



Malahide Tidy Towns Local Biodiversity Action Plan 2022-2027



An Action of the Fingal County Biodiversity Plan 2010-2015

Compiled by NatureCubsIreland



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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 All Ireland Pollinator Plan (AIPP) (2015-2020) and now 2021-2025, which provide tools to these 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 Malahide is found in Table 1.

Biodiversity Connectivity

Much of this Plan is focused on providing biodiversity connectivity across the Malahide Tidy Towns area (Figure 5). 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 Malahide were identified by the Tidy Towns group (Figure 6) and Actions to conserve and enhance their biodiversity identified (Tables 2 and 3). Naturally occurring or man-made linkages between these Hotspots and to other natural spaces were identified and informed Actions recommended 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.

A number of Green Infrastructure corridors were identified within the Malahide Tidy Towns area and with adjacent areas while writing this Plan:

- Iarnród Éireann railway line
- Coastal walkway bordering Malahide village with Broadmeadow Estuary

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



Malahide and its environment

Malahide is a coastal town situated on the east of Fingal County. It is a busy town that is a sought after residential location due to its beach location, Malahide Marina, Malahide Castle Demesne and views overlooking Broadmeadow Estuary.

Natural biodiversity features in Malahide include the Gaybrook Stream which is bordered by woodland habitat, Caves Marsh wetland and Dublin Bay. Man made biodiversity features include Malahide Demesne which has important woodland and semi natural grassland habitats. Embryonic sand dunes are forming along Malahide beach and Robswall Park supports hedgerows and meadows. Internationally protected Light bellied Brent Geese (*Branta bernicla hrota*) feed on grasslands in Robswalls Park each year.

The Tidy Towns group in Malahide 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 Malahide 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 Malahide biodiversity:

- Malahide Estuary Special Area of Conservation (SAC) (Site Code 0205)
- Malahide Estuary Special Protection Area (SPA) (Site Code 4025)
- Feeding areas of Light Bellied Brent Geese (*Branta bernicla hrota*) at Robswall Park
- Caves Marsh estuary
- Semi natural grassland at Malahide Demesne
- Species rich woodland at Malahide Demesne

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 Baldoyle 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
- Need for biodiversity interpretation

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 6).

A list of biodiversity reports written for private interested groups in Malahide is included as Table 1 below.

Additional Biodiversity Report	Actions recommended Y/N	Report available Y/N
Malahide Community School	Yes	Yes
Malahide Train Station	Yes	Yes

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

Caves Marsh within the Malahide Tidy Towns lies within the boundary of European protected Malahide Estuary Special Area of Conservation (SAC) and Malahide Estuary Special Protection Area for Birds (SPA). 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. Malahide Estuary SAC is the relevant SAC in this instance and the S.I. is No.S.I.91/2019. The list of ARCs is found in Schedule 4 of same. Malahide Estuary Special Protection area of Birds (SPA) is the relevant SPA for this site. S.I. 285/2011 is the Statutory Instrument for this SPA and the list of ARCs is found in Schedule 4 of same.

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) Robswall Park:

Robswall Park is a large 90 acre parkland along the eastern part of Malahide and connects Malahide with Portmarnock. Fingal County Council manages the park for amenity and biodiversity with large tracts of grassland grown as meadows. Hedgerows form natural field boundaries within the park. There is evidence of an underground stream in the park and this is mapped in the 1800s Ordnance Survey Maps. Internationally protected Brent Geese (*Branta bernicla hrota*) feed on Robswall Park grassland each winter (C. Merne, *pers. comm.*, 2021).



1a

Fig. 1a: Robswall Park meadow



1b

Fig. 1b: Gap in field boundary hedgerow



1c

Fig. 1c: Amenity and biodiversity management



1d

Fig. 1d: Evidence of stream

A number of actions are recommended in this LBAP for Robswall Park. One of these is to demonstrate different types of meadow management (Appendix 1). Meadows can have a 'short cut and lift' every 6 weeks or can be managed as a 'Hay meadow' that is cut and lift once or twice a year.

