NATIONAL TOURISM MONITORING PROGRAMME 2021-2025

ANNUAL RESULTS FOR 2022

ACRES LAKE FLOATING BOARDWALK

for: **Fáilte Ireland**

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Acres Lake Floating Boardwalk – Interesting Finds

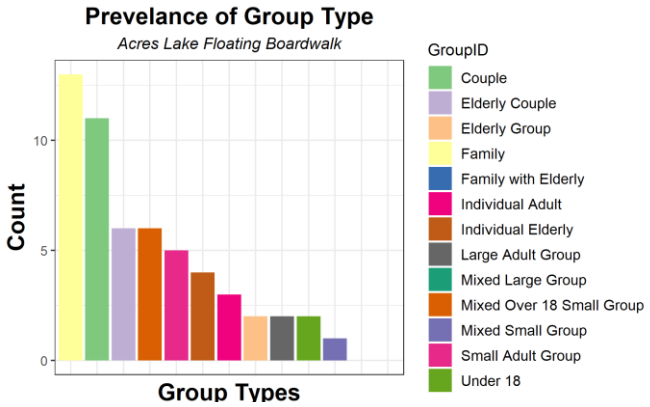
HIGH LEVELS OF BAT FORAGING ACTIVITY

Daubenton's bat – often referred to as the water bat has a high abundance at the site. This species is a trawling species which scoops floating insects from the surface of the water with their hind legs, and acrobatically throw them into their mouth mid-flight. All species of bats are protected and rely on healthy invertebrate populations to thrive.

All bat species in Ireland are protected under the Irish Wildlife Act.

VISITOR NUMBERS AND DWELL TIME

- 152 people visited the site over 8 hours
- Average dwell time of 31 minutes
- Changes since last survey include a decrease of 31.5% of visitors recorded and a decrease of 22.5% in dwell time from last year



KEY RECOMMENDATIONS

- Maintain the existing features and ensure there is no degradation of existing habitats particularly the reed beds and aquatic habitats.
- Lighting features should not be erected on site
- Carpark capacity an issue. Efforts should be made to explore options for increasing the capacity.
- Engaging interpretive material should be provided across the site to activate an interactive and educational experience.

VISITOR INTERACTION & MANAGEMENT

- Visitor interactions on site well controlled with strong management practices in place.
- Boardwalk means there were few activities undertaken on site.
- Lower number of activities resulting in impacts observed when compared to 2021
- Most of the visitors to the site stayed for at least 31 minutes – given the nature of the site being a long straight walkway.
- Site signage is limited – missed opportunity for wildlife

Highlights:

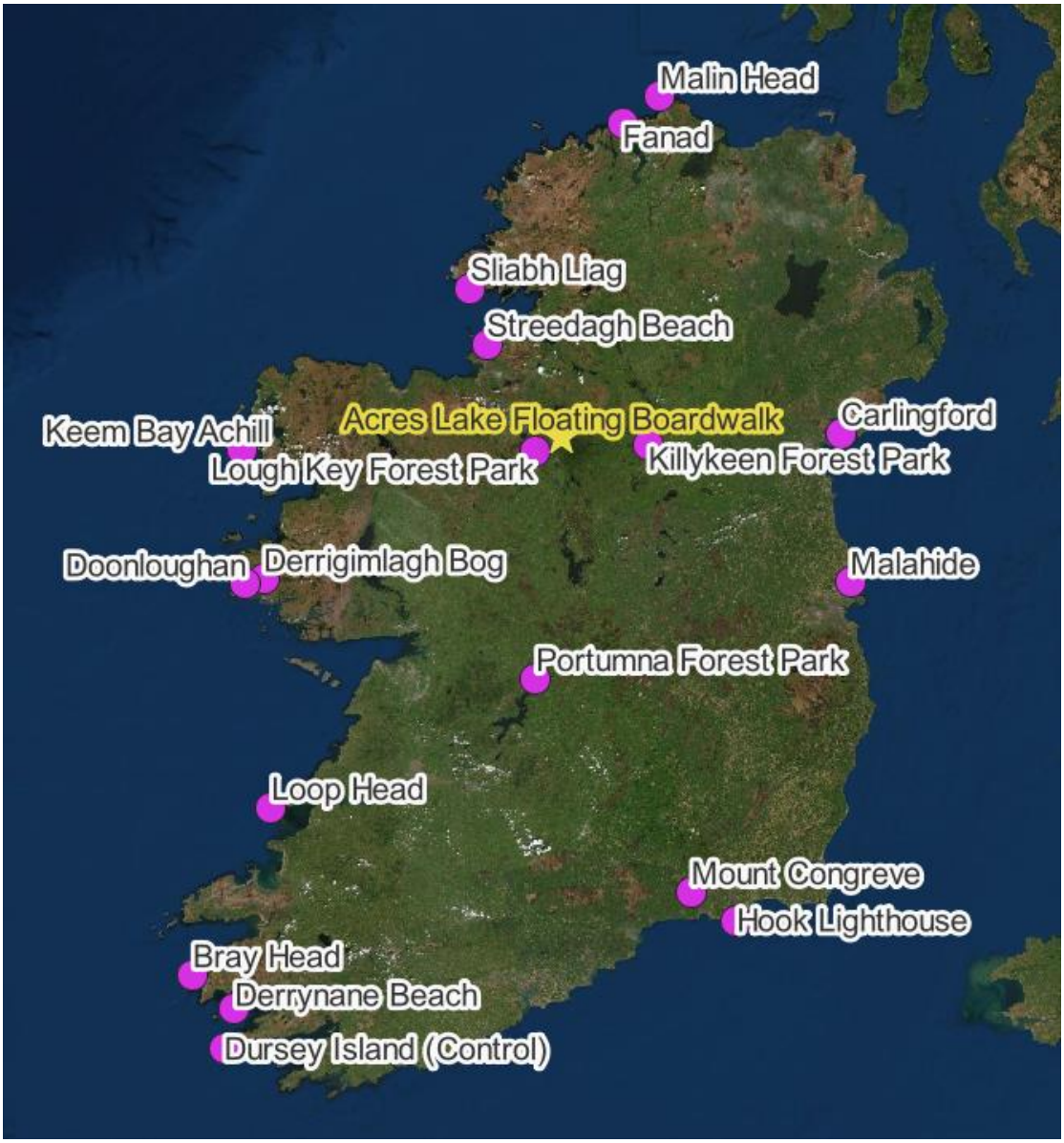
- Important callow and reed bank areas
- Decrease in percentage of activities related to netting and capture of aquatic species
- No wading species food provided – thus bread is fed to the local populations
- Long site dwell time of at least 31 minutes
- Site signage is limited – missed opportunity for wildlife

1 Acres Lake Floating Boardwalk

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.

To date, the Wild Atlantic Way Environmental Monitoring Programme has allowed us to sample and 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 Acres Lake Floating Boardwalk:

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 Acres Lake Floating Boardwalk was undertaken on the 27th of August 2022, with max temperatures reaching approximately 20.1° 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. 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.

1.3 Site Description of Acres Lake Floating Board Walk

Acres Lake is home to Irelands first floating boardwalk just outside Drumshanbo in Co. Leitrim. This boardwalk connects to a 6.5km linear walking and cycling trail along the Shannon Blueway from Acres Lake to Battlebridge Lock, near Leitrim Village. The lake itself is used for recreation and amenity and has a range of habitats present including riparian woodland patches and shallow reed beds. The site has an existing small-scale carpark with space for 15-20 cars and an existing jetty (Figure 1.1). The EPA water quality data for the Battle bridge station (downstream of the site) has a Q-value of 4.

The site is host to leisure facilities such as tennis courts, a visitor centre and an outdoor pool. There are a number of jetties and mooring features on the site.

Plans were announced in mid-2022 for an additional car park and a centre for water sports at Acres Lake. However, there have been no changes to site features between the 2021 and 2022 surveys conducted at Acres Lake Floating Boardwalk.

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

Figure 1.1 Montage of some of the feature at Acres Lake Floating Boardwalk

1.3.1 Critical Infrastructure

Table 1.1 Summary of Wastewater infrastructure at Acres Lake Floating Boardwalk

Wastewater Treatment Plant (WWTP)	Irish Water Indication of Capacity	Comment
Toilet and shower facilities are available on site No current WWTP on site at Acres Lake Floating Boardwalk Nearest settlement with WWTP in Drumshanbo (WWTP Reg #D0144)	Potential spare capacity to be considered on case-by-case basis[2]	Current wastewater facilities are sufficient if visitor numbers increase There is substantial capacity available within the treatment plant as stated in the Draft Leitrim CDP 2023-2029[3] if further wastewater facilities are introduced on site

[2] https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/leitrim/
[3] https://leitrimcoco.ie/eng/services_a-z/planning-and-development/development-plans/leitrim-county-development-plan-2023-2029/volume-ii-settlement-plans.pdf

Table 1.2 Summary of Drinking Water infrastructure at Acres Lake Floating Boardwalk

Drinking Water	Water Resource Name (WRZ)	Irish Water Indication of Capacity	Comment
Nearest serviced settlement to Acres Lake Floating Boardwalk is Drumshanbo Is serviced by the South Leitrim Regional Water Supply Scheme (SLRWSS) which abstracts raw water from the River Shannon[4]	Carrick-on-Shannon	Capacity available – Level of service (LoS) improvement required[5]	Current water supply is sufficient if visitor numbers increase

Table 1.3 Summary of Transport infrastructure at Acres Lake Floating Boardwalk

Nearest Settlement	Current Transport Infrastructure	Comment
Drumshanbo	Acres Lake is serviced by the R207 and is accessible through the town of Drumshanbo or by a linear walking/cycle path along the Shannon Blueway	Plans announced for construction of new car park at Acres Lake Floating Boardwalk, which would ease pressure from an increase in visitor numbers

[4] https://leitrimcoco.ie/eng/services_a-z/planning-and-development/development-plans/leitrim-county-development-plan-2023-2029/volume-ii-settlement-plans.pdf
[5] https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/leitrim/

1.4 Pathways and Features Condition Results

1.4.1 Pathway Condition

The path is perfectly maintained – the full site is a guarded boardwalk which is all hard infrastructure. The material and dimensions are consistent throughout (Figure 1.2 & Figure 1.3).

