

Howth Tidy Towns Local Biodiversity Action Plan 2022-2027



An Action of the Fingal County Biodiversity Plan 2010-2015

Compiled by NatureCubsIreland



Cover photo: Howth Tidy Towns Community Garden Orchard

All photos in LBAP taken by Author unless otherwise stated





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Biodiversity and Local Biodiversity Action Plans

There are many definitions of 'Biodiversity'. The Convention on Biological Diversity (CBD, 2019) defined Biodiversity as "the variability among living inter alia, terrestrial, marine and other aquatic systems and the ecological complexes of which they are part: this includes diversity within species, between species and between ecosystems". In layman's terms, it is how all elements of nature work together to preserve functioning ecosystems.

The Convention on Biological Diversity was signed by Ireland in 1996. One of the obligations of Signatories is the publication of National Biodiversity Reports. A relevant Action of Ireland's first National Biodiversity Action Plan (2002) was for Local Authorities to produce their own Biodiversity Action Plans. The production of these Tidy Towns Local Biodiversity Action Plans is an objective of Fingal's Biodiversity Action Plan (2010).

The changing face of Ireland's landscape; Tidy Towns Competitions, the All Ireland Pollinator Plan and Local Biodiversity Action Plans

The 2010 Handbook for the National Tidy Towns Competition describes the category; 'Wildlife, Habitats and Natural Amenities'. This category requires local groups to manage spaces for wildlife, instead of simply for tidy aesthetic reasons. Groups are awarded for leaving spaces wild, for planting perennial species and for taking note of the wildlife and flora in their surroundings.

This Tidy Towns category is in sync with the first All Ireland Pollinator Plan (AIPP) (2015-2020) and the latest AIPP (2021-2025) which provide tools to groups to fulfil the Tidy Towns Wildlife category. The AIPP changed perceptions of untidiness in public spaces and provided the practical tools to local groups to know what and when to plant and when to leave nature alone in order to help our declining pollinator species.

In 2016, The Tidy Towns Competition introduced the Tidy Towns Local Authority Pollinator Award which again, added to the interest by Community groups in pollinator actions.

Tidy Towns groups and Community Groups all over the country have embraced this change in landscape management. This Fingal Local Biodiversity Action Plan project validates their efforts and provides further tools to enhance the biodiversity of their areas.





Project Description

Fingal County Council acknowledged the many pollinator initiatives of Tidy Towns and Community groups across the County and realised the importance of assisting these groups in their endeavours. This Local Biodiversity Action Plan project was initiated to provide these groups with additional tools to protect and enhance local biodiversity. Ecological Contractors were hired to assist Tidy Towns and Community Groups groups to identify local biodiversity opportunities; to advise on ecological best practice methods and to write subsequent Local Biodiversity Action Plans.

The areas covered within the remit of this LBAP are public spaces where the Tidy Towns groups already carry out activities or wish to do so in the future.

Private spaces were also visited where that stakeholder was interested in participating e.g. Pitch and Putt Clubs, Scout Dens, Churches, Schools etc. Biodiversity reports were written for these private sites as part of this LBAP as these would prove to be valuable in terms of adding to the network of nature-friendly stepping stones across the whole Tidy Towns area. A list of these private site reports in Howth is found in Table 1.

Biodiversity Connectivity

Much of this Plan is focused on providing biodiversity connectivity across the Howth Tidy Towns area (Figure 7). By its nature, a LBAP is limited in size and thus must acknowledge man-made green connections between naturally occurring biodiversity to enable flora and fauna to adapt to change and survive.

'Biodiversity hotspots' in Howth were identified by the Tidy Towns group (Figure 8) and Actions to conserve and enhance their biodiversity identified (Tables 2 and 3). Naturally occurring or manmade linkages between these Hotspots and to other natural spaces were identified and informed Actions in this Plan. These man-made linkages are termed 'Green Infrastructure' and they are corridors along which animal and plant species can co-exist with man's uses of this same infrastructure e.g. train line, pedestrian or cycling pathway and football pitches.

