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Acknowledgements

Sincere thanks to all in the Passage West community who took the time to consider how they would like to help nature in Passage West. Whether this was by completing survey forms, attending meetings or providing feedback on drafts your input was of immense value in completing this plan.

For comments and suggestions thank you to Sharon Casey, Biodiversity Officer, Cork County Council and Madeleine Healy, Area Engineer, Cork County Council and Tom Gittings Ecological Consultant.

Photographs of Passage West and Passage West wildlife courtesy of Tim Holloway.







Introduction

From September to December 2017, a dynamic community led strategic planning process was facilitated by SECAD Partnership CLG in conjunction with Cork County Council and the communities of Passage West and Carrigtwohill.

In the Passage West Community, this planning process led to the development of a strategic five-year Town and Village Renewal Plan based on inputs from people living in the community, people working in the community, people providing volunteer and community-based services and people that are providing services to the communities such as Cork County Council and education, health and other service providers.

One of the actions in the Town and Village Renewal Plan was to produce a standalone Biodiversity Action Plan for Passage West. This document outlines biodiversity actions, and associated information related to the biodiversity theme in the Town and Village Renewal Plan.

About Passage West

Passage West is a residential area c.14km south of Cork City centre located on the western shores of Cork Harbour. Passage West is located upstream of both Glenbrook and Monkstown and all three places are contained within a single development boundary in the Ballincollig – Carrigaline Municipal District Local Area Plan 2017 (Cork County Council, 2017).

Passage West is an important residential alternative to Cork City and its environs, particularly Douglas.

The landscape of Passage West is designated as scenic and provides an excellent opportunity to develop as a vibrant place to live.

Recent housing development has typically been in the form of large housing estate developments.

Passage West has historically been of importance as an industrial, shipbuilding and railway terminus, but this has gone into decline over the years (Cork County Council, 2017).





What is Biodiversity?

This is a shorthand way of saying 'biological diversity'.

But what does that mean?

A simple way to describe 'biological diversity' is to say it means all the different types and individuals of living things on the planet, the places they live and the ways they live with each other.

An even simpler way to describe biodiversity might be 'Nature'!

What do Biodiversity Action Plans generally do?

In general Biodiversity Action Plans look at what species and habitats are in an area and what issues there might be for species and habitats in that area.

A good plan will then identify what actions are needed to address any issues, who is going to carry out the actions and in what timeframe as well as what resources are needed to carry out the plan, and who can help.

A local Biodiversity Action plan such as this one might choose to look at what can be done to enhance the local area to benefit biodiversity, but actions will still need to be identified as well as the who, when and how.

Not everything a group might like to do may be achievable at once, so it is a good idea to prioritise actions based on resources available.

A good local Biodiversity Action Plan also makes sure that we don't harm nature when we want to help nature.

Making a plan means we have to think about nature in our area, how we would like to help nature in our area and helps us keep track of the actions we take to help nature.

Ideally making a local Biodiversity Action Plan means we learn more about nature in our area, value nature in our area more and conserve and enhance nature in our area more.

Biodiversity Action Plans such as this should be reviewed every 5 years, as that provides an opportunity to look at what has been achieved and to look at issues still to be worked on, and how future actions might be resourced.





Why do we need Biodiversity Action Plans?

1950s- It is increasingly noticed that the way people live on the planet is damaging other species and the places those species need to live. It is realised that this damage is also a problem for people.

1980s- Under the United Nations, people across the planet decide to take action to protect all species, the places they live and the ways they live together.

1992- Ireland is one of 168 parties that sign up to the Convention on Biological Diversity which is designed to make sure that

- Biodiversity is protected,
- Biodiversity is kept safe for future generations,
- The benefits of Biodiversity are shared equally.

The idea of preparing Biodiversity Action Plans comes from the Convention on Biological Diversity

2002 - Ireland makes its first National Biodiversity Action Plan. This plan says that Local Authorities, like Cork County Council, need to prepare Biodiversity Action Plans too.

2009 - First Biodiversity Action Plan for County Cork is published.

The Cork County Biodiversity Action Plan says that to make sure the plan works, lots of organisations and people need to get involved (Cork County Council, 2009).

Lots of groups of people doing a little (or a lot!!) at a local level can make a huge positive impact for nature at county, country and global level.







Boundary considerations regarding biodiversity features

In terms of how nature functions, places in Passage West may be of importance not just within Passage West itself, but as part of a network of interconnected habitats located locally, regionally and internationally. Likewise, people from the Passage West community value biodiversity features both within and outside their town boundary.

In producing this draft biodiversity action plan, Wild Work has taken an open approach in identifying features of biodiversity interest and have not stuck within a defined geographic boundary. If a place has been highlighted as being of importance to people and biodiversity in Passage West, then it has been included in the potential actions within this draft of the plan. The centre of Passage West has been used as the starting point and then the identification of all habitats and species of interest has been based on what people in the community have suggested are places of importance. The result of this approach is that some of the places identified in the document are not located within Passage West itself. However, for the purposes of the mapping and text in this document, and following consultation with local representatives, the current (2017) development boundary used in Cork County Council planning for Passage West / Glenbrook / Monkstown as far south as Alec Day Park was used to define proposed biodiversity actions 'in Passage West' versus 'outside'.

Land ownership and necessary approval considerations

As part of the consultation process for this plan, the local community suggested areas of biodiversity interest that are in both public and private ownership.