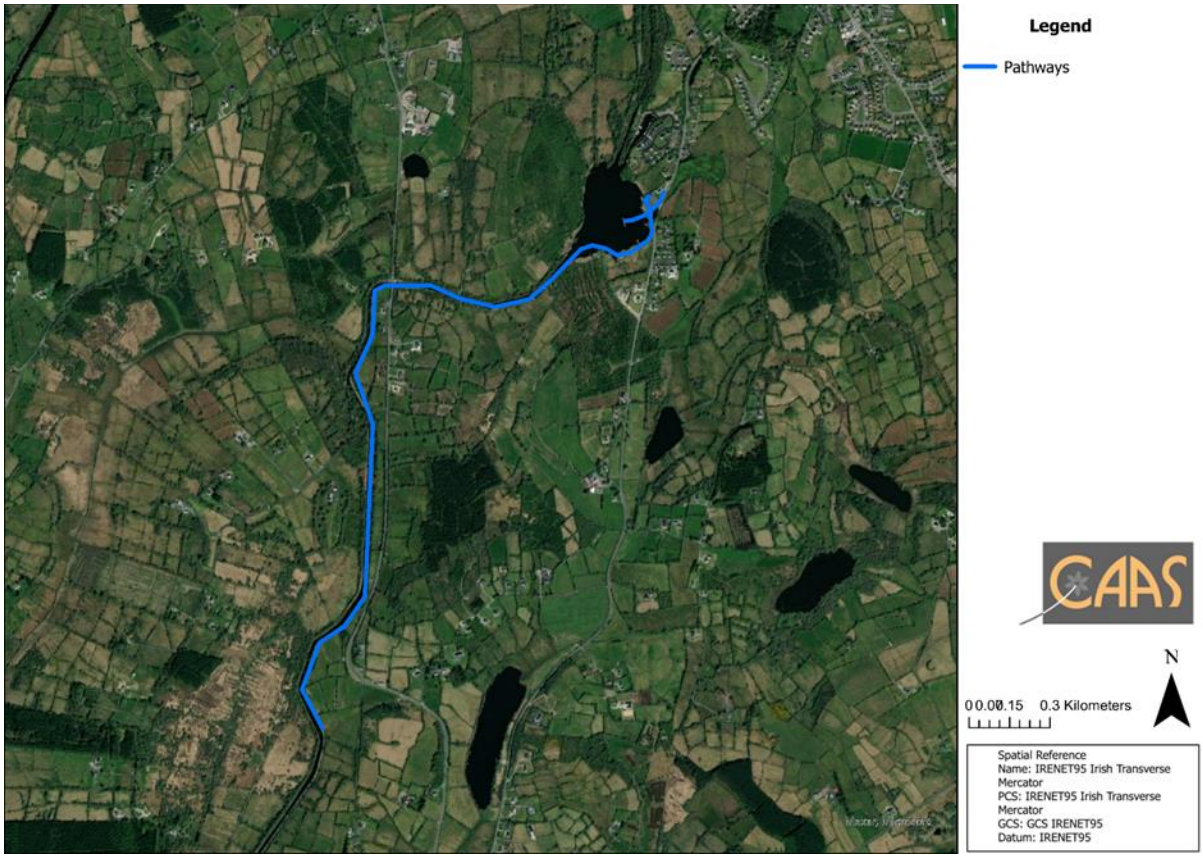


Figure 1.2 Pathways identified at Acres Lake Floating Boardwalk

Figure 1.3 Pathways at Acres Lake Floating Boardwalk

1.4.2 Features Condition

There are many signs and tourism features on site (Figure 1.4). There is an on-site visitor centre and playground with an associated outdoor swimming pool and toilet facilities. The main attractions are the jetty pier and the boardwalk itself. The signage mainly related to safety warnings, but there are signs identifying features of the Shannon Blueway, as well as a sign detailing information about Drumshambo and a wider trail map (Figure 1.5). There is minimal information about the wildlife or biodiversity of the area – mainly focusing on common duck species.

Figure 1.4 Features recorded at Acres Lake

Figure 1.5 Features at Acres Lake Floating Boardwalk

1.4.3 Hazards

The hazards identified on site (Figure 1.6) relate to slippery surfaces which are accompanied throughout the site with signs alerting visitors to the potential for hazards such as slippery surfaces.

Figure 1.6 Hazards recorded at Acres Lake

1.5 Visitor Characterisation Survey

The visitor monitoring surveys resulted in a total of 152 visitors (which represent 55 group observations). The site is most popular amongst the family group with the dominant mode of transport being by foot. The average dwell time for the site was 31 minutes; with the following activities undertaken during the survey (listed in order of occurrence rate):

Activity Type
Cycling
Dogwalking (on lead)
Sitting
Other
Powered Movement Through Water (Boat, Jetski etc)
SUP Boarding
Birdwatching and Bird feeding
Photographing
Jogging
Kayaking
Swimming

