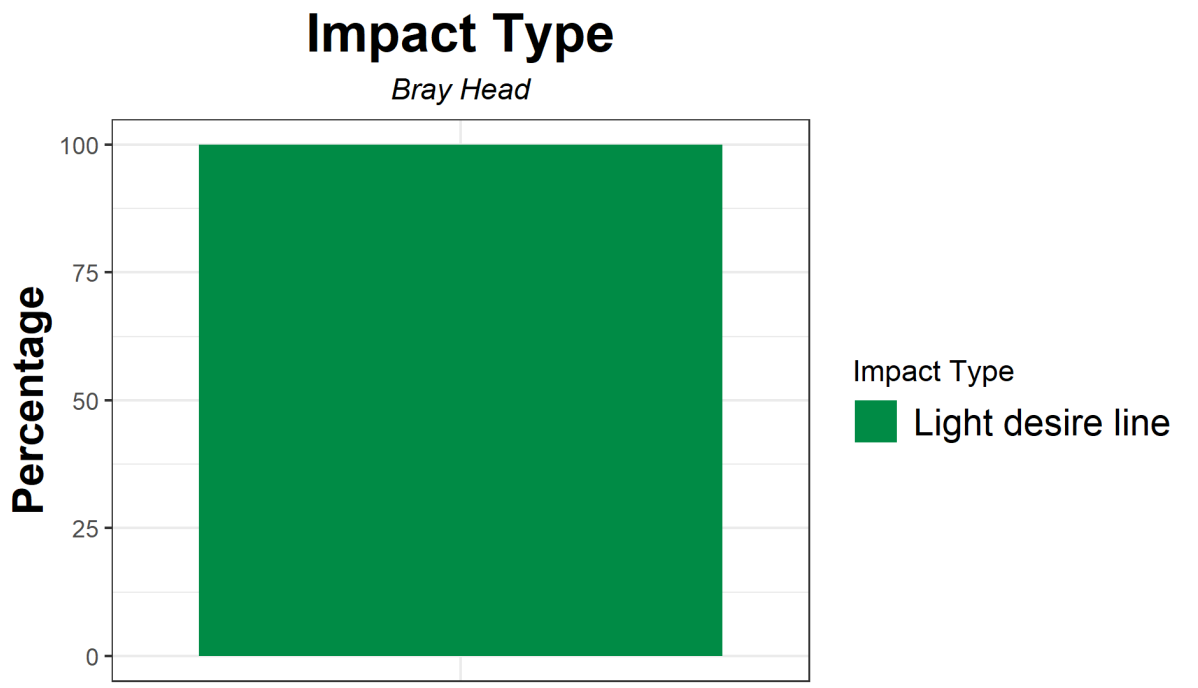


Figure 1.17 Range of Environmental Impacts Observed at Bray Head

The environmental impacts that were observed and recorded used the same coding system as the Wild Atlantic Way Monitoring[6]. These impacts were recorded if a visitor's activity or movement resulted in one of the defined impacts noted in said coding system, which were categorised by severity level to the environment, ranging from light desire lines to disturbance of wildlife to burning of materials.