No actions listed in this plan should be undertaken without prior agreement being sought from the landowner(s).

Where necessary approvals should also be sought from bodies such as:

- National Monuments Service
- National Parks and Wildlife Service
- Office of Public Works
- Port of Cork
- Inland Fisheries Ireland
- Cork County Council
- Note that this is not an exhaustive list and other bodies / individuals may need to be consulted.



Note on Irish environmental law

In terms of legislation that protects areas of biodiversity value in Ireland, there are four main types of categories that people should be aware of: proposed Natural Heritage Areas (pNHA's) and Natural Heritage Areas (NHA's) under the Irish Wildlife Act (Irish Statute Book, 1976); and Special Protection Areas (SPA's) and Special Areas of Conservation (SAC's) transposed into Irish law under the European Communities (Birds and Habitats Regulations) 2011 (Irish Statute Book, 2011).

In addition to regulations concerning the protection of habitats, species and sites of conservation importance, European Communities (Birds and Habitats Regulations) 2011 (Irish Statute Book, 2011) also contains regulations related to the sale, distribution and dispersal of invasive species.

Further details are available on the National Parks and Wildlife Service website, the most relevant of which can be found at this link: https://www.npws.ie/protected-sites/nha







What is in this Biodiversity Action Plan?

Community input

As mentioned previously, this Biodiversity Action Plan was produced as part of the process of developing a strategic Town and Village Renewal Plan. Community consultation was of prime importance and people of all ages and from all types of backgrounds were included in the process.

To this end, for the Biodiversity Action Plan, opinion was sought by face to face engagement with members of the community, through biodiversity related questions embedded in an online survey, and through opportunities offered to comment on draft versions of the Biodiversity Action Plan.

The biodiversity related questions embedded in the online survey were:

- In Passage West, where do you think are the most important places for nature and biodiversity?
- In Passage West, where do you think there are places with improvement potential for nature and biodiversity?

A total of 199 respondents from Passage West provided a response to one or both of these questions. As these were open ended questions the responses did not always fit the aim of the two questions above. Consequently, all responses were aggregated and grouped into locations / themes by the authors of this Biodiversity Action Plan.

An indicative graph of the processed responses may be seen in Fig.1 in section 'Biodiversity Locations and Themes of Importance Identified by the Community through Online Survey' below.

In addition to identifying places, as part of the collaborative process of developing this plan, the community highlighted issues of concern and gave suggestions for many actions. All community submissions and feedback have been integrated into the 'actions identified' section.





A sample selection of what members of the community had to say:

"Community gardens would be great in the Passage West area and if we had space then allotments would be magic! Something needs to be done to address mental health issues and I understand not everyone likes growing veg, but everyone eats vegetables and everyone can be involved. Through a community garden, other activities can blossom; fruit picking, jam making, veg stalls and kid's activities. Growing your own food is amazing, tastes better and is better for your health and the environment. It creates resilience within a community."

"A place known locally as 'Suez Pond' was a great place for water fowl. In the Spring, birds built their nests in the rushes. The odd Kingfisher can still be seen there."

"Continued eradication of knotweed which is still evident in some places."

"Additional suitable native planting in the town centre."

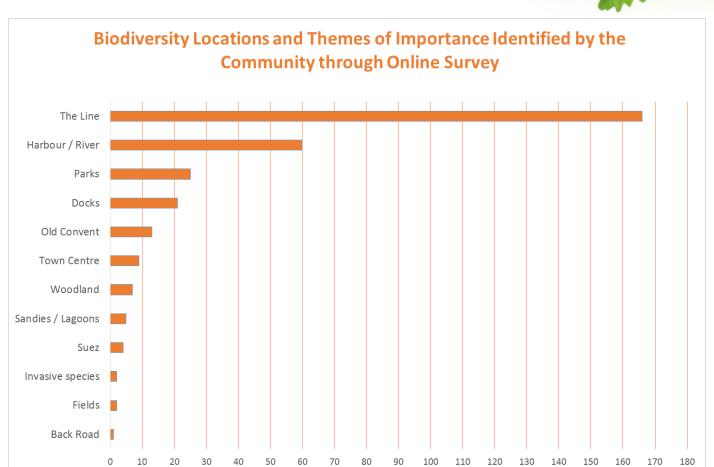
"Remaining wooded areas should be preserved."

"Green areas near estates and on shoreline are very important."









Number of Mentions

Figure 1 Biodiversity Locations and Themes of Importance Identified by the Community through Online Survey





Biodiversity information of interest about Passage West

Details of protected sites

Passage West is located right on Cork Harbour. Much of Cork Harbour is recognised as being internationally important for habitats and species, particularly bird species. Cork Harbour Special Protection Area lies just to the north of Passage West and just to the south of Monkstown (NPWS, 2017 a).

Special Protection Areas (SPAs) are part of a European-wide network of sites called Natura 2000 that are given legal protection for their habitats and species under European Directives commonly known as the Habitats Directive (European Commission, 2017 a) and the Birds Directive (European Commission, 2017 b).

Special Protection Areas derive from the Birds Directive and are intended to aid the conservation of bird species in particular.

The mudflats and saltmarshes in Cork Harbour SPA provide a home for a large number and diversity of invertebrates, mainly marine worms, clams, shrimp and snails. These provide great food for resident and migrating bird species (NPWS, 2015). Grasslands, wetlands and woodlands around the area provide roosting or feeding places for birds as well as habitat for other animal and plant species.