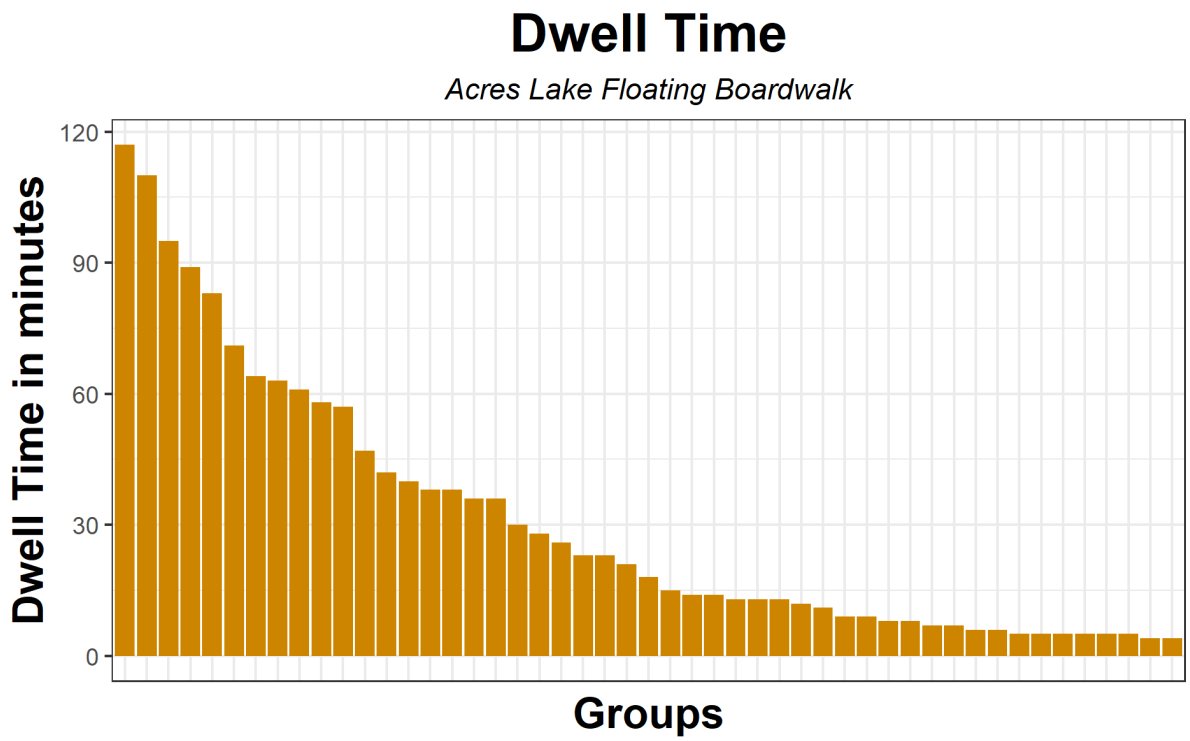


Figure 1.7 Duration of Time Spent at Acres Lake Floating Boardwalk

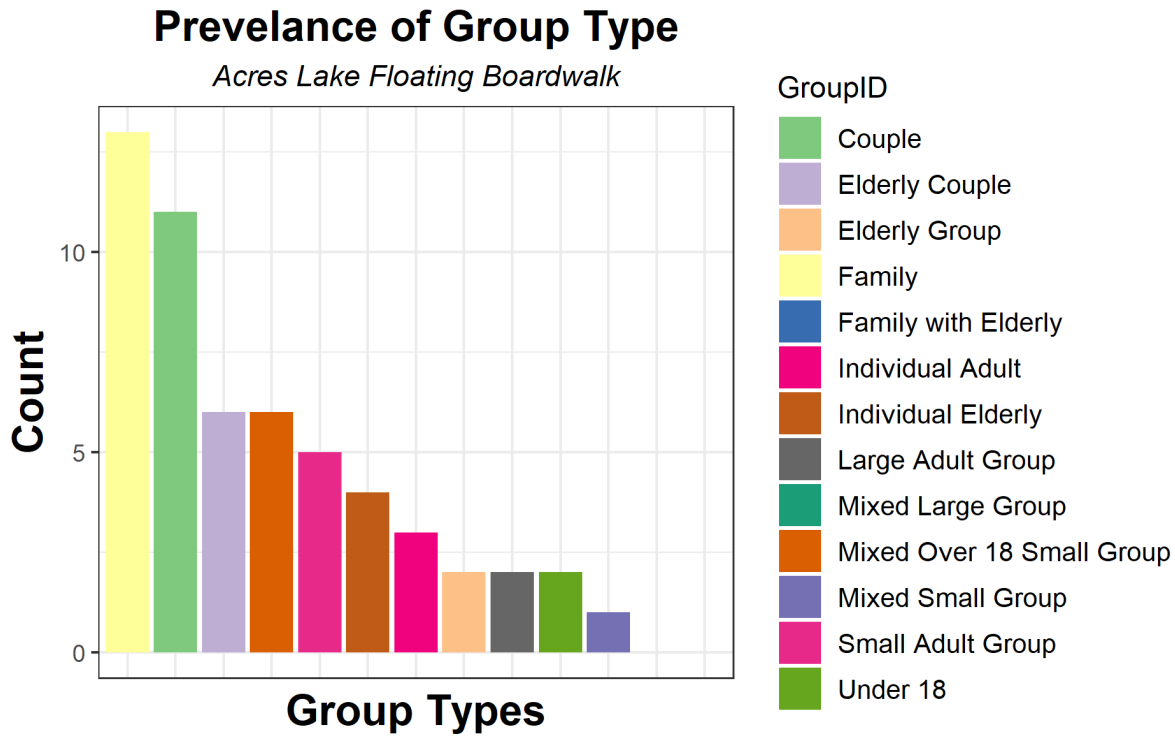


Figure 1.8 Groups of visitors that visited Acres Lake Floating Boardwalk

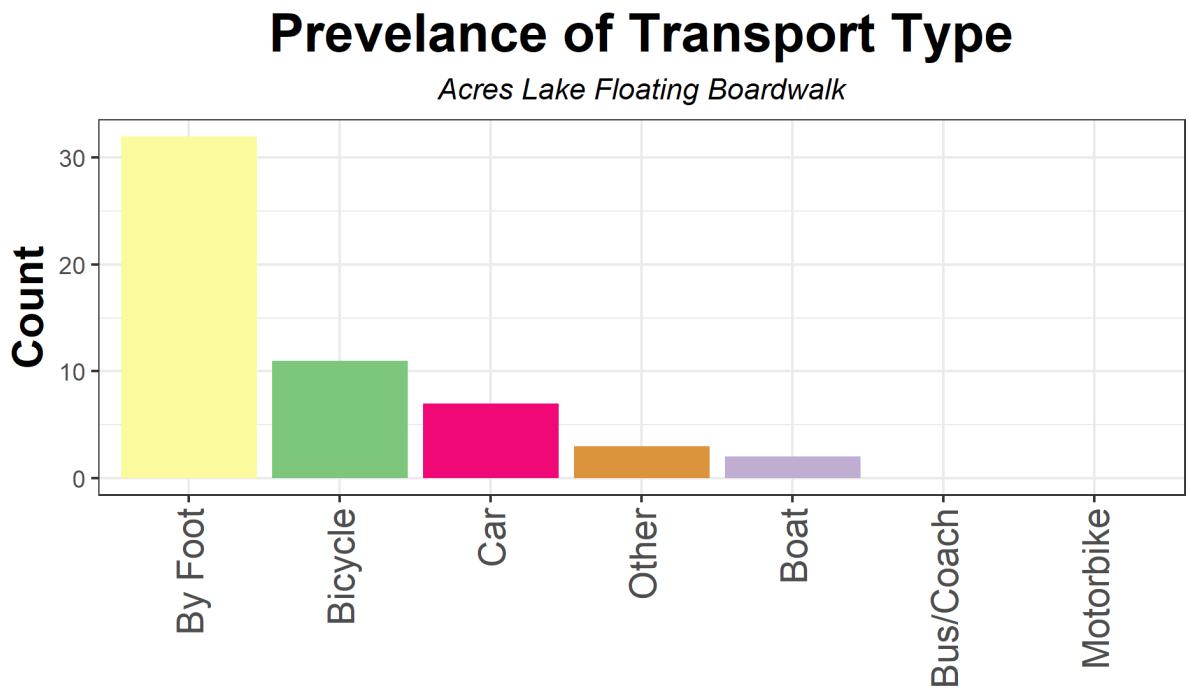


Figure 1.9 Mode of transport used to visit Acres Lake Floating Boardwalk

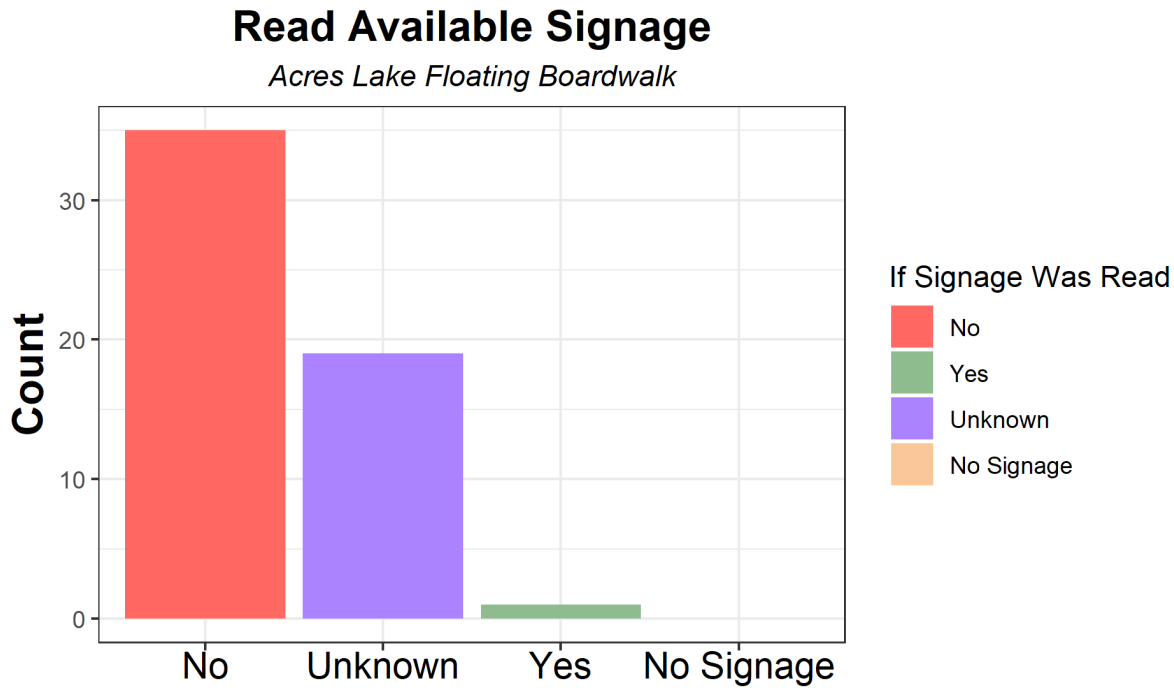


Figure 1.10 Use of Interpretive Material at Acres Lake Floating Boardwalk

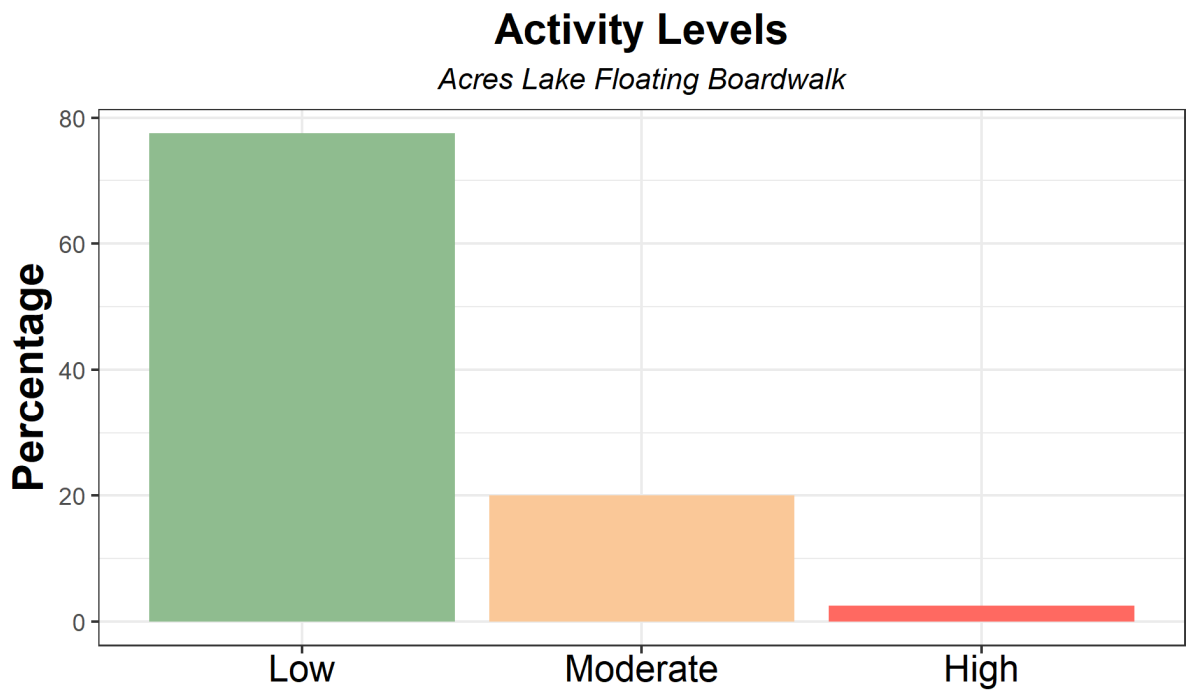


Figure 1.11 Categories of Activity Levels Observed at Acres Lake Floating Boardwalk