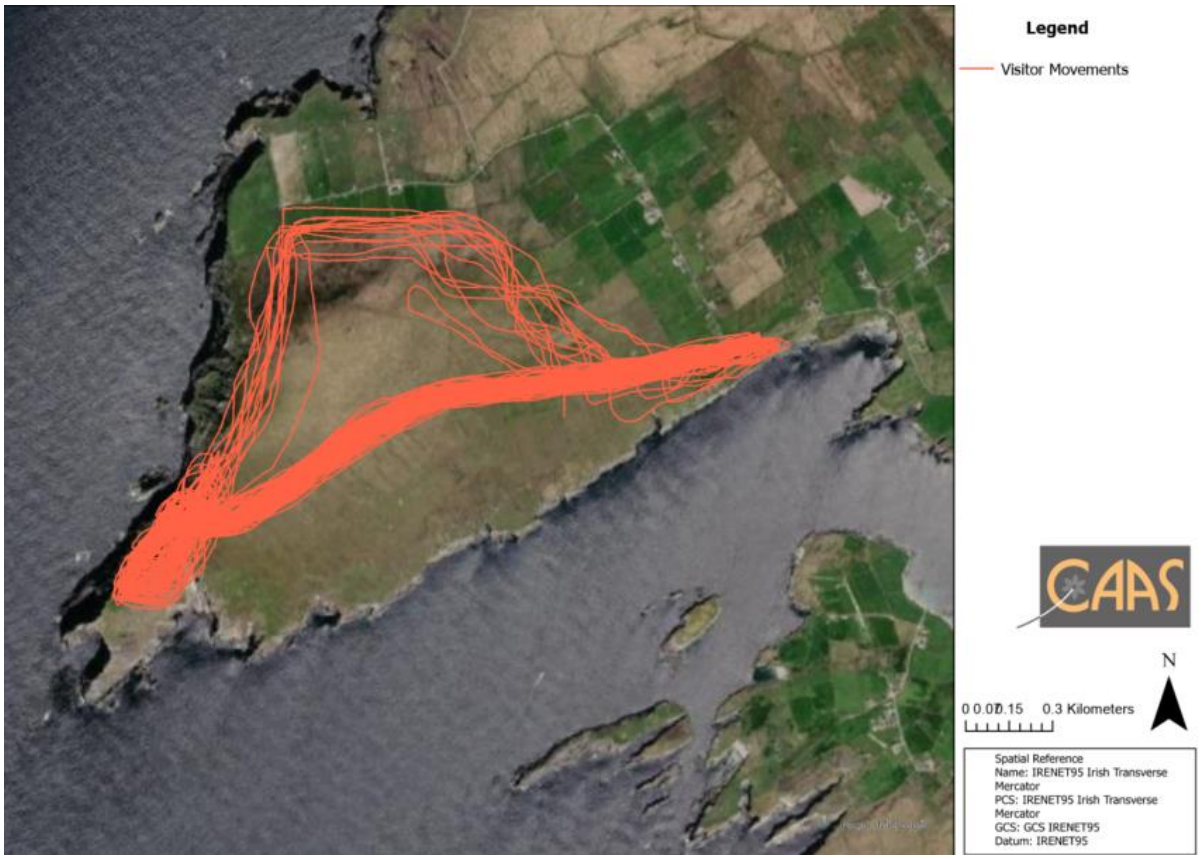


Figure 1.18 Visitor movement patterns at Bray Head

[6] See Appendix I for more detail

Of the 103 sample groups recorded on site 36% of them undertook activities other than walking, which is a large decrease of 29% from the 2021 survey. These activities (identified above) resulted in 2 impacts, 17 lower than 2021, being observed on site during the survey. Thus, 4% of activities on site resulted in impacts on the environment when compared to 23% in 2021. The impact severity levels did not vary with 100% of the impacts being low, 0% of impacts being moderate, and 0% of impacts being high severity. The impacts identified for the site were:

Impact Type	Count
Light desire line	2

1.6 Comparison with Previous Survey Results

The data obtained has provided an opportunity to compare significant changes results with previous years. Where this occurs, this will be noted in the relevant sections. The 2022 Visitor Characterisation Survey in Bray Head produced a number of changes from the 2021 Visitor Characterisation Survey. Noted changes include;

- A large increase in the number of visitors that visited the site when compared to 2021;
- Overall increase in average dwell time;
- Moderate decrease in the percentage of visitors that arrived to site by car and subsequently an increase in the percentage of visitors that arrived by foot;
- A significant increase in the percentage of activities done on site other than walking; and,
- An increase in percentage of exploring off marked trails and a decrease in stationary activities.

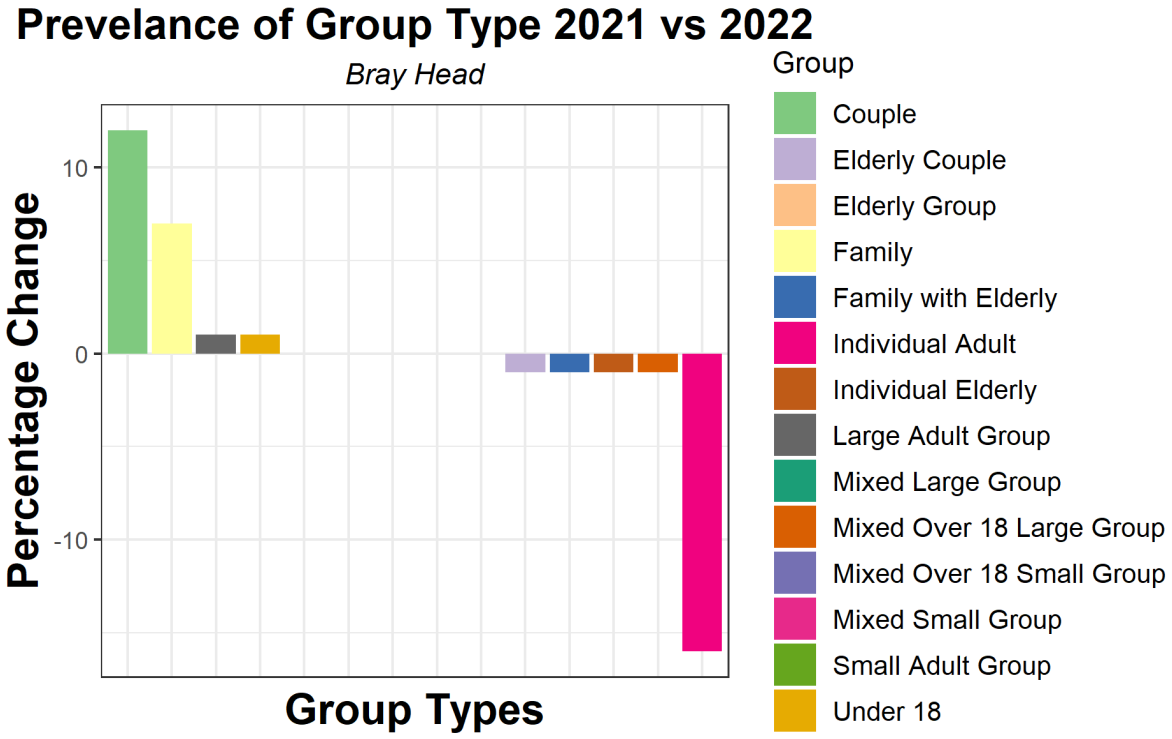


Figure 1.19 Percentage Change in groups of visitors that visited Bray Head between 2021 and 2022