Some Green Infrastructure corridors were identified within the Howth area while writing this Plan:

- Tramline pathway running alongside the eastern treeline boundary of Howth Castle Demesne
- Howth Pier Park pathway forming an important connection in Fingal's coastal pollinator corridor
- Éireann railway line connecting Howth with Sutton.

These are recreational corridors for pedestrians and cyclists or transport corridors with natural or planted boundaries, allowing for continuous biodiversity connectivity in an otherwise hard landscape.

These man-made green connections form links to connect naturally occurring biodiversity hotspots in this Local Biodiversity Action Plan.





Howth and its environment

Howth is a busy coastal town situated in the west of Fingal County. It is an active fishing village and is the largest fishing port on the Irish east coast. Howth is a major tourist destination in Fingal and its attractions include the lighthouse, local seafood restaurants, Howth Head hiking trails, Howth Castle, the National Transport Museum and boat trips to Ireland's Eye.

Natural biodiversity features in Howth include the impressive and imposing Howth Head. This is composed of the oldest rocks in Dublin where 500 million year old Cambrian shales and quartzites outcrop. Heathland with Bell heather (*Erica cinerea*), Ling Heather (*Calluna vulgaris*) and Westerm Gorse (*Ulex galii*) provide striking colour on Howth Head.

The Bogeen Stream rises in Thormanby Woods, runs along Gray's Lane and after being culverted under the Main St., enters the sea at Howth Harbour.

A number of areas of woodland occur within the Tidy Towns area e.g. 'Tedser's Hill' and the woodland adjcent Naomh Barróg GAA grounds.

The Tidy Towns group in Howth is very active and involved in biodiversity initiatives locally. It has already implemented many useful biodiversity actions and identified a number of locations that should to be conserved and interpreted.

Survey

Desktop survey:

A Desktop Study was carried out to research existing Howth biodiversity information. A review was taken of previous biodiversity surveys, of information relating to protected species and habitats and any National or Local policies or Plans that might impact biodiversity. The Desktop survey also attempted to identify and liaise with groups that might like to participate in the LBAP. Non-governmental Organisations (NGOs) were consulted to identify locations of wildlife and or notable flora and any challenges facing local flora and fauna were discussed. During this time, the true boundary of the Tidy Towns area was finalised with the help of the Tidy Towns groups.

The Desktop Survey noted the following information pertinent to Howth biodiversity:

- Howth Head Coast SPA (Site Code 4113)
- Howth Head SAC (Site Code 0202)
- Baldoyle Bay SAC (Site Code 0199)
- Howth Head SAAO
- Rare plants (Doogue, 2004)
 - Hard Curved Grass (Parapholis incurva) (Scarce)
 - Western Clover (*Trifolium occidentale*) (Scarce)
- Howth Demesne Woodland (McCourt and Kelly, 2008)

Google Earth Pro software was used to produce a map with the information derived from the Desktop Survey. Fingal County Council Development Plan (2017-2023) Open Spaces, High Amenity area, Nature Development Areas and Ecological Buffer Zones were added. Biodiversity hotspots identified by local groups were then added to this map to create a visualisation of potential wildlife corridors across Howth and to reveal major gaps in this connectivity.





Field survey:

A series of site visits was carried out so that areas of biodiversity that were important to the community were identified. As much of the Tidy Towns area was visited as possible.

Maps generated in the Desktop Survey phase were used to identify locations not suggested by Tidy Towns groups and these were visited for their potential biodiversity significance. The following categories of information were recorded during any site visit:

- Notable habitats/species (flora or fauna)
- Challenges to these notable habitats/species
- Existing uses if any of these identified habitats/sites
- Potential biodiversity outcomes for that site
- Wishlist of the Tidy Towns/Community Group
- Best practice methods to be employed at a location
- Potential for site enhancement for biodiversity

Many of the spaces of interest were quite small so habitat classification e,g. Fossit (2000) was not usually applied as could not be mapped on a large scale. Instead, 'Biodiversity Hotspots' were noted and described (Figure 8).