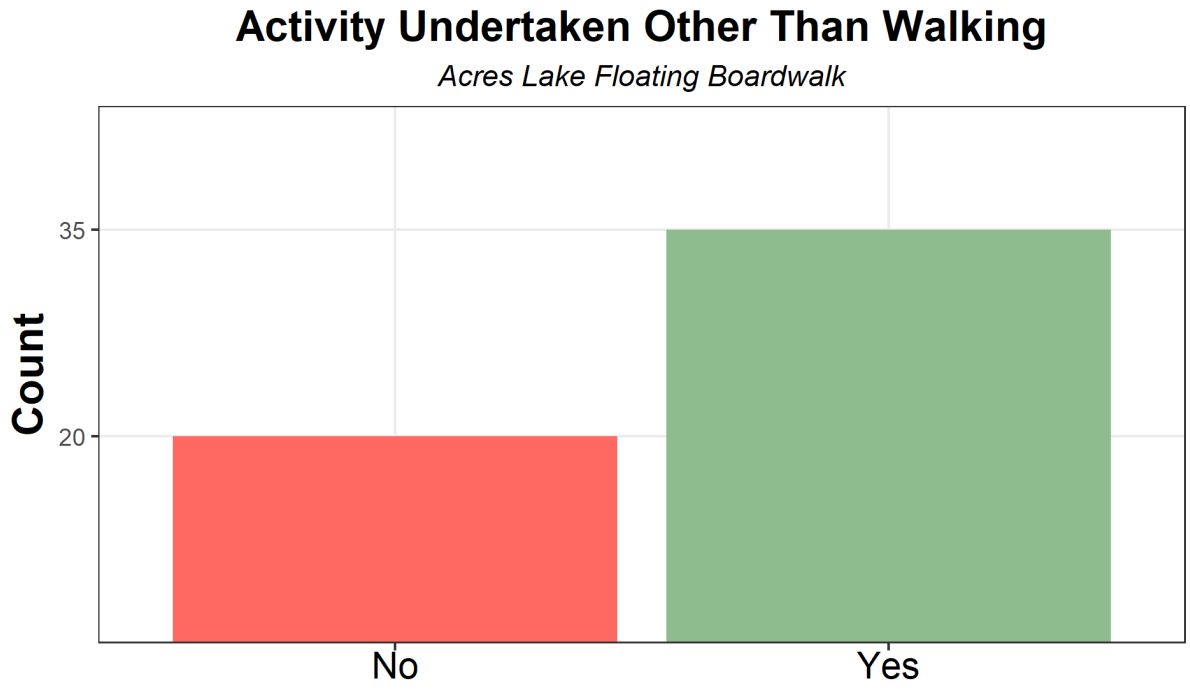


Figure 1.12 Activities undertaken other than walking

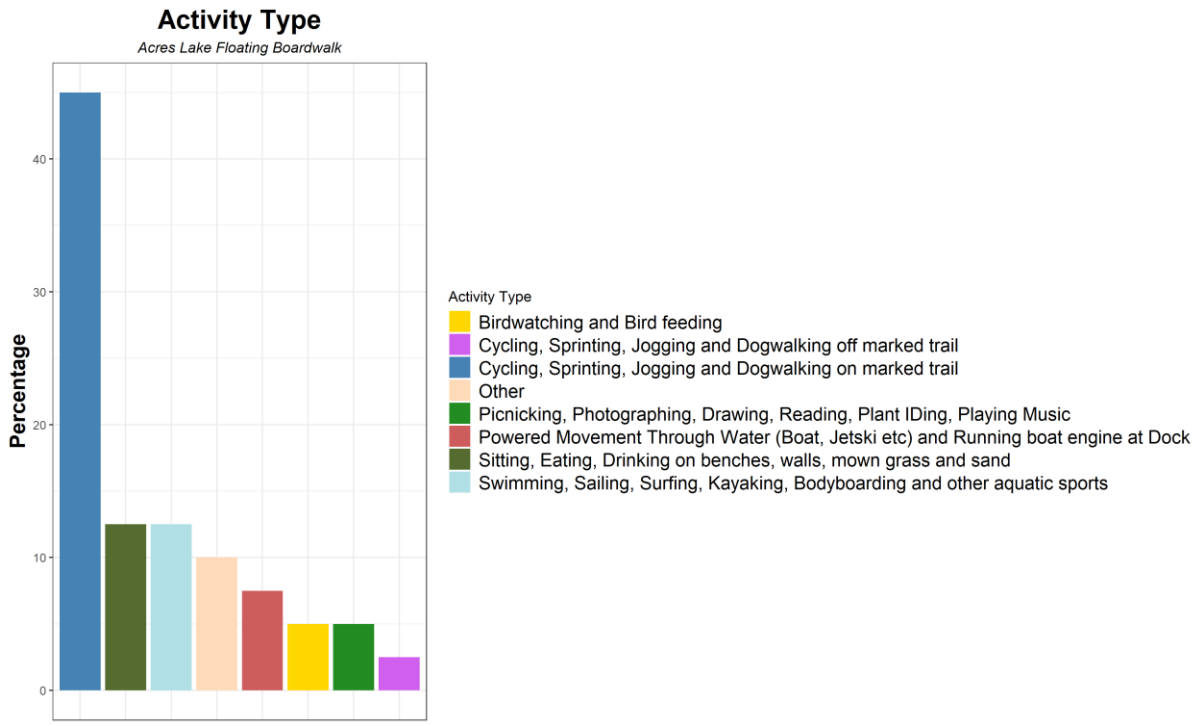


Figure 1.13 Range of Visitor Activities Observed at Acres Lake Floating Boardwalk

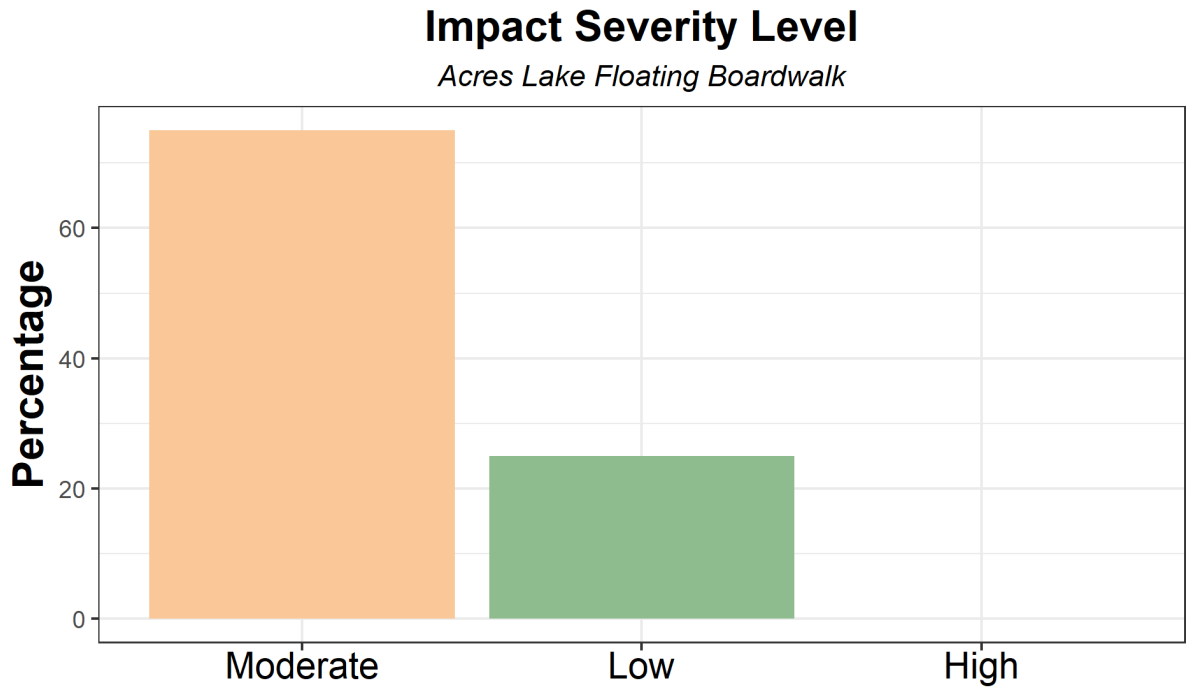


Figure 1.14 Categories of Environmental Impact Levels Observed at Acres Lake Floating Boardwalk as a result of Visitor Activities[6]

[6] 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.

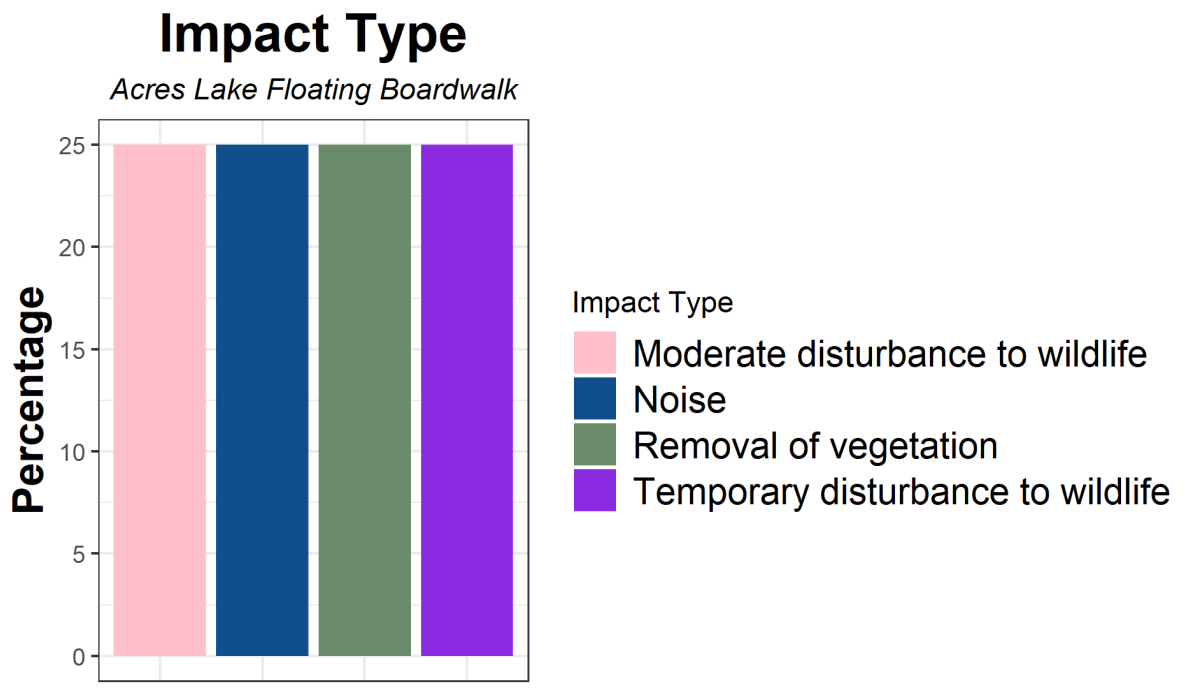


Figure 1.15 Range of Environmental Impacts Observed at Acres Lake Floating Boardwalk