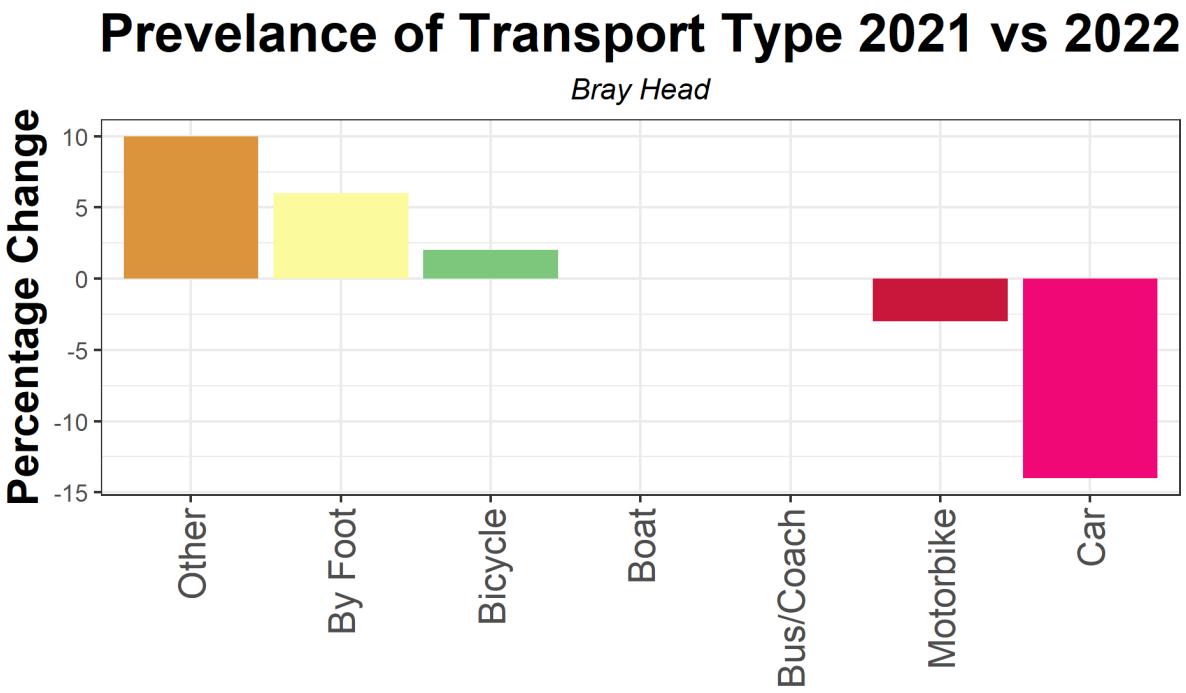


Figure 1.20 Percentage Change in mode of transport used to visit Bray Head between 2021 and 2022

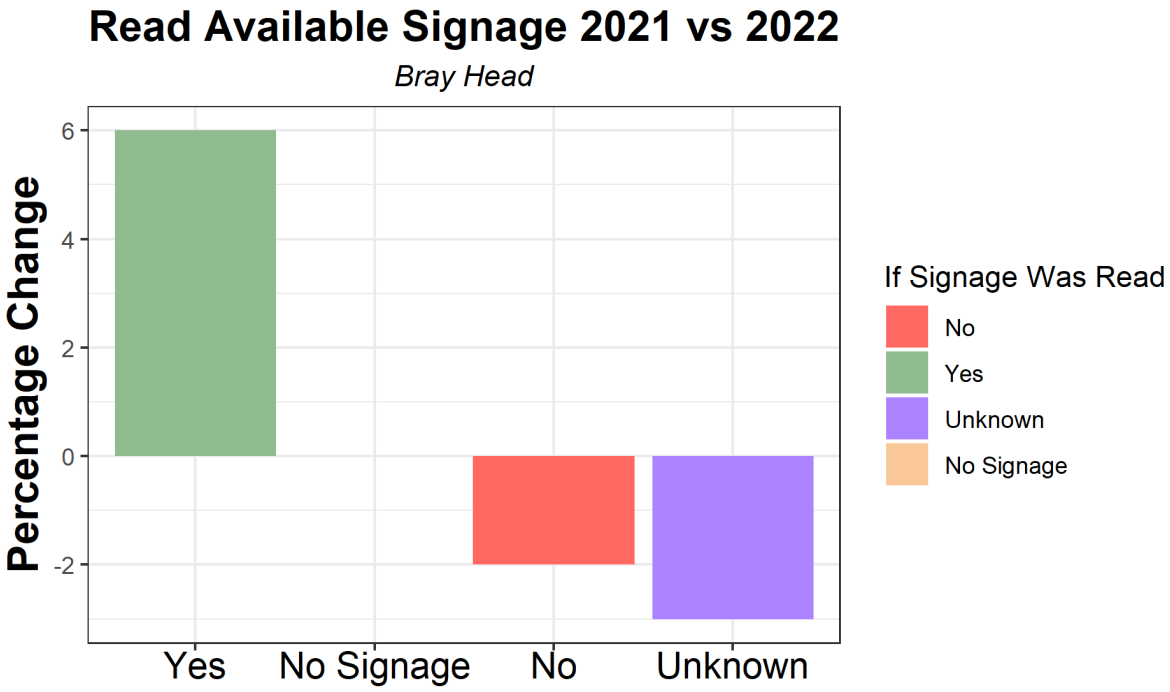


Figure 1.21 Percentage change in use of Interpretive Material at Bray Head between 2021 and 2022