Community groups, Tidy Towns volunteers, Schools, churches, Scout troops and other interested also participated in these site visits on occasion. These stakeholders had been identified or came forward in the Desktop Survey phase of the project. Many of these groups offered to assist the Tidy Towns groups going forward e.g. Transition Year classes or Scout Troops. This was considered to be an important outcome of this LBAP as all the Tidy Towns groups stated that they were already overworked due to lack of volunteers and the age profile of volunteers. A list of biodiversity reports written for these participating groups' private lands such as Schools, Scout Dens etc. in Howth is included as Table 1 below.

Additional Biodiversity Report	Actions recommended Y/N	Report available Y/N			
Scoil Mhuire N.S.	Yes	Yes			
Howth Sea Scouts	Yes	Yes			
Howth Train Station	Yes	Yes			

Table 1: List of Biodiversity reports written for private stakeholders as part of the Howth LBAP

As a result of the site visits; a better understanding of the of the local community, of the local biodiversity and of previously unidentified biodiversity emerged. This allowed for the formulation of a Local Biodiversity Action Plan that would be specific to this particular Tidy Towns area and community.





Generic Actions and points to note for all Local Biodiversity Action Plans

a) Monitoring Actions and recording results

Any Community Group implementing biodiversity initiatives should familiarise themselves with the National Biodiversity Data Centre (NBDC) website (www.biodiversityireland.ie). It is here that many practical resources are made available to local groups. It is also here where biodiversity data are recorded. Community groups should monitor the effectiveness of their actions to see what is working and what is not. The best way to do this is to participate in Citizen Science surveys. Many of these are described on the NBDC website. The results of these surveys may change over the period of a project, thus giving us a picture of the effectiveness of efforts. Any wild species, whether flora or fauna, should be recorded on the NBDC website and any pollinator sites created within an area, should be logged on the All Ireland Pollinator Plan website (www.pollinators.ie).

This will create a true map of pollinator corridors across the country. Thus, Citizen Science surveys are not included in the Tables of Actions (Table 2 and Table 3) as it is a given that they will be conducted as part of this LBAP and results logged on the NBDC website. See Appendix 10 for a list of Citizen Science surveys and instructions on how to log results.

b) Actions Requiring Consent for SACs and SPAs

If your area falls within the boundary of a Special Area of Conservation (SAC) or Special Protection Area for birds (SPA), then certain activities that can be carried out here are limited without specific permission. There is a list of activities called Activities Requiring Consent (ARC) that cannot be carried out here without permission from the National Parks and Wildlife Service (NPWS). The list of ARCs is found in the Statutory Instrument (S.I) for that SAC or SPA (www.irishstatutebook.ie). Schedule 4 of the relevant S.I. will list the ARCs for that site.

Description of some of the projects in this Plan:

The Tables of agreed Actions to implement this Local Biodiversity Action Plan are given in Tables 2 and 3. Table 2 is the list of Actions to be undertaken by Fingal County Council over the 5 year period. Table 3 is the list of Actions that will be undertaken by the Tidy Towns Group, with the support of Fingal County Council and with the assistance of other named local community groups. As mentioned previously, private stakeholders such as Scouts, Churches and Schools will be implementing biodiversity actions and these participating groups are listed in Table 1.

Four of the larger Tidy Towns LBAP projects are described below. Detailed site reports are available for all areas of the LBAP and can be made available as a resource to implement all Actions in the Plan.

13 Appendices have been included at the back of this Plan. The objective of including these Appendices is to provide a practical tool to the Tidy Towns groups when carrying out the Actions.

There are myriad resources available to help groups and it can become overwhelming to figure out which to use. These Appendices have pulled together information from many sources so that a single location can be used as a source of practical guidance.

Target species are identified in Tables 2 and 3 to allow for monitoring of effectiveness of Actions.