Another recommended action is to ensure that grassland is managed for Brent Geese. It is important that areas historically used by Brent Geese for feeding are not managed as meadows but kept at a length suitable for Brent Geese (Appendix 3).

It is recommended that the old field boundary hedgerows are managed sensitively for wildlife (Appendix 5). Any gaps should be either planted with native hedgerow species or hedgerow laying methods could be employed here.



2) Caves Marsh:

Cave's Marsh is situated on the southern boundary of the Broadmeadow Estuary. It is part of Malahide Estuary Special Area of Conservation (SAC) and Special Protection Area for Birds (SPA). The SAC is a European protected site under the EU Habitats Directive and the SPA designated for Internationally Important numbers of waterfowl under the EU Birds Directive. The Marsh occurs where the Gaybrook River joins Dublin Bay and forms a natural wetland. The Marsh is bounded to the north by a public pathway which is heavily used by walkers and joggers. Sea Road forms the eastern boundary of Caves Marsh. A mosaic of habitats is evident at Caves Marsh including Saltmarsh, Wet grassland, Brackish pools and a Freshwater Marsh (Pierce and Roe, 2007).

Actions recommended for Caves Marsh as part of this LBAP are mindful of its protected European status. Certain activities called Activities Requiring Consent, require permission from the National Parks and Wildlife Service at European protected sites. It is recommended that a Feasibility Study is conducted into the development of a new pathway over Caves Marsh. School children cross the Marsh daily from housing estates to Pope John Paul II School across the Marsh. The pathway made by joggers and walkers is encroaching into the Marsh habitats and potentially disturbing waterfowl.

The Marsh has dense growth of Winter Heliotrope (*Petasites fragrans*). This is preventing other native flora from growing here (Appendix 6). Methods of control should be investigated and under guidance considering the protected status of the Marsh.



2a

Figure 2a: Swan nesting in Caves Marsh



2b

Figure 2b: Caves Marsh where it meets Broadmeadow Estuary



2c

Figure 2c: Winter heliotrope extending across Caves Marsh



2d

Figure 2d: Pathway encroaching onto Marsh habitats

3) Malahide Beach green space:

This is the name given to the long open green space running between the Coast Rd. and Malahide Beach for the purpose of this LBAP. On the western side is the beach with a mix of shingle substrate and sand, vertical sand banks, coastal vegetation and on the other side is the Coast Rd. Malahide Tidy Towns group has been working closely with Fingal County Council to leave large swathes of grass uncut here. The result is excellent. Pyramidal orchids are blooming in numerous locations (*pers. obs.*, 2021) and there is a good diversity of wild flora. Small tree copses are dotted here and there but it is mostly an open green space. Embryonic sand dunes are attempting to form at the top of the beach along the most western part of the grass area and numerous coastal flora are growing here.



3a

Fig. 3a: Swathes of meadow at Malahide green space



3b

3b: Pyramidal Orchid at Malahide Beach green space



3c



3d

Figure 3c: Embryonic Sand Dunes forming at top of beach

Figure 3d: Tree Copse in Malahide Beach green space

Actions recommended for this open green space include the planting of more trees (Appendix 5), leaving an uncut buffer zone along the top of the beach to allow Embryonic sand dunes to form (Appendix 11) and creating a defined shape for the meadow (Appendix 1). Control of Soapwort before it further spreads is recommended as it is still only present in a single location along the top of the beach. Removal of Sycamore saplings is also recommended before they mature (Appendix 6). Sowing of locally sourced Kidney Vetch seed (Appendix 8) on the sand dunes is recommended as a food source for the Red Listed Large Carder Bee (*Bombus muscorum*).

4) Seabury Park:

This Park is a medium sized park along the northern edge of the Seabury area of Malahide. Old Yellow Walls Rd. forms its southern boundary and Broadmeadow Estuary is its northern boundary. There is a woodland area which has childrens' seating throughout thus lending itself to a natural outdoor classroom space. This woodland has much Alexanders (*Smyrniun olusatrum*) growing around the base of the trees. Fingal County Council manages an area of grassland in the eastern half as a pollinator meadow. A woodland borders the eastern boundary but its ownership is as yet unidentified.