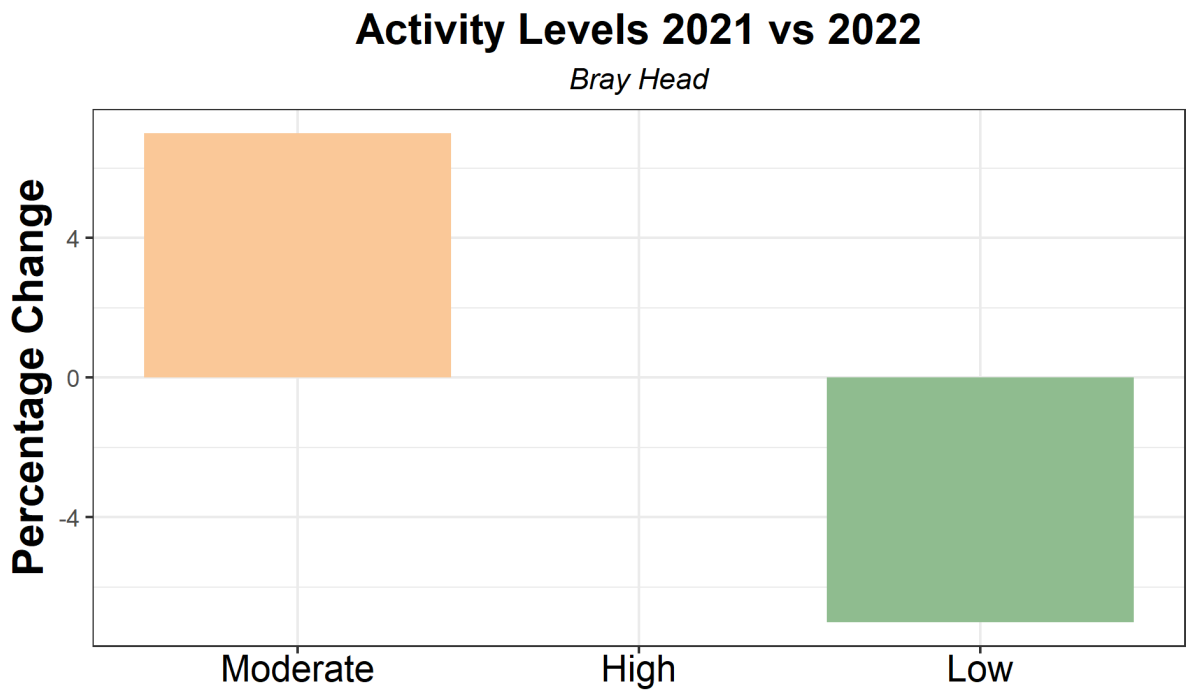


Figure 1.22 Percentage change in categories of Activity Levels Observed at Bray Head between 2021 and 2022