Within the town itself, there is little habitat for the migrating and resident wading and other wetland birds for which Cork Harbour is internationally renowned and protected, as there are only small strips of mud, sand and gravel exposed at low tide along the seafront. Birds do utilise the channel between Lough Mahon and the lower harbour, and birds such as Cormorant (*Phalacrocorax carbo*) will roost on quays, rocks etc. along the shoreline (Tom Gittings pers. comm.). Monkstown Creek, just south of Passage West and the shore off the Blackrock to Passage West Amenity Walk to the north provide ideal habitat in significant quantity.

Species of conservation importance

At least 90 bird species have been recorded in and around Passage West, over half of which are protected species and / or of conservation concern (NBDC, 2017).

Many species such as such as the Robin (*Erithacus rubecula*), House Sparrow (*Passer domesticus*), Pied Wagtail (*Motacilla alba*) and Song Thrush (*Turdus philomelos*) may be familiar to most of us. In the Passage West area wintering wildfowl of international conservation importance are, relatively, common. In



addition to this diversity some remarkable birds of prey have also been recorded in the area including the Peregrine Falcon (*Falco peregrinus*) and the Merlin (*Falco columbarius*) (NBDC, 2017).

Mammals such as Badger (*Meles meles*), Rabbit (*Oryctolagus cuniculus*), Fox (*Vulpes vulpes*), Hedgehog (*Erinaceus europaeus*), Red Squirrel (*Sciurus vulgaris*), Hare (*Lepus timidus hibernicus*), and Otter (*Lutra lutra*) have all been recorded in and around Passage West. Because Passage West is right on the harbour, marine mammals such as Grey Seal (*Halichoerus grypus*), Common Seal (*Phoca vitulina*), Common Dolphin (*Delphinus delphis*) and Bottlenose Dolphin (*Tursiops truncatus*) might be glimpsed from time to time (NBDC, 2017).

Four species of bat, out of the 9 native Irish bat species, have been recorded here and it possible that others remain to be recorded (NBDC, 2017). The old reservoir adjacent to the greens of the Golf Course provide potential hunting ground for Daubenton's Bat (*Myotis daubentonii*). The Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is usually only found in more Western parts of Ireland (Bat Conservation Ireland, 2017), (NBDC, 2017). This is the only native species that roosts hanging upside down with its wings wrapped around it (Bat Conservation Ireland, 2017). It is starting to increase its range and has been recorded in Ballincollig just west of Cork city in the last 5 years (NBDC, 2017). Passage West and surrounding areas have the older buildings and broadleaved woodland this species shows a preference for, so it could be recorded here in the near future.

Under the Habitats Directive mentioned above, all species of bat, all species of whale and dolphin as well as the Otter have strict protection, however in Ireland most mammal species are afforded some level of protection under Wildlife Protection and / or Animal Cruelty laws (NPWS, 2017 b), (Wildlife Crime, 2017).

Geology

The bedrock that Passage West sits on is Old Red Sandstone. In the agricultural land behind the town the soil is acid brown earth, however the slopes on which most of the town is built has a very thin soil (NBDC, 2017).





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Hydrology

The Glounatouig (or Hilltown) stream is the closest freshwater stream, and is located south of Monkstown at Raffeen. The Glenatouig stream is not currently monitored as part of EPA water quality monitoring (EPA, 2017). An assessment of sections of the Glounatouig as part of an Environmental Impact Statement prepared by RPS consultants in connection with a proposed redevelopment of the N28 road (RPS, 2017) had the status of water in the stream as Q value 3-4 i.e. moderate slightly polluted. This information is contained in Appendix 10B 'Habitat Assessment Survey Results' of the Environmental Impact Statement.

The most significant water body connected with Passage West is the harbour. At Passage West, for Transitional Waterbody quality monitoring under the Water Framework Directive (European Commission, 2017 c), this is referred to as Lough Mahon. The most recent, available Water Framework Directive Assessment (2010-2015), (catchments.ie, 2017) has this water body assessed as 'Moderate'.

Details of any relevant past surveys

In 2000 the Heritage Council in Ireland introduced a standardised system for classifying habitats in Ireland. This is 'A Guide to Habitats in Ireland' by Julie. A. Fossitt (Fossitt, 2000). As well as a name for each habitat, each is given a code. These codes are used in this Biodiversity Action Plan. In 2005 Cork County Council started an ambitious project to map habitats in the county according to the new classification system (Cork County Council, 2017b), (NBDC, 2017). This mapping can be viewed online at the National Biodiversity Data Centre 'Biodiversity Maps' section under 'Habitats', then 'Fossitt Habitats'.

As might be expected in and around an urban centre, habitat types such as Cultivated Land (BC) and Built Land (BL), Disturbed Ground (ED) and Improved Grassland (GA) were recorded inside the current Passage West / Glenbrook / Monkstown development boundary. There is also a lot of tree cover within the current development boundary. The majority of the more established wooded areas are planted and / or composed primarily of non-native species. Many of these would be classified as Highly Modified / Non-native Woodland (WD). However in an urban context, this type of woodland still provides important habitat for native wildlife.