1) Biodiversity Education Hub at Tramline 'Childrens' Area':

This space is called the 'Childrens' Area' for the purpose of this Plan. It is a large open green space with tree copses, a large area of bramble scrub, nettle beds and the treeline provided by Howth Castle Demesne boundary along the Tramline pathway. It has childrens' seating within one of the tree copses, hence its name. It lends itself to being a 'Biodiversity Education Hub' as many natural features and proposed Actions to be carried out here would act as educational tools to the public. This space is also very close to the Orchard and Community Garden behind Scoil Mhuire National School where there are a number of biodiversity actions already implemented and more recommended in this LBAP.

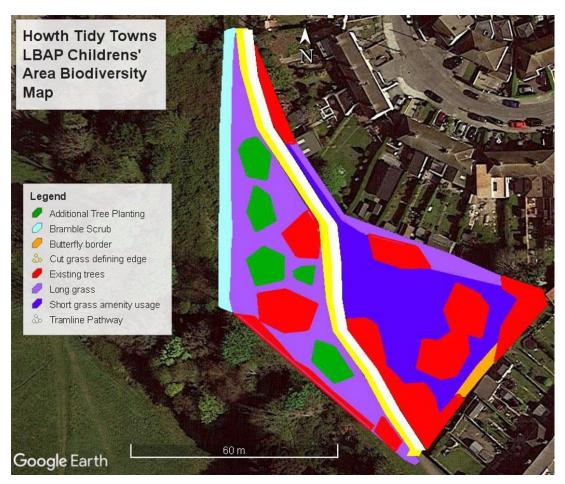


Figure 1: Proposed Biodiversity Education Hub at Tramline Pathway Childrens' Area

Actions proposed for this space include interpreting the nettle beds as important food and shelter habitats for butterflies. It is proposed to leave a wide border of uncut grass along the treeline with Howth Castle Demesne. A natural border along a treeline provides important transitional habitat to terrestrial mammals moving along the treeline as well as providing hibernation refuge for Queen Bumblebees and other invertebrates. It is also recommended adding to the existing tree copses with native Irish trees (Appendix 5). Bird and Bat boxes would provide additional nesting and roosting opportunities to these animal groups here as well as raising awareness about the needs of different bird species and our native bat species. An action for this space that is always popular with children is to create hedgehog corners comprising mounds of logs and leaves. Removal of excessive areas of Alexanders is also an action.







Figure 2a: Bramble scrub at 'Childrens' Area'



Figure 2b: Alexanders growing around tree at Childrens' Area

2) Howth Slopes:

A feature of Howth Tidy Towns' project area is the sloped landscaped spaces throughout the Tidy Towns area. The local Tidy Towns group has been working hard to keep these spaces natural and a number of initiatives are proposed in this Plan for these slopes.

Balkill Park slope, Grace O' Malley Drive slope, Courthouse slope, DART slope, Harbour Road slope and Howth Terrace slope are the sloped landscaped areas in question. These names have been given by the Tidy Towns groups for ease of identification. They are identified in Figure 8 in this Plan.

Some of the slopes are already managed for biodiversity with Fingal County Council carrying out one cut a year and removing the cuttings e.g. Balkill Park Slope. Others are managed solely by the Tidy Towns group e.g. Courthouse, Harbour Rd. and DART slopes. The DART slope is being over-run by Winter Heliotrope (*Petasites fragrans*) as is Harbour Rd. slope and the control of this plant is an action for these spaces. Grace O' Malley Drive slope is left uncut for biodiversity but is being taken over by Alexanders (*Smyrnium olusatrum*) so this needs to be managed. Winter Heliotrope and Alexanders are beneficial for pollinators but as they spread so fast and completely cover the soil, no other native flora can survive in their presence (Appendix 6).