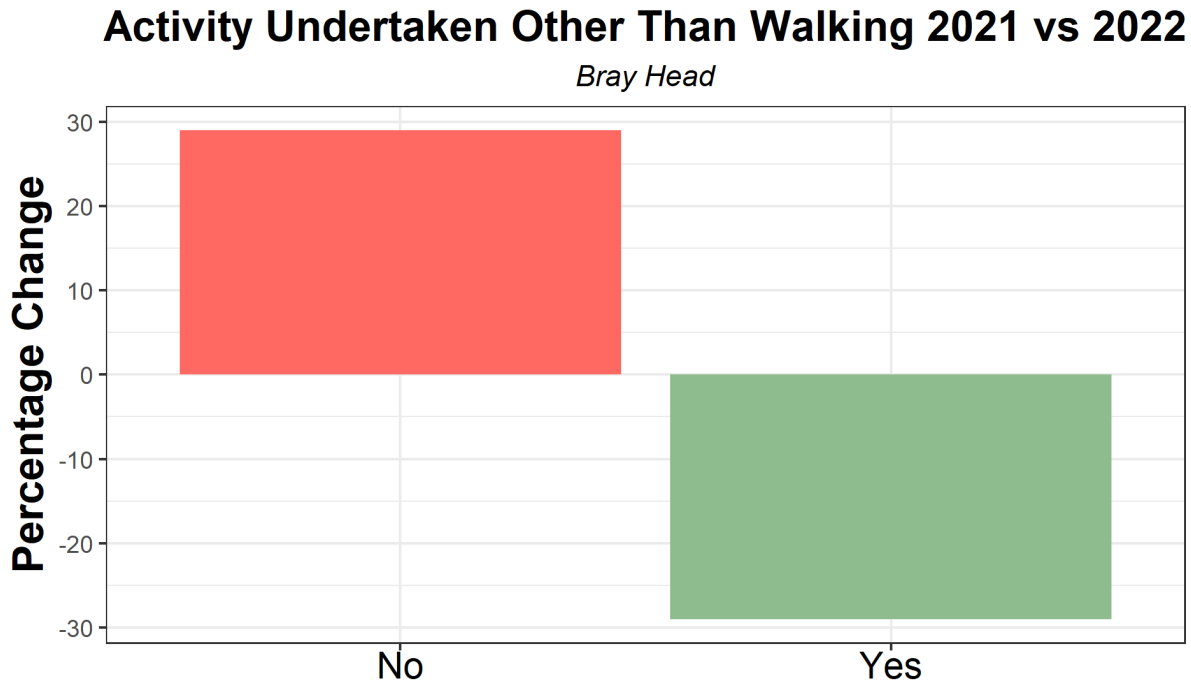


Figure 1.23 Percentage change in activities undertaken other than walking at Bray Head between 2021 and 2022

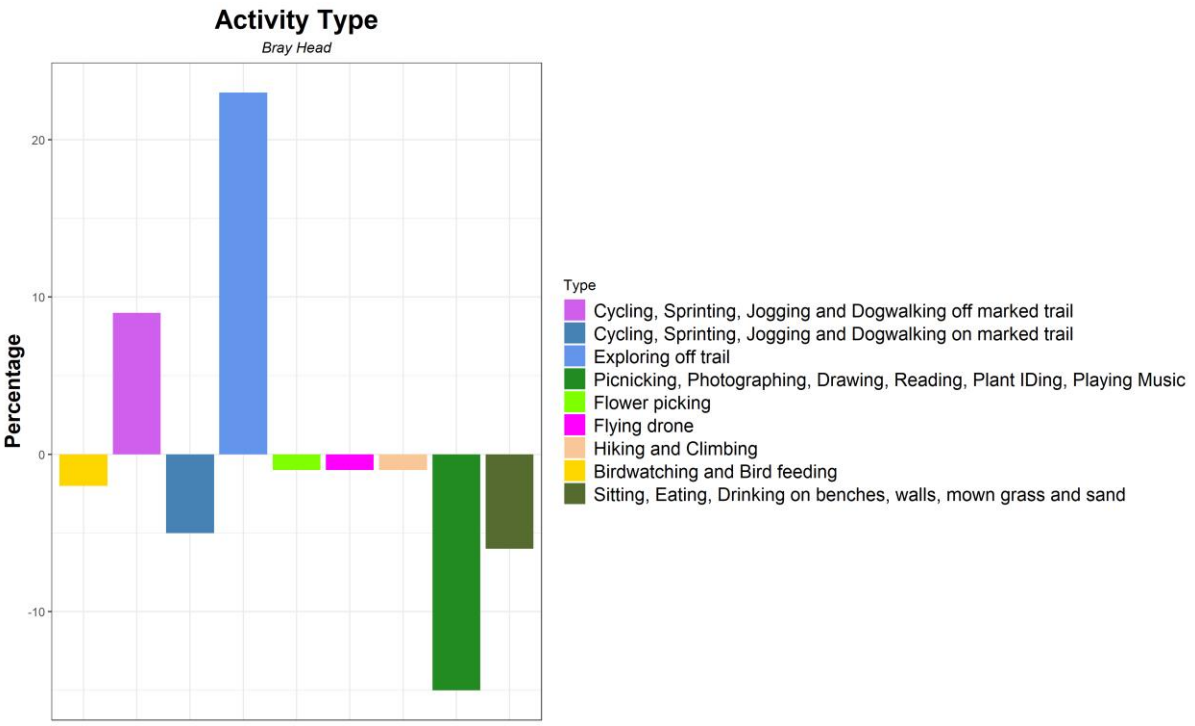


Figure 1.24 Percentage change in range of Visitor Activities Observed at Bray Head between 2021 and 2022