Other habitats recorded within the Passage West boundary include:

- Dense Bracken (HD1)
- Scrub (WS1)

The Cork County Council Habitat Survey shows that outside of the Passage West boundary, but connected or adjacent to it, there is a wider variety of semi-natural habitats.

These included:

- Brackish Waters (CW1)
- Littoral Sediment (LS1)
- Sublittoral Sediment (SS3)
- Marine Water (MW4)

Lakes and Ponds (FL7). This refers to the old reservoir within the grounds of Monkstown Golf Club which, although originally man-made, now has the character of a natural water body. Although not often mapped on the Cork County Council habitat survey for the immediate area, Hedgerows (WL1) are connected to the Passage West boundary. There is Eroding \ upland Rivers (FW1) close to, but outside, the boundary.

The closest Eroding \ Upland Rivers (FW1) feature is the Glounatouig stream at Raffeen. See Hydrology section above for a description of this stream.

Due to their landscape importance, there are a number of wooded and open / scrub areas, as well as Monkstown golf course that are protected from development under Cork County Council Ballincollig / Carrigaline LAP 2017-2020 (Cork County Council, 2017 b)





The Actions

The actions listed in this plan have been produced based on the following:

- 1. Submission of ideas from community stakeholders during consultation
- 2. Individual submissions made via online survey questionnaires
- 3. Desktop research by Wild Work

As a result of the community input, some actions are very specific, and every effort was made to include them and where possible expand on them.

For example, a number of residents had mentioned 'The Sandies' as an important biodiversity and landscape feature in Passage West. During a discussion of this one local resident mentioned sighting an Otter using the lagoon, which prompted the idea of setting up an Otter survey.

At a consultation meeting in St. Peter's Community School a local resident said they found the term 'biodiversity' to be confusing leading to a discussion about other terms used in a draft version of the Biodiversity Action Plan and the need for local people to have some training about this.

During desktop research Wild Work had noted some open areas in Passage West through examination of aerial maps and local authority Local Area Plans. One of these was the steep open area south of Pembroke Estate. Although this area was not highlighted by residents through the online survey it was mentioned by some during face to face consultation, particularly by residents of Pembroke Estates.

This type of input led to the creation by Wild Work, guided by the professional judgement of Wild Work members and in accordance with Wild Work general principles, of the 12 Main Action Theme Areas in Figure 1 above into which the diverse suggestions received through the consultation process might best be organised.





General principles

The following general principles should be followed in the implementation of any actions included in this biodiversity action plan:

- 1. Always preserve features of high conservation value.
- 2. Strive to use native species whenever planting/sowing.
- 3. When attempting to help nature, try to fully understand the habitats and species of flora and fauna already associated with the given location.
- 4. Consult with Wild Work staff or other qualified ecologists to learn how to implement best practice.
- 5. Work with, rather than against nature to make biodiversity enhancement more efficient.
- 6. Cease using herbicides, insecticides, fungicides and any other pesticides or chemicals where possible. For example, it is possible to maintain border edges of green areas without using herbicides. This task can be carried out quite easily either with a manual hoe, shovel, or use of strimming equipment.
- 7. Follow Sustainable Use Directive guidelines if applying any pesticides.
- 8. Wild can be beautiful. Always strive to make places aesthetically pleasing, so that others will be inspired to copy your good example.
- 9. Try to understand the big picture and be aware that some actions considered to be beneficial may not always be of benefit to biodiversity and nature in every setting. For example, planting trees is usually a good idea, but not if we are trying to protect a rare grassland and its associated fauna. There are plenty of other examples...
- 10. Remember that people can benefit from biodiversity, as much as biodiversity can benefit from people; Help people, to help nature, to help people...







Main Action Themes Habitat mapping Wild Places – for play and recreation – for people and for biodiversity Managing green spaces to benefit pollinators and biodiversity A community garden and allotments **Education and research Caring for wetlands** Monitoring, recording and knowledge sharing **Bats and birds** 9. Otters 10. Preserving places with biodiversity features of interest 11. Preserve biodiversity habitats in hedgerows and old stone walls 12. Managing invasive species





List of Identified actions

Action Themes 1 - 2	Suggested timeframe for undertaking the action						
1. Habitat mapping	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5		
1.1. Train community volunteers (teenagers and adults alike) to carry out habitat mapping in Passage West.							
1.2. Habitat map Passage West area to Fossitt Level 3, to be carried out by trained community volunteers.							
2. Wild Places – for play and recreation – for people and for biodiversity							
2.1. Develop a plan for managing natural habitats near Dan Desmond Villas and Glenbrook Terrace as 'Wild Places'. The area is zoned as open space in the Local Area Plan.							
2.2. Develop a plan for managing natural habitats in the green at the entrance to Pembroke Wood for potential use as a 'Wild Place'.							
2.3. Develop a plan for managing natural habitats to the south of Hill Crest, Foxwood and Pembroke Heights in remnant areas of the original Pembroke Estate woodland as a 'Wild Place'. Half of the area is zoned as open space in the Local Area Plan.							
2.4. Develop a biodiversity enhancement plan for the green wild area near Tom Fahy Park. This plan could then compliment and influence developments that are to take place.							
2.5. Develop a biodiversity enhancement plan for the Horsehead area, zoned as PW-R-01 in the Local Development Plan. This plan could then compliment and influence residential developments that are to take place.							
2.6. Investigate making improvements to Tom Fahey Parkfor swimming. In the past, Tom Fahy Parkwas a popular swimming spot, but is no longer regarded as suitable. Water quality and other issues in this area would need to be addressed.							
2.7. Establish an 'Adventure playground' based on UK Playwork model in a 'Wild Place' in Passage West.							
2.8. Provide training to the Passage Scouts so that they can play an active role in the development of 'Wild places' in Passage West.							
2.9. Incorporate the idea of linking 'Wild Places' into Greenway development in Passage West.							