Seabury Tidy District Group works very hard throughout the adjacent Seabury residential area and has undertaken many biodiversity initiatives. This group is eager to develop biodiversity at Seabury Park. A border of perennial wildlife friendly flowers has been planted along the southern boundary fence and the Group is eager to develop the eastern woodland as a biodiversity educational resource, if ownership can be ascertained.

Biodiversity actions recommended for Seabury Park were developed in tandem with Seabury Tidy District Group and Malahide Tidy Towns Group. One of the first actions for this park is to remove Alexanders from growing in the tree copses. Although this plant is beneficial to pollinators it can take over from other native flora and it is already in abundance in this location. Due to the mosaic of interesting habitats in the park, a Nature Trail throughout the park is considered to be a useful action. If ownership of the eastern woodland can be identified, the groups would like to apply for a Neighbourhood Grant to develop this woodland as a biodiversity educational resource.



4a



4b



4c

**Fig. 4a: Pollinator meadow at Seabury Pk. Fig. 4b: Perennial planting by MTT/STDG at Seabury Pk.
Fig. 4c: Alexanders growing around trees in Seabury Park**



Table 2: Fingal County Council Actions as part of Malahide 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	• Robswalls Park	1	1-5	FCC
					• Coast Rd. Portmarnock to Malahide	2		
					• Lissadell Park	3		
					• Seabury Park	4		
					• Malahide Beach Park	5		
					• Malahide Casino	6		
Target species: • Bee species	A, B, BT, EF OIS,P, R, TM	2	Leave long grass uncut	-	• Seabury Park in tree copse	4	1-5	FCC
					• Malahide Casino in tree copse	6		
					• Lissadell Park along treeline	3		
					• Malahide Beach Park at top of beach	5		
Target species: Brent Geese	B	3	Manage grass for Brent Geese	3	• Robswalls Estate	7	1-5	FCC/Irish Brent Geese Research Group
					• Robswalls Coast Road	8		
Planting Schemes Target species: • Bee species • Butterflies	B, BT, OIS, P, TM	4	Wildlife planting: • Perennial planting • Coastal plants • Plant base of street trees with wildlife friendly plants	2	• Flower bed adjacent Malahide Tennis Club	9	2	FCC/MTT/ Seabury Tidy District Group/Malahide Community School/ 9 th Port Malahide Scouts
					• Formal flower bed in front of the Grand Hotel	10		
					• Start of coastal walkway	11		
					• Various residential streets	-		

A: Amphibians e.g. Frog, Common Newt

EF: Endemic flora e.g. local wildflowers

R: Reptiles e.g. Common Lizard

BoCCI: Birds of Conservation Concern Ireland

AI: Aquatic Invertebrates

OIS: Other Invertebrates and Spiders

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

Annex IV: Annex IV of EU Habitats Directive EU92/43/EEC

B: Birds

BT: Bats

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



	B, BT, OIS, P	5	Trees: • Plant coastal tolerant trees: Whitebeam, Oak, Ash	2, 5	• Malahide Beach Park tree copses	5	2	FCC
Robswalls Park Target species: • Bee species • Butterflies	All	6	• Fill gaps in hedgerow with native trees or hedgelaying • Demonstrate different grass management methods	5 1	• Robswalls Park hedgerows • Agreed locations in Robswalls Pk.	1	3-5	FCC
Target habitat: Wetland habitats	All All	7 8	Management Plan for Cave's Marsh Management Plan of Gaybrook Stream Linear Park	- -	Caves Marsh recreational and protected areas Millview, Seabury, Castle Cove, Milford, Hillcrest Estates.	12 13	3 1	FCC FCC/ MTT/Seabury Tidy District Group/Millview Residents' Assoc./Killeen Residents' Assoc.
Target species: Annex IV Bat	Bt	9a 9b	• Bat boxes • Countywide Bat Survey	7	• Seabury Park • Malahide Beach Park • Robswalls Park • All	4 5 1	2 1-5	FCC/MTT/Schools/ Scouts
Target Group: Unwanted and Invasive plant species	All	10	• Trial alternatives to herbicide use • Remove Japanese Knotweed	- 6	• All • Malahide Community School	- 14	1-5 1	FCC