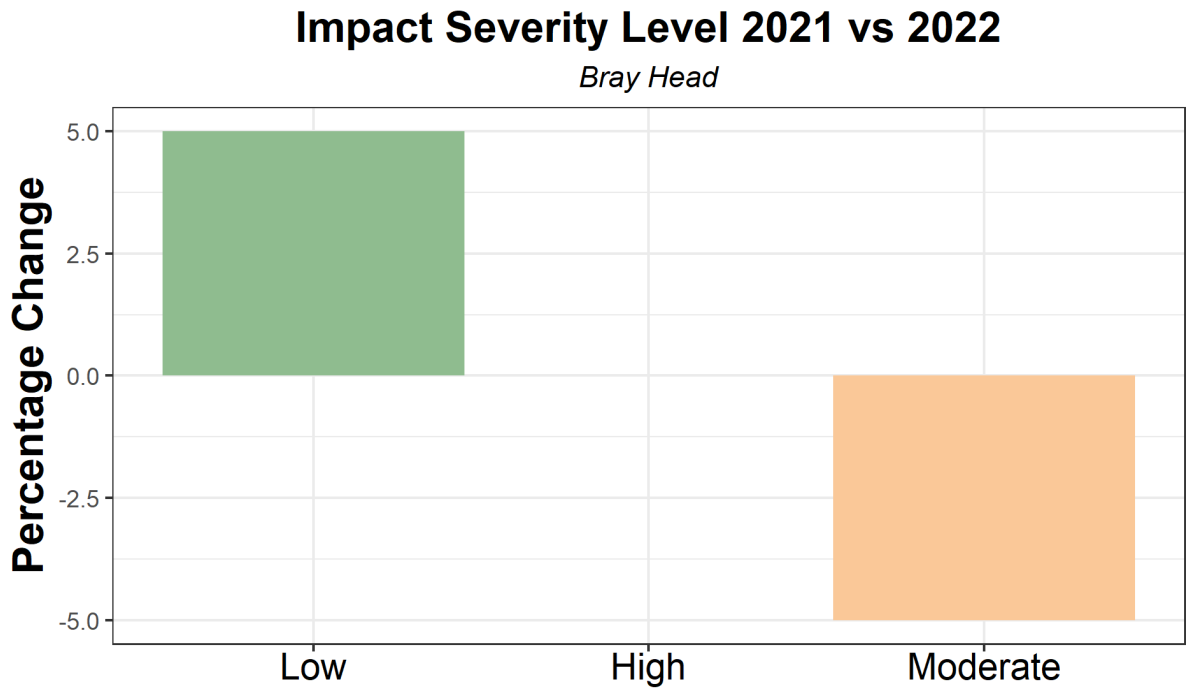


Figure 1.25 Percentage change in categories of Environmental Impact Levels Observed at Bray Head as a result of Visitor Activities[7] between 2021 and 2022

[7] Impact severity was measures as a categorical variable which has a range of impact factors that are pre-determined; such as injuring, killing or taking wildlife as a severe impact (high) and temporary disturbance of wildlife being a low impact. These are explained fully in the method section above.

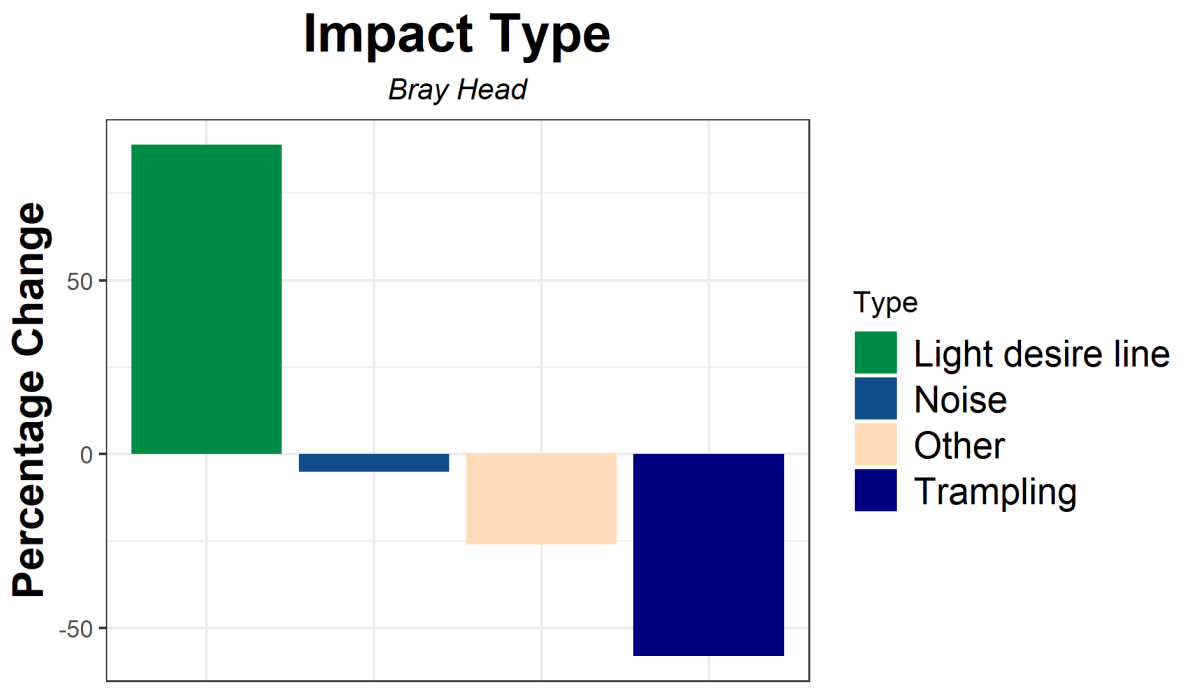


Figure 1.26 Percentage change in range of Environmental Impacts Observed at Bray Head between 2021 and 2022

Table 1.4 Summary of changes with previous survey results

Survey	Notable Differences	Comment
Visitor Dwell Time	• Overall dwell time increased by 21%	Large increase in dwell time could be attributed to an increase in visitor numbers to the site
Prevalence of Group Type	• 12% increase in couples • 16% decrease in individual adults	Larger number of visitors could attribute to a variation in group types that visited the site
Prevalence of Transport Type	• 14% decrease by car • 6% increase by foot	Increase in percentage of visitors arriving by foot and thusly large decrease in percentage of visitors arriving by car
Read Available Signage	• Signage not read dropped by 2% • 6% increase in signage read • Unknown decrease by 6%	Overall slight increase in percentage of visitors who read available signage
Activity Levels	• Moderate activity levels increased by 7% • Low activity levels decreased by 7% • No change in high activity levels	No significant changes observed
Activity Undertaken Other Than Walking	• Activities undertaken other than walking decreased by 29% • Activities undertaken other than walking increased by 29%	Significant increase in percentage of activities done on site other than walking