The environmental impacts that were observed and recorded used the same coding system as the Wild Atlantic Way Monitoring[7]. 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 1.16 Visitor movement patterns at Acres Lake Floating Boardwalk 2022

[7] See Appendix I for more detail

Of the 55 groups, down from 82 in 2021, were recorded on site 64% of them undertook activities other than walking. These activities (identified above) resulted in 4 impacts, down from 19, being observed on site during the survey. Thus, 10% of activities, down from 33%, on site resulted in impacts on the environment. The impact severity levels varied with 25% of the impacts being low, 75% of impacts being moderate, and 0% of impacts being high severity. The impacts identified for the site were:

Impact Type	Count
Moderate disturbance	1
Noise	1
Removal of vegetation	1
Temporary disturbance to wildlife	1

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 Acres Lake Floating Boardwalk produced a number of changes from the 2021 Visitor Characterisation Survey. Noted changes include;

- A large decrease was noted between the number of impacts observed from 2022 when compared to 2021;
- A severe reduction in the percentage of visitors who drove to the site and opted instead to walk or cycle;
- An increase in percentage of activities (cycling, dog walking, jogging etc.) along marked trails along with a slight decrease of these activities occurring off of marked trails; and,
- Reduction of visitors during the 8-hour survey by 31.5% to 152 visitors over 52 groups with dwell time reducing by 22.5%.

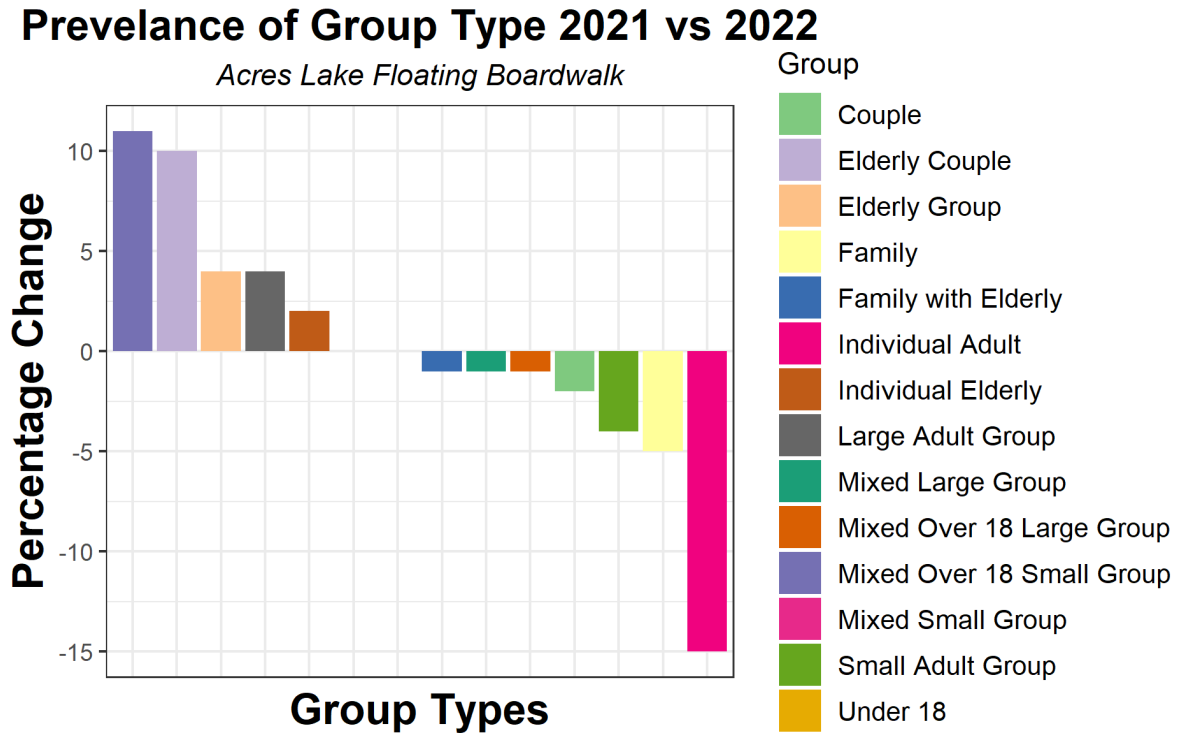


Figure 1.17 Percentage Change in groups of visitors that visited Acres Lake Floating Boardwalk between 2021 and 2022

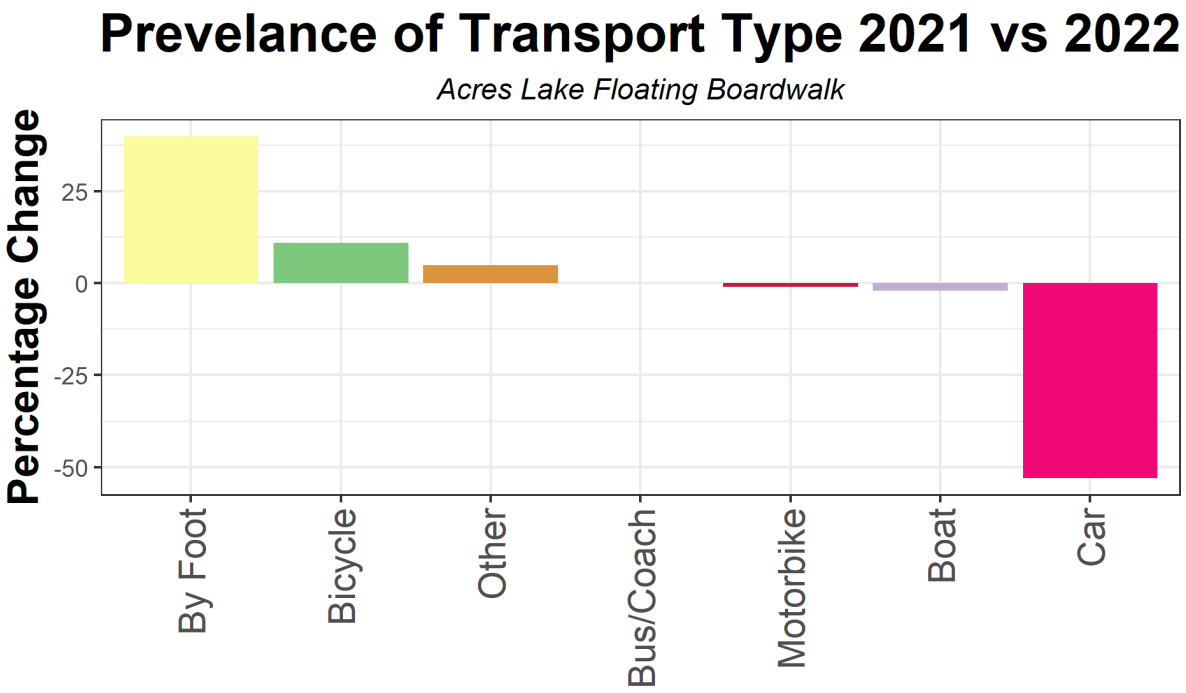


Figure 1.18 Percentage Change in mode of transport used to visit Acres Lake Floating Boardwalk between 2021 and 2022

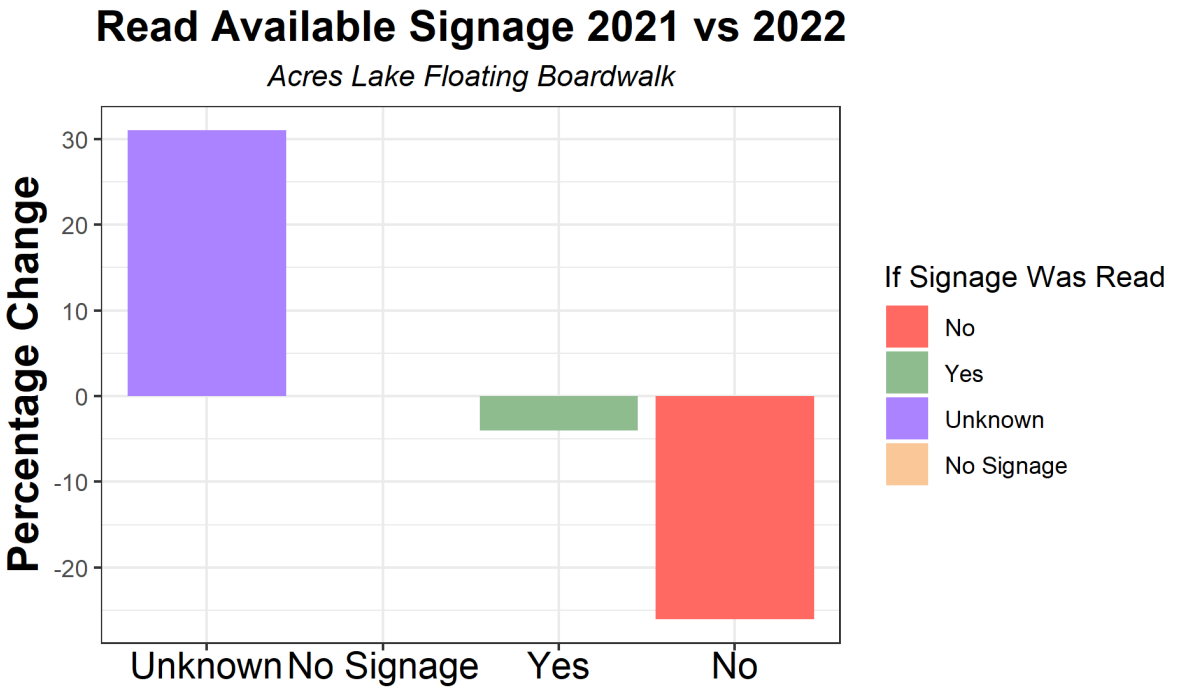


Figure 1.19 Percentage change in use of Interpretive Material at Acres Lake Floating Boardwalk between 2021 and 2022