A: Amphibians e.g. Frog, Common Newt

EF: Endemic flora e.g. local wildflowers

R: Reptiles e.g. Common Lizard

BoCCI: Birds of Conservation Concern Ireland

AI: Aquatic Invertebrates

OIS: Other Invertebrates and Spiders

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

Annex IV: Annex IV of EU Habitats Directive EU92/43/EEC

B: Birds

BT: Bats

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



Education	All	11	Interpretation Panels:	-	<ul style="list-style-type: none"> • Seabury Park habitats • Lissadell Park • Robswalls Park • Malahide Beach Park • Coastal Walkway • In front of Grand Hotel • Adjacent Malahide Tennis Club 	4 3 1 5 11 10 9	3	FCC/Dublin Bay Biosphere/MTT/Seabury Tidy District Group/Malahide Community School
Target Species: Birds	B	12	Countywide Bird Survey	-	• All	-	1-5	FCC/MTT/Schools/Scouts

A: Amphibians e.g. Frog, Common Newt

EF: Endemic flora e.g. local wildflowers

R: Reptiles e.g. Common Lizard

BoCCI: Birds of Conservation Concern Ireland

AI: Aquatic Invertebrates

OIS: Other Invertebrates and Spiders

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B: Birds

BT: Bats

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



Table 3: Malahide Tidy Towns Group actions as part of 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 on beach: <ul style="list-style-type: none"> • Sycamore saplings • Sea Buckthorn • Soapflower • Winter Heliotrope • Alexanders • Sea Buckthorn • Mare's Tail 	6	<ul style="list-style-type: none"> • Malahide Beach • Seabury Park • Swords Rd. from Swords Boat Club to Old Yellow Walls Rd. • Cave's Marsh • Sonesta Park • Malahide Community School • Coastal Walkway 	15 4 16 12 17 14 11	1-5	MTT/Malahide Community School/ 9 th Port Malahide Scouts
	All	T2	Clear space for woodland flora	2	Lissadell Park Woodland	3	2	MTT/9 th Port Malahide Scouts
	All	T3	Apply for Neighbourwood Scheme funding	-	<ul style="list-style-type: none"> • Lissadell Park Woodland • Woodland at east of Seabury Park 	3 17	3	MTT
Target species: • Red List Large Carder Bee	P	T4	Plant Kidney Vetch Seed for Large Carder Bee	2	Malahide Beach Embryonic Sand Dunes	15	2	MTT

A: Amphibians e.g. Frog, Common Newt
EF: Endemic flora e.g. local wildflowers
R: Reptiles e.g. Common Lizard

AI: Aquatic Invertebrates
OIS: Other Invertebrates and Spiders
TM: Terrestrial mammals e.g. Hedgehog, Shrew, Field Mouse, Fox, Badger

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

BT: Bats
Tx: Tidy Towns Group Action



Target species: • Hedgehog	A, B, Bt, OIS, P, R, TM	T5	Log pile hibernaculum /Compost corner	7	Adjacent Malahide Tennis Club	9	3	MTT/9 th Port Malahide Scouts
Target species: • Solitary Bees	P, OIS	T6	Drill holes for solitary bees	7	Logs adjacent Tennis Club	9	2	MTT
Target BoCCI Amber List birds: • Sand martins	B	T7	Monitor nest occupation	-	Beach concrete wall	18	1-5	MTT
Target habitat: Wetland habitat	All	T8	Restore wet area at west end of Sonesta Park	-	Sonesta Park	17	2	MTT/FCC/Malahide Community School
Education	All	T9	Interpretation	-	Malahide Biodiversity Hotspots Information leaflet & App.	-	3	MTT/Malahide Community School
	All	T10	Malahide Biodiversity Colouring Pages	-	Pubs and restaurants	-	3	MTT
	All	T11	BioBlitz & Information Leaflet	12	Lissadell Park	3	2	MTT

A: Amphibians e.g. Frog, Common Newt
EF: Endemic flora e.g. local wildflowers
R: Reptiles e.g. Common Lizard

AI: Aquatic Invertebrates
OIS: Other Invertebrates and Spiders
TM: Terrestrial mammals e.g. Hedgehog, Shrew, Field Mouse, Fox, Badger