Survey	Notable Differences	Comment
Activity Type	• Jogging, cycling and dog walking etc., off marked trails increased by 9% • 23% increase in exploring off trail • Picnicking etc., decreased by 15% • Sitting etc., decreased by 6%	Significant increase in percentage of visitors exploring off trail while stationary activities such as picnicking and sitting also showed a decrease in percentage
Impact Severity Level	• No change in high impact level • Low impact level increased by 5% • Moderate impact level decreased by 5%	No significant changes observed
Impact Type	• 58% decrease in trampling • 89% increase in light desire lines	Lower number of impacts were recorded during 2022, therefore changes in impact type aren't reflective

1.7 Ecological Monitoring Results

1.7.1 Ecological Constraints

The habitats within 2km of Bray are sensitive to water pollution, invasive species and direct damage and the sensitive species found within 2km are sensitive to pollution and disturbance effects.

Table 1.5 Designated sites within 2km of Bray Head and relevant ecological receptors

Site Code	Site Name	Distance (km)	Site Type	Qualifying Feature
[001382]	Valencia Island Cliffs pNHA	0.00	pNHA	
[004154]	Iveragh Peninsula SPA	0.00	SPA	Kittiwake *(Rissa tridactyla)* [A188], Peregrine falcon *(Falco peregrinus)* [A103], Guillemot *(Uria aalge)* [A199], Chough *(Pyrrhocorax pyrrhocorax)* [A346], Fulmar *(Fulmarus glacialis)* [A009]
[002262]	Valencia Harbour/Portmagee Channel SAC	0.14	SAC	Mudflats and sandflats not covered by seawater at low tide [1140], Reefs [1170], Large shallow inlets and bays [1160]
[001373]	Puffin Sound-Horse Island Cliffs pNHA	0.31	pNHA	

1.7.2 Habitat Descriptions

The main habitat at Bray head is mountain heath which dominates most of the landscape (Figure 1.27). The area has low intensity cattle graze present and it was recorded that a number of Chough use the site regularly. The area surrounding the castle at the top of the walkway is characterised by a very short grass sward – this is a low diversity mix which has higher intensity sheep graze which is resulting in a very short sward.

The site is well managed with the majority of the visitors staying along the soft infrastructure path. The main area of visitor activity which is off path – has incidences of exposed soils from trampling – however these are localised. The loop walk has less footfall but there is more damage to the habitats as a result – with the steep incline areas of the heath having high rates of exposed substrate and damage. The carpark side of the main peak on site has a widely dispersed network of trails showing dispersed damage – likely to be due to the topography and wet conditions of the site.