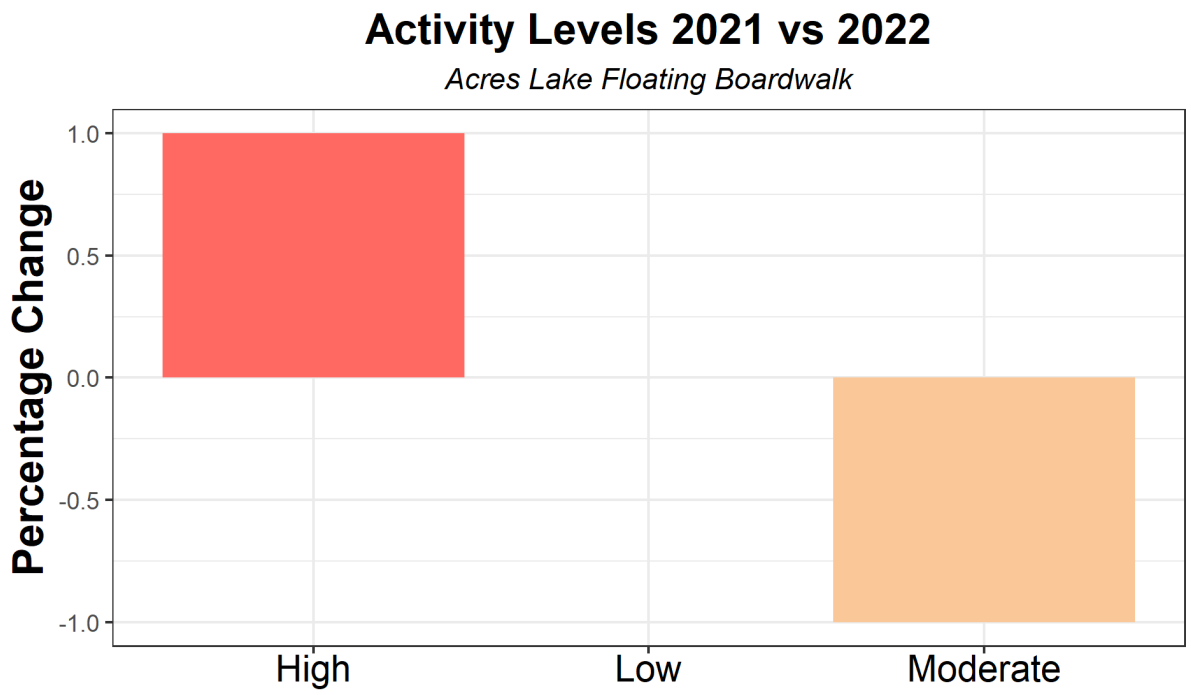


Figure 1.20 Percentage change in categories of Activity Levels Observed at Acres Lake Floating Boardwalk between 2021 and 2022

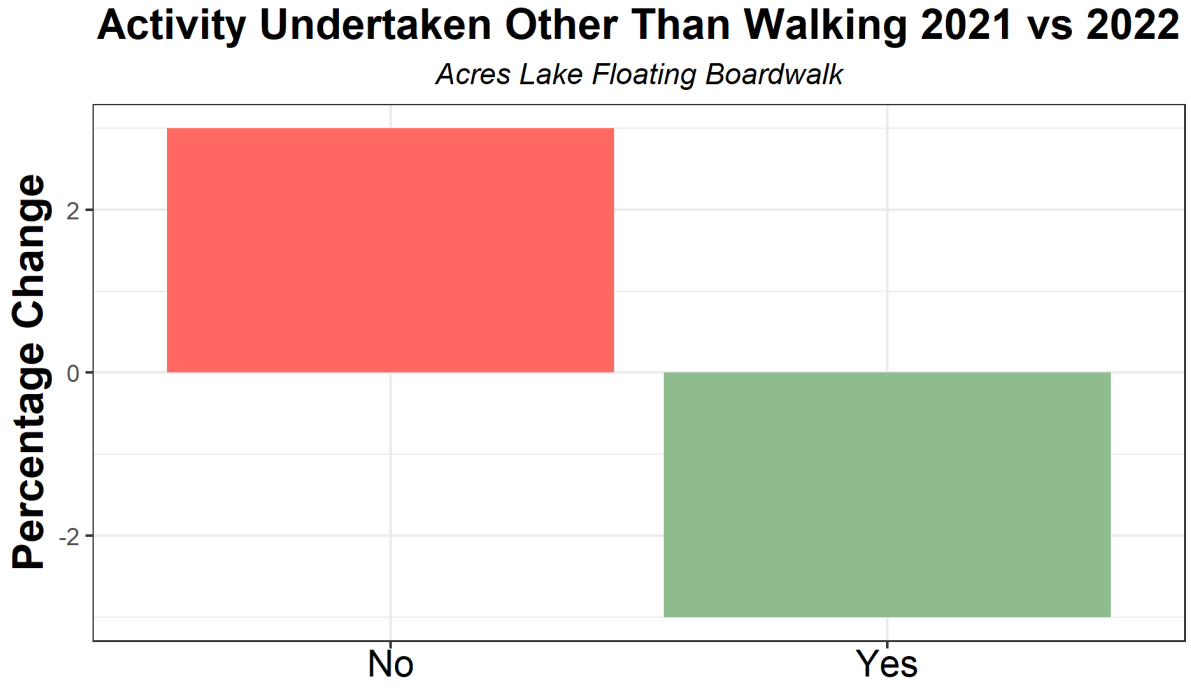


Figure 1.21 Percentage change in activities undertaken other than walking at Acres Lake Floating Boardwalk between 2021 and 2022

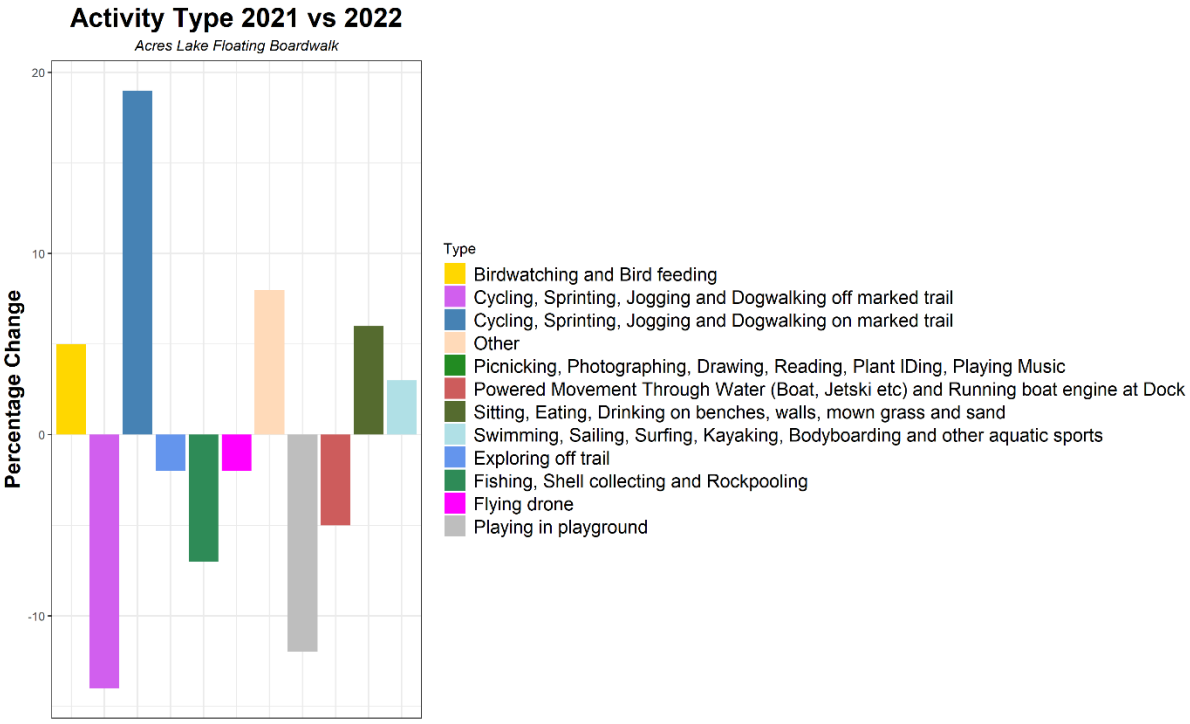


Figure 1.22 Percentage change in range of Visitor Activities Observed at Acres Lake Floating Boardwalk between 2021 and 2022

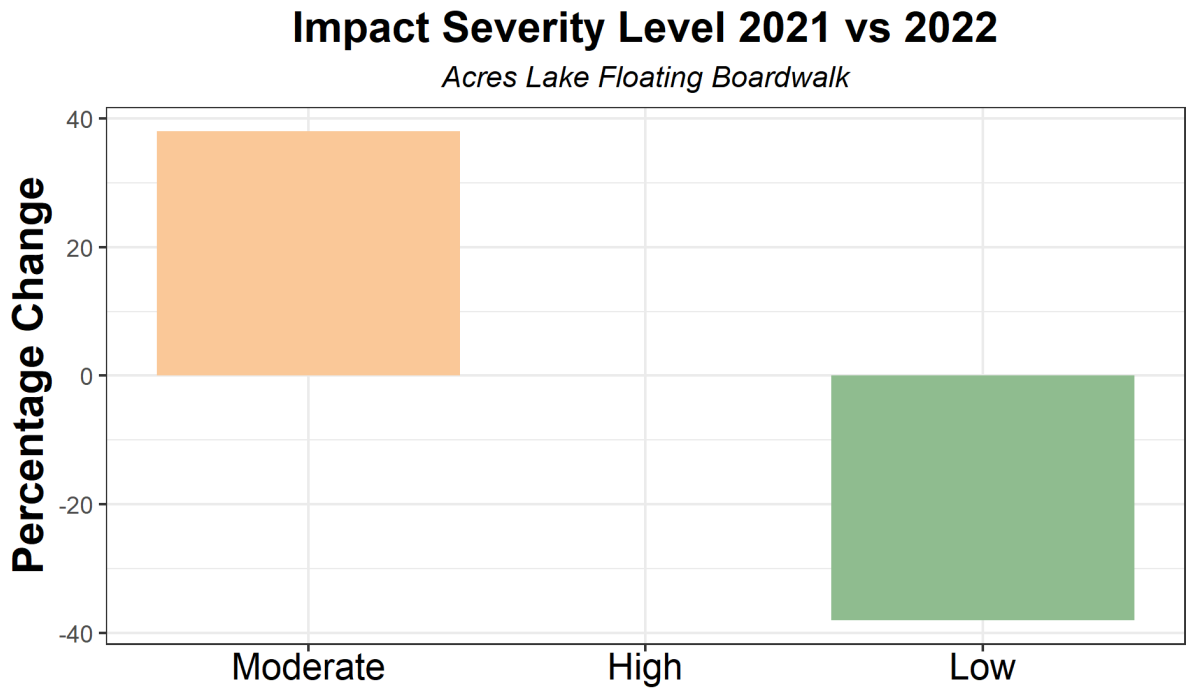


Figure 1.23 Percentage change in categories of Environmental Impact Levels Observed at Acres Lake Floating Boardwalk as a result of Visitor Activities[8] between 2021 and 2022

[8] 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.