Action Theme 3	Suggested timeframe for undertaking the action				
3. Managing green spaces to benefit pollinators and biodiversity					
3.1. Train community members to manage local green space habitats for pollinators such as bees and butterflies, inclusive of management and maintenance of wildflower grassland and wildflower strips.					
3.2. Introduce chemical free and pollinator friendly landscape management practices in Marmullane Park, Patrick Murphy Park, Fr. O'Flynn Park, Tom Fahy Park, and Alec Day Park.					
3.3. Introduce chemical free and pollinator friendly landscape management practices in the large green in Pembroke Crescent.					

Action Theme 4		Suggested timeframe for undertaking the action					
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5		
4. A community garden and allotments							
4.1. Obtain a suitable space and develop a community garden for food growing, kid's activities and social activities of benefit to people's health and well-being.							
4.2. Contact property owners of the former St. Mary's Convent about bringing the old allotments back into use.							
4.3. Investigate using agricultural lands on the edge of town for developing allotments and/or a community garden. Landowners could be contacted to see if they were willing to rent or donate some land.							





Action Themes 5 - 6	Suggested timeframundertaking the a				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
5. Education and research					
5.1. Make biodiversity expertise available to schools to assist them in managing their grounds for biodiversity.					
5.2. Build connections with academia to facilitate community based research and learning opportunities related to nature and well-being in Passage West.					
5.3. Provide education and training for the Passage Scouts to prepare them to become local champions for biodiversity so that they can play an important role in the implementation of actions in the biodiversity action plan.					
6. Caring for wetlands					
6.1. Investigate the biodiversity importance of the three artificial tidal lagoons inside the old railway line walkway upstream of the town. Otter are known to fish in at least one of the lagoons.					
6.2. Raise awareness of the Suez Pond.					
6.3. Update the Suez Pond Biodiversity Report (Flynn / Furney Environmental Consultants, 2010).					
6.4. Implement any recommended management actions for the Suez Pond, once an update has been made to the original Suez Pond Biodiversity Report (Flynn / Furney Environmental Consultants, 2010).					
6.5. Investigate biodiversity potential of the east facing beach on the spit east of Robert's Bridge car park and manage to enhance its biodiversity value.					
6.6. Implement a small stream water monitoring scheme that can be carried out by community volunteers.					





Action Themes 7 - 9	Suggested timeframe for undertaking the action					
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
7. Monitoring, recording and knowledge sharing						
7.1. Record nature related local knowledge, stories and folklore; particularly from elderly people.						
7.2. Train community members to use the National Biodiversity Data Centre's online mapping tools for recording and storing biodiversity information.						
7.3. Set up an online portal or some other means of storing and sharing biodiversity related information about Passage West in future.						
8. Bats and birds						
8.1. Investigate the importance of the vicinity of St Mary's Church of Ireland for bats.						
8.2. Identify buildings in the town that are of importance to wildlife, particularly to bats.						
8.3. Ensure to maintain and/or improve roosting and nesting spaces for bat species and bird species, such as Swifts (<i>Apus apus</i>) when altering any old buildings.						
8.4. Use Best Available Technology and the concept of Net Biodiversity Gain (CIEEM, CIRIA, IEMA, 2016) in design and build of new developments to maximise opportunities for wildlife, such as bats and birds.						
8.5. Ensure any new lighting instalments do not have a negative impact on bats and other wildlife.						
9. Otters						
9.1. Set up a Passage West Otter Survey that can be carried out by local people.						
9.2. Investigate the importance of places in the Passage environs for Otters.						
9.3. Consider Otters and other marine life when devising solutions to improve access and egress to the water in the Passage area.						





Action Themes 10 - 11	Suggested timeframe for undertaking the action					
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
10. Preserving places with biodiversity features of interest10.1. Carry out ecological survey of the areas of woodland and scrub near Dan Desmond Villas in Maulbaun.						
10.2. Manage the habitat between the soccer pitch and astro turf next to Star of the Sea primary school to enhance its biodiversity value.						
10.3. Manage the woodland at west end of St. Joseph's Terrace to enhance its biodiversity value.						
10.4. Investigate biodiversity potential of the old Marmullane Burial Ground at Ardmore and manage to enhance its biodiversity value.						
10.5. Consult with owners about investigating biodiversity potential of Monkstown Golf Club and environs, inclusive of the reservoir, and managing to enhance its biodiversity value.						
10.6. Investigate biodiversity potential of Oldcourt Woods and manage to enhance its biodiversity value.						
10.7. Investigate biodiversity potential of woodland in the 'Back Road'area.						
11. Preserve biodiversity habitats in hedgerows and old stone walls						
11.1 Set up an "Adopt a Stone Wall" initiative in the locality to preserve and/or enhance the biodiversity quality of stone walls such as those in in the old Marmullane Burial Ground at Ardmore						
11.2 Preserve and restore old hedgerow remnants near entrance to Pembroke Woods housing estate.						