Figure 3a: Winter heliotrope on DART Slope



Figure 3b: HTT managed side of Balkill Dr. Slope





Other actions identified for these slopes is the cessation of herbicide usage, plantingof wildlife friendly shrubs (Appendix 2), creating nesting places for solitary bees (Appendix 7), planting locally sourced Heather to reflect Howth Head vegetation and adding in rocks to create invertebrate, amphibian and reptile refuges and butterfly 'landing pads'.

3) Howth Tidy Towns Community Garden

This Tidy Towns initiative is an excellent example of a local community group working together with a school to provide a wonderful amenity space, biodiversity resource and educational tool to all involved. The Tidy Towns group has already planted an Orchard here with the help of the school children from Scoil Mhuire National School and a number of other biodiversity actions are proposed for this location. The Community Garden is bordered by a mature hedgerow which provides a wonderful habitat for flora and fauna and an educational tool to teach about sensitive hedgerow management for wildlife (Appendix 5).

Additional biodiversity actions proposed for this Community Garden include planting *Phacelia* which is a food plant for the Red Listed Large Carder Bee (*Bombus muscorum*) found along the Fingal coastline (Appendix 2). Growing sensory and edible plants here is a proposed action which not only benefits wildlife but also engages the local primary school children in an educational activity. Erecting bat and bird boxes in the hedgerow and orchard will teach about the individual needs of different bird species and our native bat species.



Figure 4a: Community Garden and Orchard



Figure 4b: School childrens' art in Community Garden



Figure 5: A mockup of some biodiversity initiatives for the Community Garden space

4) Howth Pier Park:

Howth Pier Park is a greenopen space which runs alongside Harbour Rd. in the village. It hosts thousands of visitors in the summer months who enjoy lying on the grass by the marina and soaking up the marine atmosphere. As a result of its heavy pedestrian footfall, it is not suited to many 'wild' planted spaces. However, a number of actions have been recommended for this much used amenity space that would compliment a biodiversity function.

The first and perhaps most important action is to cease using herbicide around the base of trees in this park. Howth Tidy Towns group aims to grow suitable wildlife friendly clump-forming plants at the base of these trees to create a biodiversity corridor along this park. The cessation of herbicide use is paramount to enable this action.









Figure 6a: Howth Pier Park

Figure 6b: HTT planting along low concrete bar

A Fisherman's Monument has been agreed for a location in this green space opposite Beshoffs Grill. This Plan recommends growing coastal native plants here on a 'shingle' substrate to give a maritime feel to the monument, to teach about our coastal flora and provide a stepping stone for pollinators along this green park space.

There is a long low concrete 'bar' bordering the green space along Harbour Rd. The Tidy Towns group has started planting a flower bed along this wall. This Plan recommends low growing pollinator friendly ground cover here (Appendix 2).

Adding some new coastal trees such as Oak, Ash or Whitebeam along this green space would provide food and shelter to myriad animals. These tree species are native Irish and tolerant of coastal conditions. A good location might be the less used eastern end of the park space.

Bird and bat boxes in the existing trees would provide much needed nesting and roosting space for a variety of bird and bat species.





Table 2: Fingal County Council Actions as part of Howth Tidy Towns Local Biodiversity Action Plan

Theme	Animals benefitting	No.	Action	Appendix	Location	I.D.	Year	Partners
Grass Maintenance Schedule Target species: • Bee species • Butterflies	A, B, BT, EF OIS,P, R, TM	1	Meadow cut once a year and remove cuttings	1	 Balkill Park Slope Grace O' Malley Drive Slope Tramline grass verges LHS of tramline at '*Childrens' Area' 	1 2 3 4	1-5	FCC
Target species: • Bee species	A, B, BT, EF OIS,P, R, TM	2	Leave long grass uncut	-	 Tree Copses at *'Childrens' Area' Widen uncut buffer along Tramline/ Howth Castle treeline 	4 3	1-5	FCC
Planting Schemes Target species: • Bee species • Butterflies	B, BT, OIS, P, R, TM	3	Howth Rd./Howth Pier Park pathway: • Wildlife bulbs/Large Carder Bee food	2	Howth Road wildflower area	5	1-5	FCC/HTT/Howth Sea Scouts/Santa Sabina Dominican Convent
			Wildlife friendly flowers		 Howth Pier Park pathway along low concrete wall FCC Street Planters Olympic Garden 	6 7 8		
			Coastal/Rockery plants		Fisheries Harbour MemorialCourthouse Slope	9		
			 Plant base of trees with wildlife friendly flowers 		Howth Pier Park pathway	6		