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

Tx: Tidy Towns Group Action



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

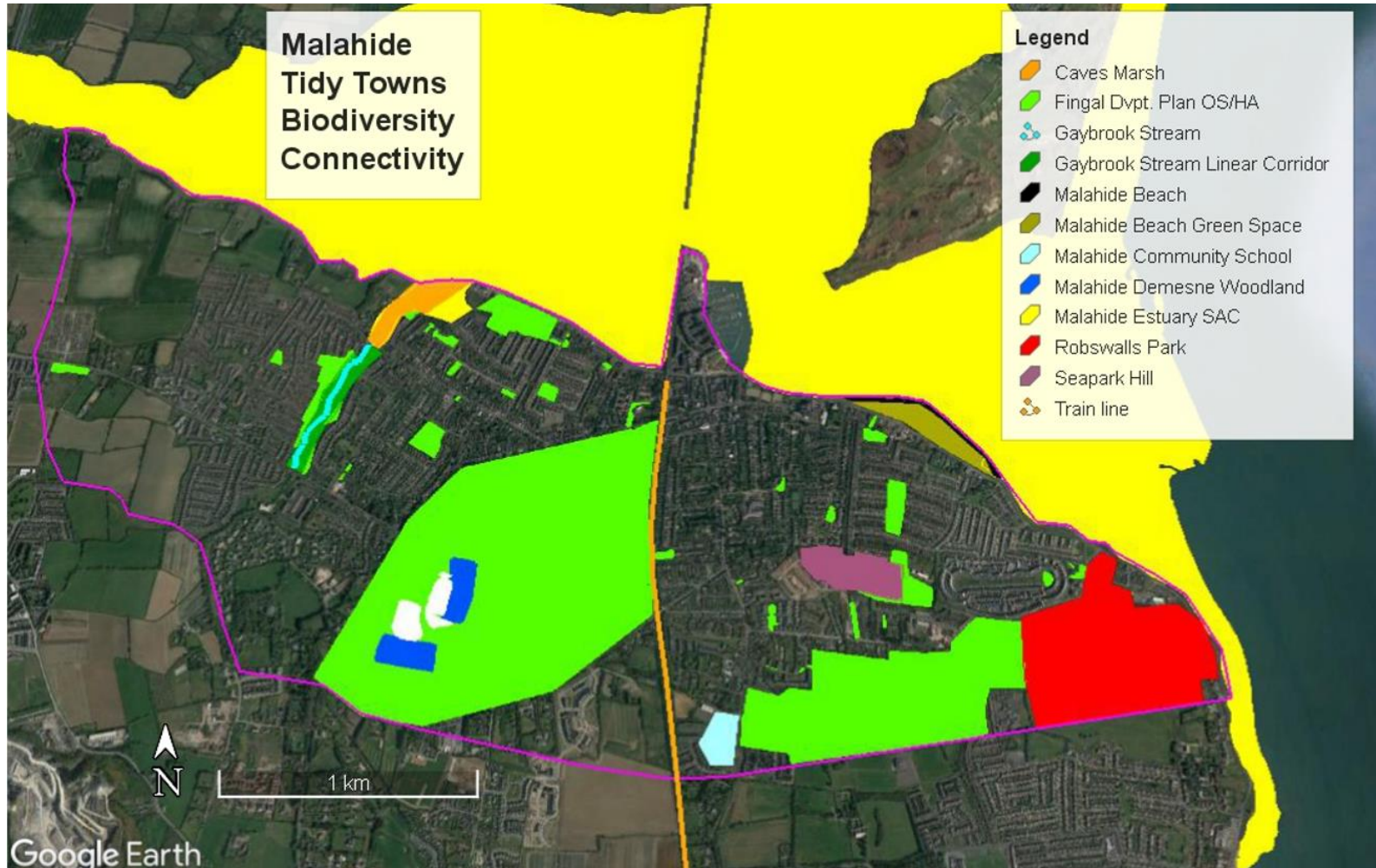


Figure 5: Biodiversity Connectivity in Malahide Tidy Towns Area