Action Theme 12	Suggested timeframe for undertaking the action					
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
12. Management of invasive species12.1. Run biosecurity education and awareness sessions about land and water based Invasive species in Passage West.						
12.2. Record and map stands of Japanese Knotweed (<i>Fallopia</i> spp.) in Passage West.						
12.3. Record and map stands of Winter Heliotrope (<i>Petasites fragrans</i>) in Passage West.						
12.4. Record and map infestations of Traveller's Joy, also known as "Mile-aminute" (Clematis vitalba) in Passage West.						
12.5. Record and map stands of Cherry Laurel (<i>Prunus laurocerasus</i>) in Passage West.						
12.6. Encourage gardeners to plant native species where possible. For example, when purchasing bluebells, people should buy and plant the native Bluebell (<i>Hyacinthoides non-scripta</i>) rather than the non-native Spanish Bluebell (<i>Hyacinthoides hispanica</i>) or the Bluebell hybrid (<i>Hyacinthoides x massartiana</i>).						

12.7 Produce an invasive species management plan for Passage West.





Details on implementation of the actions

Indicative costings per action

Costs indicated are additional to on-going expenditure and/or volunteer effort in the commmunity, and are also additional to any expenditure that may required for related future development.

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Action no.	Up to €1,000	Up to €5,000	Up to €10,000	Up to €15,000	€15,000 +
1.1.		•			
1.2.	•				
2.1.		•			
2.2.		•			
2.3.		•			
2.4.		•			
2.5.		•			
2.6.			•		
2.7.					•
2.8.		•			
2.9.		•			
3.1.		•			
3.2.	•				
3.3.	•				
4.1.					•
4.2.	•				
4.3.	•				
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5.2.	•				
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8.5.		•			
9.1.		•			
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10.1.	•	•			
			•		
10.3. 10.4.		•			
10.4.	•	•			
10.6.	•				
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		•			
11.1.	•				
11.2. 12.1.	•				
		•			
12.2.	•				
12.3.	•				
12.4.	•				
12.5.	•				
12.6.	•				
12.7			•		



Additional implementation considerations for each action

	Suitable for participation of	Seasonality and/or	Technical			Landowner
Action no.	trained volunteers, work placements, etc.	timing factor	expertise required	Once-off	On-going	permission required
1.1.	<i>√</i>	✓	√ √	✓		
1.2.	· ✓	✓	<u> </u>	·	✓	✓
2.1.			✓	✓		✓
2.2.			✓	✓		✓
2.3.			✓	√		✓
2.4.			✓	✓		✓
2.5.			✓	✓		✓
2.6.	✓	✓	✓	✓		✓
2.7.	✓	✓	✓	✓	✓	✓
2.8.	✓	✓	✓	✓	✓	✓
2.9.		✓	✓	√		✓
3.1.	✓		✓	✓		
3.2.	✓	✓	✓		✓	✓
3.3.	✓	✓	✓		✓	✓
4.1.	✓		✓	✓		✓
4.2.	✓			✓		✓
4.3.	✓			✓		✓
5.1.		✓	✓		✓	
5.2.	✓				✓	
5.3.		✓	✓		✓	
6.1.		✓	✓	✓	✓	✓
6.2.	✓			✓		✓
6.3.			✓	✓		✓
6.4.	✓	✓	✓	✓	✓	✓
6.5.	✓	✓	✓	✓	✓	✓
6.6.	✓	√	✓		✓	✓
7.1.	✓		✓		✓	
7.2.	✓		√	✓	✓	
7.3.	✓		✓	✓		
8.1.	✓	✓	✓	✓	✓	✓
8.2.	✓	✓	✓	✓	✓	✓
8.3.		✓	✓	√	✓	√ .
8.4.		✓	<u>√</u>	✓	✓	✓
8.5.			<u> </u>		✓	√
9.1.	✓	√	√	✓	✓	✓
9.2. 9.3.		√	<u> </u>	√	✓	√
10.1.			<u> </u>	∀	V	√
10.1.	✓	√	∨	¥	✓	∀
10.2.	→	∀	∨		→	√
10.4.	→	√	<u>√</u>	✓	→	√
10.5.	→	√	<u> </u>	,	→	√
10.6.	∨ ✓	√	<u>√</u>	√	∨ ✓	∀
10.7.	∀	∀	<u> </u>	, , , , , , , , , , , , , , , , , , ,	∀	√
11.1.	∀	4				∀
11.2.	<u> </u>				✓ ✓ ✓	√
12.1.	√	✓	✓			√
12.2.	• ✓	√	<u> </u>	✓		√
12.3.	✓	, √	· ✓	, ✓		<i>,</i>
12.4.	• ✓	, ✓	<u>,</u>	, ✓		√
12.5.	✓	, √	· ✓	, ✓		<i>,</i>
12.6.	· ✓	·		·	✓	·
12.7		✓	✓	✓		
		·		<u> </u>		





Mapping related to the actions

Maps presented below are intended to provide context for the location of actions identified in this plan in relation to the Passage West boundary and the wider Passage West hinterland. As might be expected, many of the areas within the boundary identified for actions are relatively small in scale. Equally these are of relatively low biodiversity value in comparison to areas outside of the boundary as some sites of international conservation importance are located just outside the boundary. However the smaller action areas inside of the boundary might be considered important in a local context. Dense Bracken (HD1), Scrub (WS1), and Highly Modified / Non-native Woodland (WD) are valuable semi-natural habitats types which occur inside the Passage West boundary. Small scale examples of such habitat types provide important stepping stone and forage opportunities for wildlife. They are also an important amenity and education resource to have in urban and peri-urban areas and should be valued for this reason also.