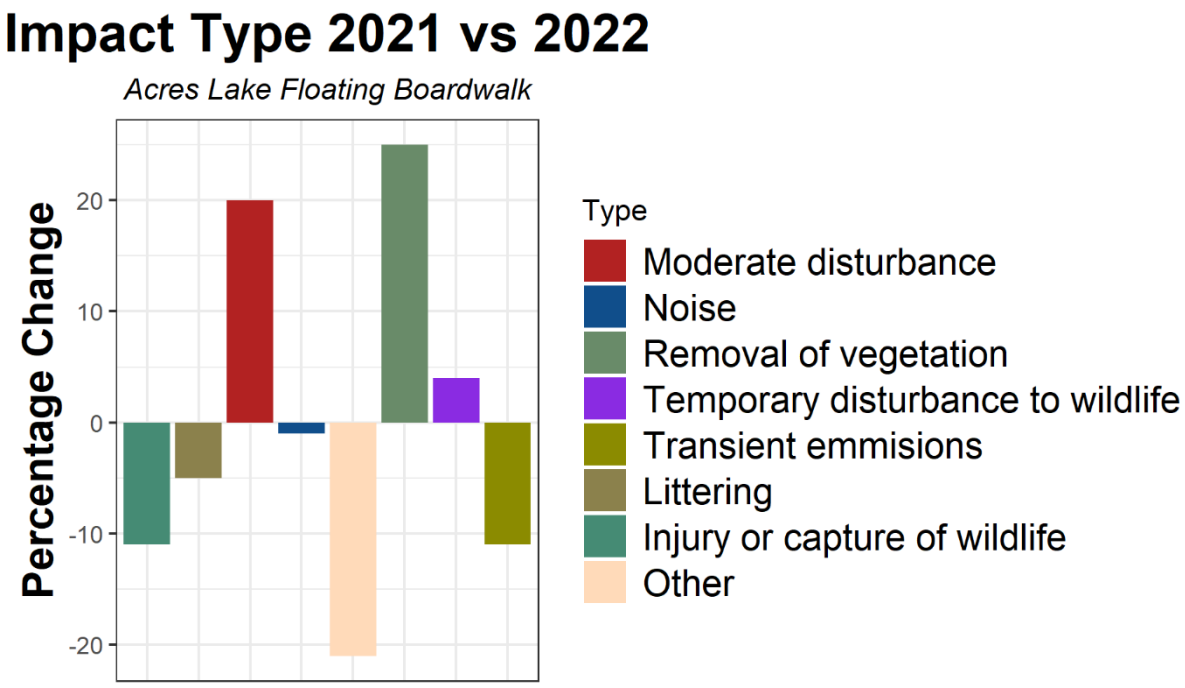


Figure 1.24 Percentage change in range of Environmental Impacts Observed at Acres Lake Floating Boardwalk between 2021 and 2022

Table 1.4 Summary of changes with previous survey results

Survey	Notable Differences	Comment
Visitor Dwell Time	• Overall dwell time reduced by 22.5%	Survey was conducted later in the season compared to 2021 which could lead to less visitors and thus, dwell time
Prevalence of Group Type	• 10% increase in elderly couple • 15% decrease in individual adults • 11% increase in mixed over 18s	Slight changes in percentage of visitor group types could be attributed to the 2022 survey taking place later in the season
Prevalence of Transport Type	• 11% increase in bike • 2% decrease in boat • 20% increase by foot • 53% decrease by car • 1% decrease by motorbike	Large increase in percentage of visitors arriving by foot and bicycle and thus large decrease in visitors arriving by car
Read Available Signage	• Signage not read dropped by 26% • 4% decrease in signage read • Unknown increased by 31%	Significant decrease in percentage of signage not read observed. However, this can be attributed to a large increase in unknown if signage was read
Activity Levels	• High activity levels increased by 1% • Low activity levels decreased by 1% • No change in moderate activity levels	No significant changes observed
Activity Undertaken Other Than Walking	• Activities undertaken other than walking increased by 3% • Activities undertaken other than walking decreased by 3%	No significant changes observed
Activity Type	• Jogging, cycling and dog walking etc. off marked trails decreased by 14% • Jogging, cycling, and dog walking etc. on marked trails increase by 19%	Increase in percentage of activities done on marked trails

	• 7% decrease in number of netting and capture of aquatic wildlife observed	Decrease in percentage of activities related to netting and capture of aquatic wildlife
Impact Severity Level	• No change in high impact level • Low impact level decreased by 38% • Moderate impact level increased by 38%	Large increase in percentage of moderate impacts. This is due to lower numbers of impacts being recorded during 2022
Impact Type	• 11% decrease in injury or capture of wildlife • 20% increase in moderate disturbance • 21% decrease in other • 25% increase in in removal of vegetation • No other significant changes	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

There are no designated sites within 2km of Acres Lake Floating Boardwalk.

1.7.2 Habitat Descriptions

Acre's lake is a small lake system with existing recreation amenity usage on site. The trees on the westside of the lake are characterised as a narrow riparian woodland which are backed by a coniferous plantation. The tall reed beds around the lake itself provide ecological resources for invertebrate species and provide refugia for breeding wading birds. These areas are the key resources for the site.

The site was investigated for bat activity and there were 5 species identified on site which use the river which extends from the site for foraging and commuting while the lake itself provides a key foraging resource. The absence of intrusive lighting structures at the area is key for the site. Visitor movements at the site are restricted to within the boardwalk itself which limits potential interactions.

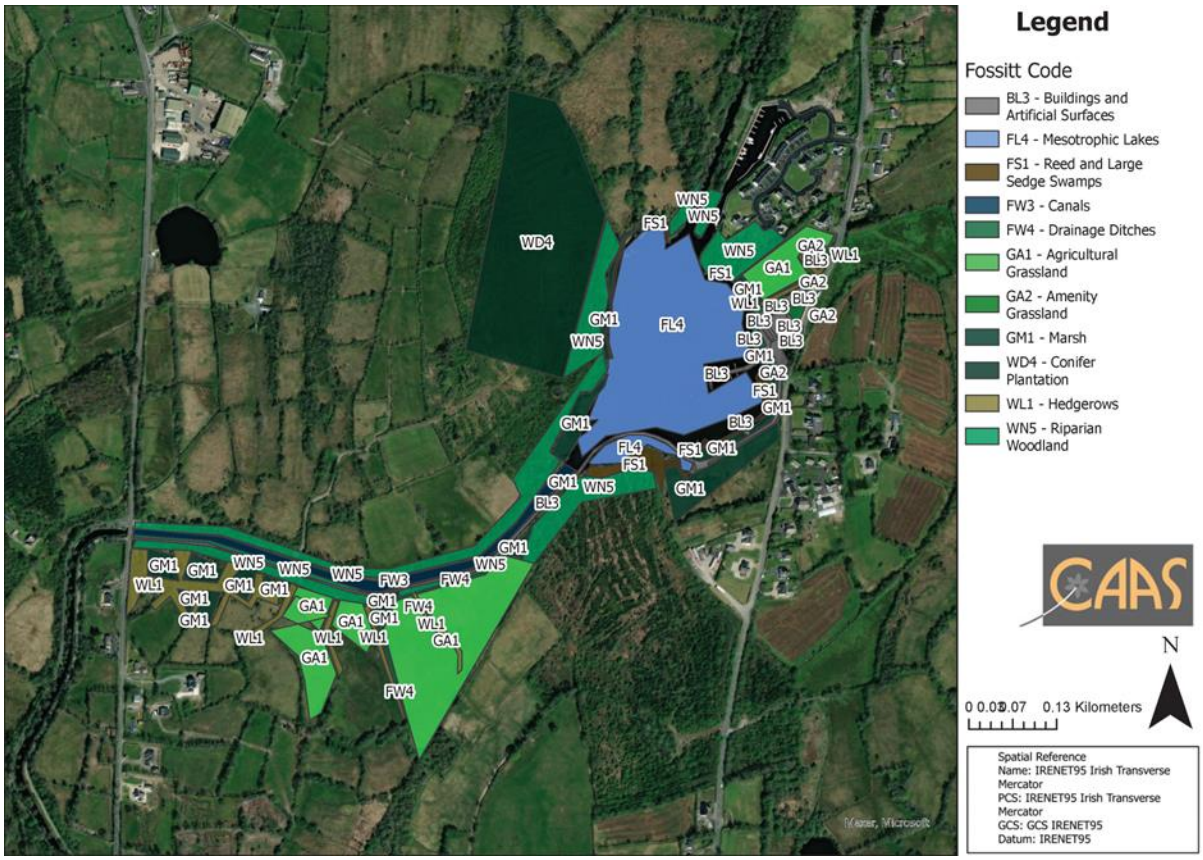


Figure 1.25 Habitats present at Acres Lake

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 Birds

Given the woodland habitat within the area, the NBDC (National Biodiversity Data Centre) data shows that passerines such as wrens, blue tits, chaffinches and blackbirds are present in large numbers within the area. Along with this there is also a lake habitat within the area and thus, bird species such as whooper swans and cormorants also reside in the vicinity of Acres Lake. Small numbers of birds of prey such as buzzards and kestrels were also recorded.