A: Amphibians e.g. Frog, Common Newt

AI: Aquatic Invertebrates

BT: Bats

EF: Endemic flora e.g. local wildflowers

OIS: Other Invertebrates and Spiders

P: Pollinators e.g. Bees, Moths, Butterflies, Hoverflies

B: Birds

R: Reptiles e.g. Common Lizard

TM: Terrestrial mammals e.g. Hedgehog, Shrew, Field Mouse, Fox, Badger *Childrens' Area: Open Space with

childrens' seats north of Grace O' Malley Drive ¹Community Garden behind Scoil Mhuire N.S. **BoCCI**: Birds of Conservation Concern Ireland

Annex IV:

Annex IV of EU Habitats Directive EU92/43/EEC



								Nator ecopali cialio.re
			Wildlife friendly Shrubs/Fruit bushes		DART Slope	11		
Target species: • Red List Large Carder Bee • Bee species • Butterflies	B, Bt, EF, OIS, P, TM	4	¹Community Garden: • Phacelia for Large Carder Bee • Sensitive hedgerow management	2	In defined areasBoundary hedge	12	2	FCC
Target species: • Bee species • Butterflies	B, Bt, OIS, P, TM	5	Howth Public Library: • Pollinator friendly flowers • Perennial herbaceous plants	2	Rear grassy slope LHS annual bedding plant flower bed	13	2	FCC/HTT/Howth Sea Scouts/Mafikeng Scouts
Biodiversity Education Hub at *'Childrens' Area' Target species: • Annex IV: Bats • Red List Large Carder Bee • Bee species • Butterflies	All	6	 Plant coastal tolerant trees e.g. Oak, Ash, Whitebeam Perennial wildlife planting Wildlife friendly bulbs/Large Carder Bee food Leave large area of bramble scrub uncut Leave nettle areas uncut 	2 2	*'Childrens' Area' along Tramline pathway	4	2-5	FCC/HTT/Howth Sea Scouts/Scoil Mhuire N.S.
Target groups: Unwanted and Invasive species	All	7	Trial alternatives to herbicide use	-	All Tramline	3	1-5	FCC

A: Amphibians e.g. Frog, Common Newt **EF**: Endemic flora e.g. local wildflowers

AI: Aquatic Invertebrates

B: Birds

BT: Bats

OIS: Other Invertebrates and Spiders

P: Pollinators e.g. Bees, Moths, Butterflies, Hoverflies

R: Reptiles e.g. Common Lizard TM: Terrestrial mammals e.g. Hedgehog, Shrew, Field Mouse, Fox, Badger *Childrens' Area: Open Space with childrens' seats north of Grace O' Malley Drive ¹Community Garden behind Scoil Mhuire N.S. **BoCCI**: Birds of Conservation Concern Ireland Annex IV: Annex IV of EU Habitats Directive EU92/43/EEC