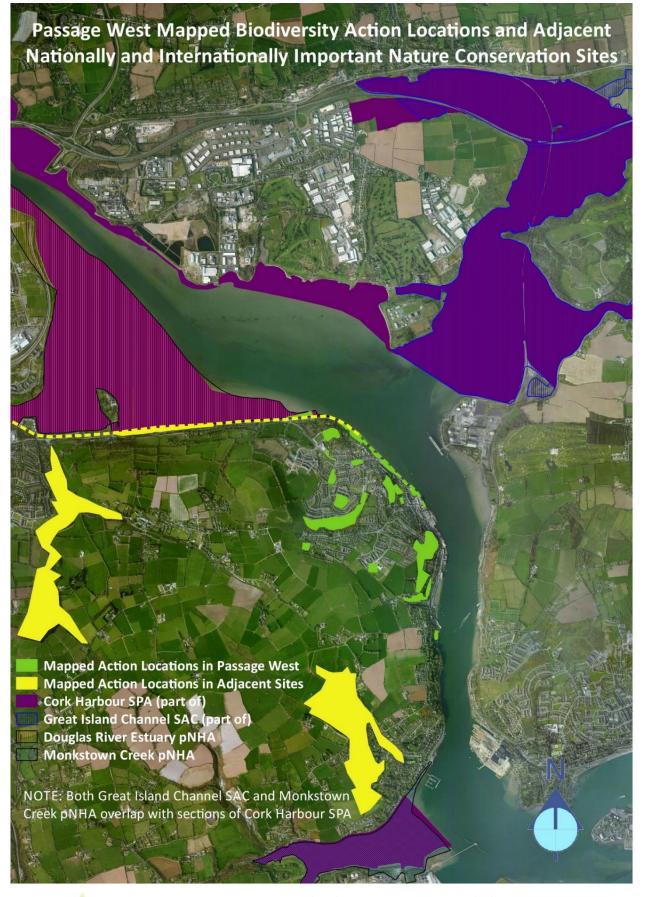
Three maps are presented below. One gives context to action areas in relation to important, protected nature conservation areas in the Passage West area, another shows numbered identified actions that have a geographical component and occur *inside* the Passage West boundary whereas the third shows numbered identified actions that have a geographical component and occur *outside* the Passage West boundary.

Note that one mapped identified action feature is crossed by the Passage West boundary (see also discussion under 'Boundary considerations regarding biodiversity features' above). In this instance it is mapped as if it is entirely inside the boundary. These are the lagoons at 'The Sandies'.

Where identified actions are located in the same geographic areas for ease of interpretation higher numbered identified actions in this situation have been mapped as point features on polygon features. This is more so the case in mapping of actions inside the Passage West boundary. See e.g. Action 10.1 / 2.1.

It should be noted that this Biodiversity Action Plan is for Passage West. For Cork County Council Local Area Plans there is not a defined, stand-alone development boundary for Passage West. A common development boundary is used for Passage West / Glenbrook/ Monkstown After consulting with local representatives it was decided to use the Passage West / Glenbrook/ Monkstown development boundary as far south as Alec Day Park in this Biodiversity Action Plan as a reference for defining actions 'in Passage West' and at adjacent sites. See also 'Boundary considerations regarding biodiversity features' section of this document above.









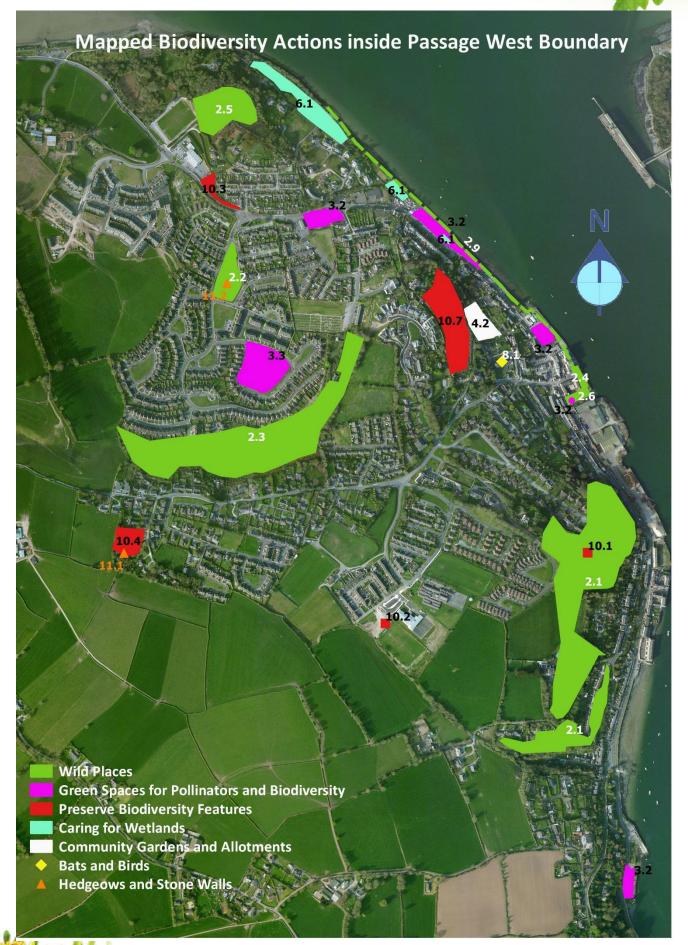


Figure 3 Mapped Biodiversity Actions inside Passage West Boundary







Figure 4 Mapped Biodiversity Actions outside Passage West Boundary



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Appendix

Further information related to the actions

Helping biodiversity and helping people

Biodiversity Action Plans usually consider the needs of flora and fauna in isolation and as something separate to human needs.