Table 1.5 List of birds that have been recorded at NBDC Hectads[9] G90 & G91

Group	Common name	Scientific name	Number Recorded
Bird	Barn Owl	*Tyto alba*	1
Bird	Barn Swallow	*Hirundo rustica*	27
Bird	Black-billed Magpie	*Pica pica*	37
Bird	Black-headed Gull	*Larus ridibundus*	21
Bird	Blackcap	*Sylvia atricapilla*	16
Bird	Blue Tit	*Cyanistes caeruleus*	41
Bird	Brambling	*Fringilla montifringilla*	1
Bird	Chaffinch	*Fringilla coelebs*	42
Bird	Coal Tit	*Periparus ater*	35
Bird	Common Blackbird	*Turdus merula*	47
Bird	Common Bullfinch	*Pyrrhula pyrrhula*	30
Bird	Common Buzzard	*Buteo buteo*	3
Bird	Common Chiffchaff	*Phylloscopus collybita*	21
Bird	Common Coot	*Fulica atra*	10
Bird	Common Cuckoo	*Cuculus canorus*	14
Bird	Common Goldeneye	*Bucephala clangula*	5
Bird	Common Grasshopper Warbler	*Locustella naevia*	11
Bird	Common Greenshank	*Tringa nebularia*	1
Bird	Common Kestrel	*Falco tinnunculus*	18
Bird	Common Kingfisher	*Alcedo atthis*	11
Bird	Common Linnet	*Carduelis cannabina*	10
Bird	Common Moorhen	*Gallinula chloropus*	15
Bird	Common Pheasant	*Phasianus colchicus*	32
Bird	Common Pochard	*Aythya farina*	4
Bird	Common Raven	*Corvus corax*	9
Bird	Common Redshank	*Tringa tetanus*	3
Bird	Common Sandpiper	*Actitis hypoleucos*	6
Bird	Common Snipe	*Gallinago gallinago*	14
Bird	Common Starling	*Sturnus vulgaris*	37
Bird	Common Swift	*Apus apus*	11
Bird	Common Tern	*Sterna hirundo*	3

[9] 10km^2 grid

Group	Common name	Scientific name	Number Recorded
Bird	Common Whitethroat	*Sylvia communis*	12
Bird	Common Wood Pigeon	*Columba palumbus*	39
Bird	Corn Crake	*Crex crex*	3
Bird	Eurasian Collared Dove	*Streptopelia decaocto*	15
Bird	Eurasian Curlew	*Numenius arquata*	24
Bird	Eurasian Jackdaw	*Corvus monedula*	37
Bird	Eurasian Jay	*Garrulus glandarius*	8
Bird	Eurasian Oystercatcher	*Haematopus ostralegus*	2
Bird	Eurasian Siskin	*Carduelis spinus*	14
Bird	Eurasian Sparrowhawk	*Accipiter nisus*	11
Bird	Eurasian Teal	*Anas crecca*	10
Bird	Eurasian Treecreeper	*Certhia familiaris*	19
Bird	Eurasian Wigeon	*Anas Penelope*	10
Bird	Eurasian Woodcock	*Scolopax rusticola*	3
Bird	European Golden Plover	*Pluvialis apricaria*	3
Bird	European Goldfinch	*Carduelis carduelis*	22
Bird	European Greenfinch	*Carduelis chloris*	20
Bird	European Robin	*Erithacus rubecula*	49
Bird	Fieldfare	*Turdus pilaris*	8
Bird	Goldcrest	*Regulus regulus*	31
Bird	Great Black-backed Gull	*Larus marinus*	1
Bird	Great Cormorant	*Phalacrocorax carbo*	13
Bird	Great Crested Grebe	*Podiceps cristatus*	16
Bird	Great Spotted Woodpecker	*Dendrocopos major*	1
Bird	Great Tit	*Parus major*	36
Bird	Greater White-fronted Goose	*Anser albifrons*	1
Bird	Grey Heron	*Ardea cinerea*	12
Bird	Grey Partridge	*Perdix perdix*	1
Bird	Grey Wagtail	*Motacilla cinerea*	19
Bird	Greylag Goose	*Anser anser*	1
Bird	Hedge Accentor	*Prunella modularis*	41
Bird	Hen Harrier	*Circus cyaneus*	8
Bird	Hooded Crow	*Corvus cornix*	34
Bird	House Martin	*Delichon urbicum*	12
Bird	House Sparrow	*Passer domesticus*	22
Bird	Lesser Black-backed Gull	*Larus fuscus*	8
Bird	Lesser Redpoll	*Carduelis cabaret*	24
Bird	Little Grebe	*Tachybaptus ruficollis*	12
Bird	Long-eared Owl	*Asio otus*	3
Bird	Long-tailed Tit	*Aegithalos caudatus*	22
Bird	Mallard	*Anas platyrhynchos*	18
Bird	Meadow Pipit	*Anthus pratensis*	44
Bird	Merlin	*Falco columbarius*	1
Bird	Mew Gull	*Larus canus*	5
Bird	Mistle Thrush	*Turdus viscivorus*	29
Bird	Mute Swan	*Cygnus olor*	20
Bird	Northern Lapwing	*Vanellus vanellus*	12
Bird	Northern Pintail	*Anas acuta*	1
Bird	Northern Shoveler	*Anas clypeata*	1
Bird	Northern Wheatear	*Oenanthe Oenanthe*	1
Bird	Red-breasted Merganser	*Mergus serrator*	4
Bird	Red Grouse	*Lagopus lagopus*	1
Bird	Redwing	*Turdus iliacus*	14
Bird	Reed Bunting	*Emberiza schoeniclus*	29
Bird	Rook	*Corvus frugilegus*	28
Bird	Sand Martin	*Riparia riparia*	4
Bird	Sedge Warbler	*Acrocephalus schoenobaenus*	16
Bird	Sky Lark	*Alauda arvensis*	14
Bird	Song Thrush	*Turdus philomelos*	44
Bird	Spotted Flycatcher	*Muscicapa striata*	14
Bird	Stonechat	*Saxicola torquate*	11
Bird	Tufted Duck	*Aythya fuligula*	14
Bird	Tundra Swan	*Cygnus columbianus*	1
Bird	Water Rail	*Rallus aquaticus*	7
Bird	White-throated Dipper	*Cinclus cinclus*	3

Group	Common name	Scientific name	Number Recorded
Bird	White Wagtail	*Motacilla alba*	34
Bird	Whooper Swan	*Cygnus cygnus*	8
Bird	Willow Warbler	*Phylloscopus trochilus*	34
Bird	Winter Wren	*Troglodytes troglodytes*	47
Bird	Yellowhammer	*Emberiza citronella*	3

1.7.5 NBDC Records of Mammals

Although the site provides optimum habitat for otters, only low numbers of otter have been recorded in the area by the NBDC. Daubenton's bat and badger were the most commonly occurring mammal species within the vicinity of Acres Lake with pine marten and red squirrel also being recorded in high numbers given the suitable habitats for the species in the area.

Table 1.6 List of mammals that have been recorded at NBDC Hectads[10] G90 & G91

Group	Common name	Scientific name	Number Recorded
Terrestrial mammal	American Mink	*Mustela vison*	7
Terrestrial mammal	Brown Rat	*Rattus norvegicus*	1
Terrestrial mammal	Daubenton's Bat	*Myotis daubentonii*	144
Terrestrial mammal	Eastern Grey Squirrel	*Sciurus carolinensis*	3
Terrestrial mammal	Eurasian Badger	*Meles meles*	88
Terrestrial mammal	Eurasian Pygmy Shrew	*Sorex minutus*	1
Terrestrial mammal	Eurasian Red Squirrel	*Sciurus vulgaris*	15
Terrestrial mammal	European Otter	*Lutra lutra*	5
Terrestrial mammal	European Rabbit	*Oryctolagus cuniculus*	3
Terrestrial mammal	Fallow Deer	*Dama dama*	2
Terrestrial mammal	House Mouse	*Mus musculus*	1
Terrestrial mammal	Irish Hare	*Lepus timidus subsp. hibernicus*	8
Terrestrial mammal	Irish Stoat	*Mustela erminea subsp. hibernica*	1
Terrestrial mammal	Natterer's Bat	*Myotis nattereri*	1
Terrestrial mammal	Pine Marten	*Martes martes*	21
Terrestrial mammal	Red Deer	*Cervus elaphus*	1
Terrestrial mammal	Red Fox	*Vulpes vulpes*	7
Terrestrial mammal	West European Hedgehog	*Erinaceus europaeus*	7
Terrestrial mammal	Wood Mouse	*Apodemus sylvaticus*	1

1.8 Recommendations

Overall recommendations are in line with the recommendations provided in 2021 with the main recommendation for the site is to maintain the existing features and ensure there is no degradation of existing habitats particularly the reed beds and aquatic habitats. Along with this, lighting features should not be erected on site to maintain the existing connectivity and activity for nocturnal species.

It was noted in the 2021 report that Acres Lake has a carpark capacity issue which lowers accessibility to the site, as can be seen in the 2022 Visitor Characterisation Survey as the majority of visitors arrived by foot. However, plans have been announced to construct a new park, which should increase accessibility to the site. Additionally, as recommended in the 2021 report, engaging interpretive material should be provided across the site to activate an interactive and educational experience, as visitor interaction with interpretive material on site is very low.

As with 2021, alternate food sources could be provided – along with signage – to raise awareness of the importance of nutrition when feeding wildlife.

[10] 10km^2 grid

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

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

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[11]. 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.

[11] 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.