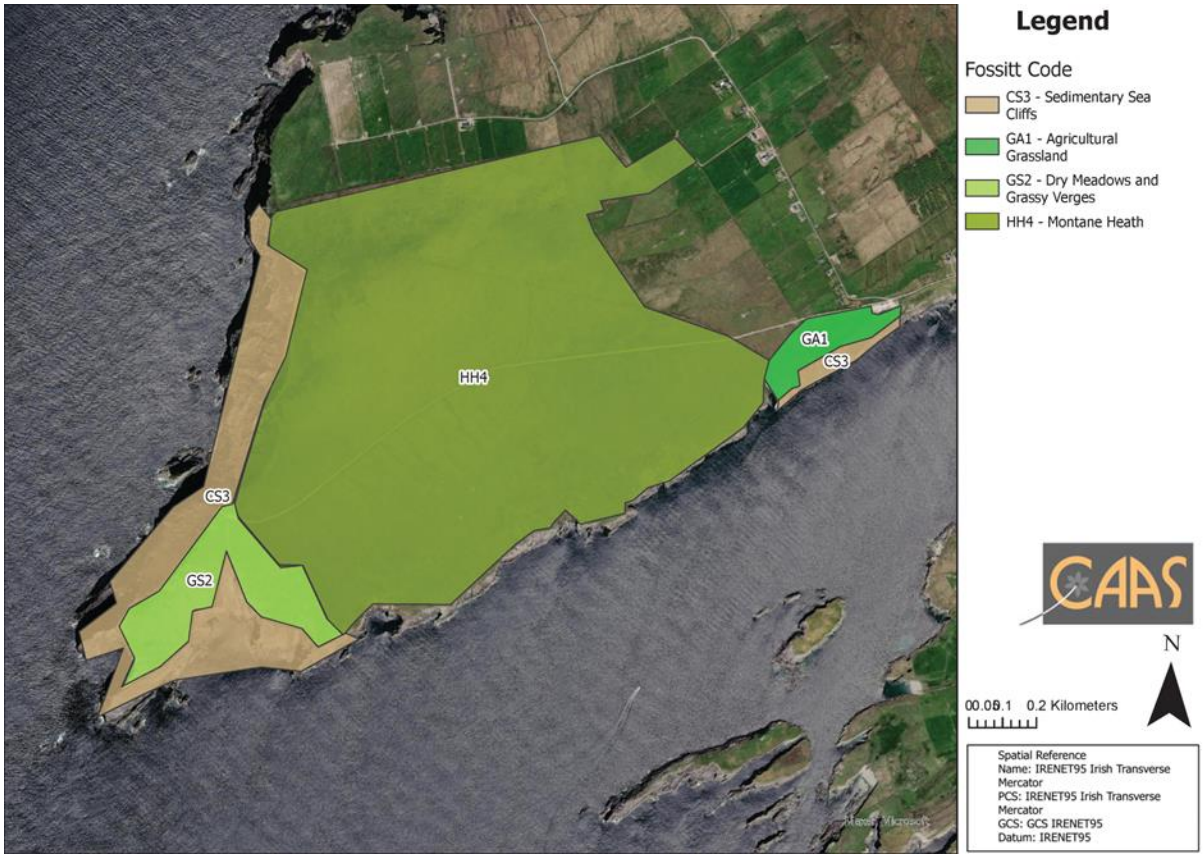


Figure 1.27 Habitats present at Bray Head

1.7.3 Condition Assessment

Habitat condition assessments are an integral part of the National Tourism Monitoring Programme. They will allow an assessment of how habitat degradation due to human disturbance may relate to visitor monitoring data gathered at each of the 19 Failte Ireland sites for the duration of the programme.

Each habitat condition assessment will follow a rating scale, that has been designed specifically for this monitoring programme as a standardised, repeatable measurement for assessing habitat condition across all Failte Ireland sites (details on the full methodology are supplied in Appendix II of this report). In order to adequately capture possible changes to habitat condition at each site in relation to tourism activities, the habitat condition assessments will be conducted every second year of the 5-year monitoring programme. Carrying out this condition assessment every second year, creates a sufficient timescale for changes in site condition in relation to visitor movements and activities on site to become apparent, and therefore to be reflected in the resultant data.

The initial habitat condition assessments that will form the baseline for the programme's condition assessments for each of the 19 sites, were carried out in the inaugural year of this programme in 2021. The next year of habitat condition assessment will be conducted in 2023. Each assessments results will be detailed within their relevant year's interim report, with the overall analysis of trends in habitat condition in relation to visitor movements for every site reported in the final year of the monitoring programme in 2025.

1.7.4 NBDC Records of Mammals

The NBDC data shows there are a range of mammals within the receiving environment – particularly in the marine environment.

Mammals likely to occur on site include European rabbit, Irish hare, wood mouse and Irish Stoat.

Table 1.6 List of mammals that have been recorded at NBDC Hectad V37

Group	Common name	Scientific name	Number Recorded
Marine mammal	Bottle-nosed Dolphin	*Tursiops truncatus*	8
Marine mammal	Common Dolphin	*Delphinus delphis*	24
Marine mammal	Common Porpoise	*Phocoena phocoena*	20
Marine mammal	Common Seal	*Phoca vitulina*	11
Marine mammal	Cuvier's Beaked Whale	*Ziphius cavirostris*	2
Marine mammal	Grey Seal	*Halichoerus grypus*	38
Marine mammal	Humpback Whale	*Megaptera novaeangliae*	10
Marine mammal	Long-finned Pilot Whale	*Globicephala melas*	2
Marine mammal	Minke Whale	*Balaenoptera acutorostrata*	25
Marine mammal	Risso's Dolphin	*Grampus griseus*	6
Marine mammal	True's Beaked Whale	*Mesoplodon mirus*	1
Terrestrial mammal	Brown Long-eared Bat	*Plecotus auritus*	1
Terrestrial mammal	European Otter	*Lutra lutra*	2
Terrestrial mammal	European Rabbit	*Oryctolagus cuniculus*	4
Terrestrial mammal	Irish Hare	*Lepus timidus subsp. hibernicus*	6
Terrestrial mammal	Irish Stoat	*Mustela erminea subsp. hibernica*	1
Terrestrial mammal	Lesser Noctule	*Nyctalus leisleri*	1
Terrestrial mammal	Pipistrelle	*Pipistrellus pipistrellus*	1
Terrestrial mammal	Red Fox	*Vulpes vulpes*	1
Terrestrial mammal	Sika Deer	*Cervus nippon*	1
Terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeus*	1
Terrestrial mammal	West European Hedgehog	*Erinaceus europaeus*	1
Terrestrial mammal	Wood Mouse	*Apodemus sylvaticus*	1

1.8 Recommendations

The site as a whole is well managed in regards to tourism, however, as is stated in the 2021 report it was recommended that a boardwalk or stone pathway should be developed if visitor numbers were to increase. Visitor numbers did increase in 2022, however, while this did not lead to an increase in impacts a boardwalk or stone pathway should still be explored as options in order to safeguard the habitats at Bray Head from visitor impacts.

As is also stated in the 2021 report, chough are known to frequent the site and thus a managed grazing regime is recommended in order to both support the requirements for chough but also increase the floral diversity on 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[8]. 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.

[8] 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.