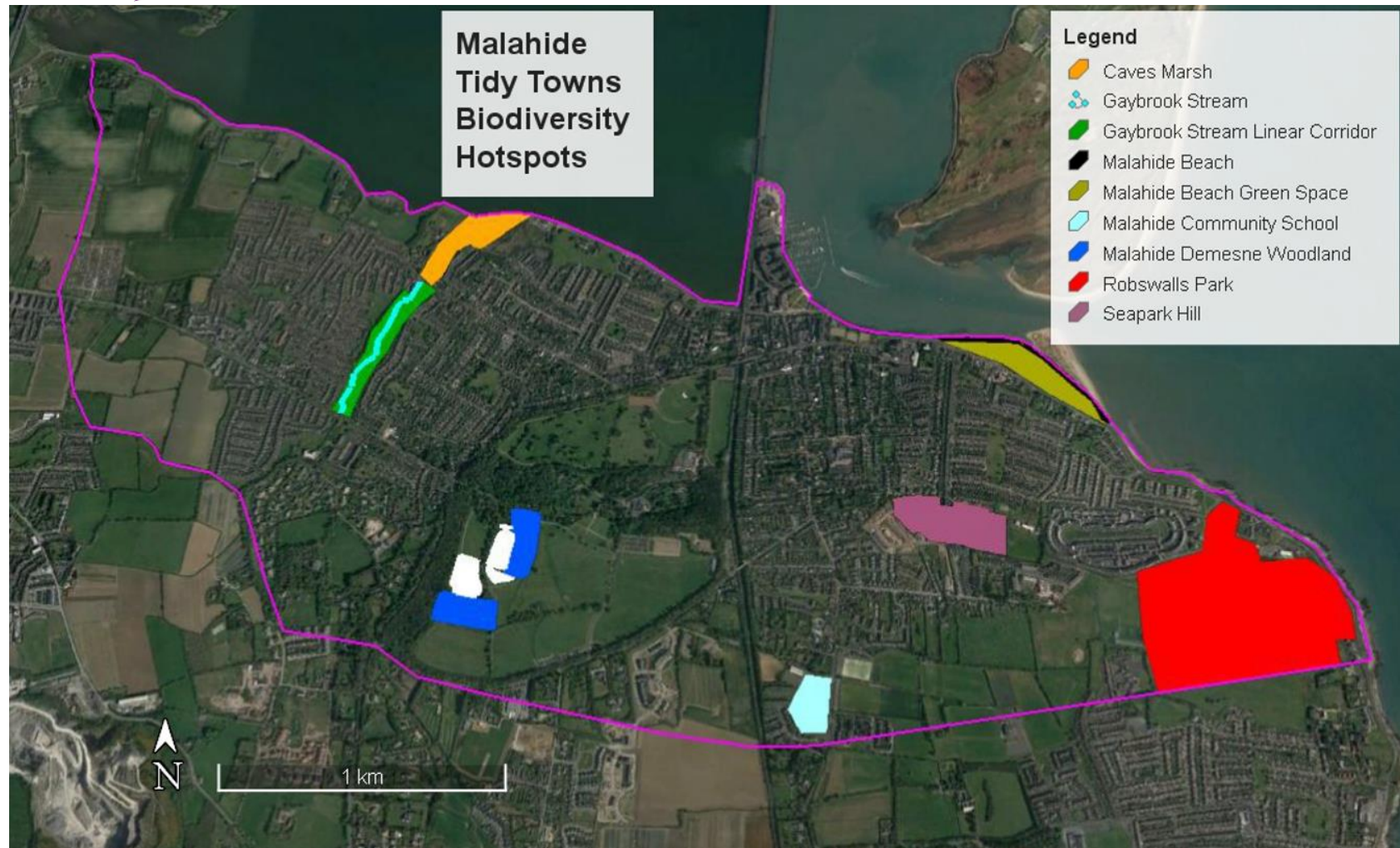


Figure 6: Biodiversity Hotspots identified in Malahide Tidy Towns Local Biodiversity Action Plan



Figure 7: Malahide Tidy Towns Local Biodiversity Action Plan Action Locations



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