								NatureCubsIreland.ie
			 Remove Winter Heliotrope and Snowberry Liaise with homeowners regarding garden waste 		Gray's Lane Tramline	3		
Target species: Annex IV: Bats	Bt	8a 8b	Bat boxes Countywide Urban Bat Survey	7	 Tramline along Castle treeline ¹Community Garden All 	3 12	2 1-5	FCC/HTT/Scouts/ Schools
Target species: BoCCI Amber List birds: • Tern species • Swifts	B, Bt, EF, OIS, P	9	Biodiverse Brown Roof Swift nest boxes	7	 Howth Pier Park Toilet Block flat roof DART Station flat roof Surface of Dungriffin Reservoir Howth Sea Scout Den 	15 16 17 18	2	FCC/Irish Rail/Irish Water FCC/Howth Sea Scouts
Target habitat: Freshwater	All	10	Bogeen Stream: • Actions from 2021 Fingal Wetland Study	-	Bogeen Stream along Gray's Lane	14	2-5	FCC
Education	All	11	Interpretation Panels	-	 Howth Road Wildflower area Balkill Park Slope Meadow side Tramline biodiversity/no garden waste Grace O' Malley Drive Slope meadow Childrens' Area at Tramline path 	5 1 3 2 4	2-5	FCC/Dublin Bay Biosphere
Target species: Birds	В	12	Countywide Bird Survey	-	• All	-	1-5	FCC/HTT/Scouts/School

A: Amphibians e.g. Frog, Common Newt

AI: Aquatic Invertebrates

B: Birds

BT: Bats

EF: Endemic flora e.g. local wildflowers

OIS: Other Invertebrates and Spiders

P: Pollinators e.g. Bees, Moths, Butterflies, Hoverflies

R: Reptiles e.g. Common Lizard

TM: Terrestrial mammals e.g. Hedgehog, Shrew, Field Mouse, Fox, Badger *Childrens' Area: Open Space with

childrens' seats north of Grace O' Malley Drive ¹Community Garden behind Scoil Mhuire N.S. **BoCCI**: Birds of Conservation Concern Ireland Annex IV: Annex IV of EU Habitats Directive EU92/43/EEC





Table 3: Howth Tidy Towns Group actions as part of Tidy Towns Local Biodiversity Action Plan

Theme	Animals benefitting	No.	Action	Appendix	Location	I.D.	Year	Partner
Target Group: Endemic Flora	All	T1	Control unwanted plant species: • Winter Heliotrope • Alexanders • 3 Cornered Garlic • Cleavers • Mare's Tail	6	 Tramline Grace O' Malley Drive Slope Balkill Drive Slope DART Slope Courthouse Slope Olympic garden 'Childrens' Area' along Tramline Slope along Howth Terrace Woods adjacent Binn Éadair GAA 	3 2 1 11 10 8 4 19 20	1-5	HTT/Santa Sabina Dominican Convent/Howth Sea Scouts
	All	T2	Sow locally collected wildflower seed	8	Sow at: • Howth Pier Park pathway flower beds • DART Slope	6 11	2-5	HTT/Santa Sabina Dominican Convent/Howth Sea Scouts
Target species: Hedgehog	A, B, H, OIS, P, TM, R	Т3	Log pile hibernaculum /Compost Corner	7	¹ Community garden	12	1	HTT/Scoil Mhuire N.S.
Target species: Solitary bees	OIS, P	T4	Solitary Bee nest site	7	Courthouse Slope logs	10	1	нтт
Target species: • Bees • Butterflies	B, Bt, OIS, P, TM	T5	Plant base of trees with wildlife friendly flowers	2	Balglass Road	21	2	НТТ
Education	All	Т6	Tramline biodiversity information leaflet	-	Tramline biodiversity/garden waste	3	3	HTT

A: Amphibians e.g. Frog, Common Newt **EF**: Endemic flora e.g. local wildflowers

OIS: Other Invertebrates and Spiders

AI: Aquatic Invertebrates

B: Birds **BT**: Bats **P**: Pollinators e.g. Bees, Moths, Butterflies, Hoverflies

R: Reptiles e.g. Common Lizard

TM: Terrestrial mammals e.g. Hedgehog, Shrew, Field Mouse, Fox, Badger

Tx: Tidy Towns Group Action





Maps generated as part of the Howth Tidy Towns Local Biodiversity Action Plan



Figure 7: Biodiversity Connectivity in Howth Tidy Towns Area



Figure 8: Biodiversity Hotspots identified in Howth Tidy Towns Local Biodiversity Action Plan







Figure 9: Howth Tidy Towns Local Biodiversity Action Plan Action Locations





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