Wild Work's motto of helping people, help nature, help people is about recognising that people want to help nature and that people can benefit in doing so. If we help nature, we can also help ourselves and our communities, particularly in terms health and well-being.

For example, developing and managing woodlands as spaces for people to exercise and play, but while also prioritising the need to manage the woodland for the benefit of the species of flora and fauna that live there.

Actions included in this plan take this concept into consideration.

Wild Places – for play and recreation – for people and for biodiversity

Biodiversity and nature are known to provide social and health benefits to communities (ten Brink, et al., 2016) (Kardan, et al., 2015).

Some places that have been identified in this action plan are referred to as 'Wild Places'.

Anywhere listed as a 'Wild Place' is potentially suitable for developing and managing as a wild place for young and old people to play and recreate, to relax and unwind and to experience wildness up close. Often these are abandoned under-utilised places where nature has been allowed to thrive. These places have fantastic potential to be enhanced both for people and for biodiversity.

The kinds of places that are suited to 'Wild Place' development are often not being utilised for any other purposes, so creating a "Wild Place" can be an ideal thing to do in the short, medium or long term if desired.

Sometimes people damage wild areas when developing them for recreational purposes. Therefore, any form of 'Wild Place' development should be complementary to the place itself in terms of both recreation and biodiversity value.



In providing a recreational outlet for people, the development of 'Wild Places', if done correctly, should improve access and safety, address anti-social behaviour, foster a sense of pride and appreciation of the

Inspiration and ideas for 'Wild Place' development can be found in the following links:

Chicago reclaiming unused infrastructure to develop urban green spaces

http://biophiliccities.org/the-606-chicago/

place and enhance the place's overall beauty.

An abandoned Berlin train station becomes a primeval forest and wildlife park

https://gruen-berlin.de/natur-park-suedgelaende

Vitoris-Gasteiz links green spaces through recreational walkways

http://www.vitoria-

gasteiz.org/we001/was/we001Action.do?idioma=en&accionWe001=ficha&accion=anilloVerde

Areas of wild vegetation in a Danish climate resilient neighbourhood

http://klimakvarter.dk/en/byrum/

Enabling wildlife be part of everyday life in Bristol

http://www.avonwildlifetrust.org.uk/sites/default/files/files/My%20Wild%20City%20-

%20Final%20Booklet.pdf

A green living spaces plan for Birmingham

https://www.birmingham.gov.uk/downloads/download/208/green living spaces plan

The Biophilic Cities Project

http://biophiliccities.org/about/

For further information contact info@wildwork.ie.







Adventure playgrounds

Wild places have potential to be developed as adventure playgrounds.

Adventure playgrounds aim to build confidence and promote participation in the community for children and people (AVOW, 2017).

In adventure playgrounds, young people can take risks, construct, create and establish their own way of playing (play:groundNYC, 2017)

In the UK, where adventure playgrounds originated in the 1970's, local authorities have developed freely accessible adventure playgrounds that are staffed by qualified 'Playworkers'. The role of playworkers is to remove barriers to children's play, create playful environments, support children's own play, assess risk, and help when needed without directing or controlling (Wilson, 2010)

More details about Adventure Playgrounds and Playwork can be found in the following links:

http://avow.org/en/play-provision/

http://play-ground.nyc/about/

https://popupadventureplaygrounds.files.wordpress.com/2012/07/pupstoolkit.pdf

https://popupadventureplaygrounds.files.wordpress.com/2012/07/amazing-benefits-en.pdf

http://playfreemovie.com/playwork/

https://soundcloud.com/erinjd/claire

http://www.allianceforchildhood.org/sites/allianceforchildhood.org/files/file/PlayworkPrimer 2010.pdf

http://www.allianceforchildhood.org/playwork

For further information contact info@wildwork.ie.







Some actions that have been listed are of relevance to the All-Ireland Pollinator Plan.

Details of this national initiative can be found here: http://www.biodiversityireland.ie/projects/irish- pollinator-initiative/all-ireland-pollinator-plan/resources/

Pollinators play a key role in our ecosystems; providing pollination services for wildflowers and crops to ensure successful seed and fruit production and also with helping us monitor the overall health of our countryside.

In Ireland, our main pollinator species include: 1 honeybee species; 20 bumblebee species; 77 solitary bee species; and 180 hoverfly species. 33% of our native bumblebee species, 43% of our native solitary bee species and 20% of our native hoverfly species are threatened with extinction. This is due to hunger, homelessness, poisoning and other factors (NBDC, 2015)

Examples of pollinator friendly landscape management include:

- Conversion of lawn area to managed wildflower meadow
- Planting of native wildflower strips
- Creation of nesting sites for solitary bees

