Saleen and District Residents Association



Biodiversity Action Plan

2024-2028





The Community Foundation for Ireland

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Acknowledgements

A special thanks to Michele and Seamus who were always so generous with their time, knowledge, offers of cups of tea and a very welcome lunch! Your enthusiasm and love for Saleen and nature was inspiring.

It is always such a pleasure to work with a group that shows such passion for their community and environment. The work that Saleen & District Residents' Association have done over the years is clear evidence of the pride they take in their community.

We hope this Biodiversity Action Plan is helpful in your work in Saleen going forward and that it will inspire you to continue to Help Nature, Help People, Help Nature.

Wild Work



1. Introduction

This Biodiversity Action Plan (BAP) was commissioned by Saleen and District Residents Association in 2023. The BAP was carried out under funding from the Community Foundation for Ireland (CFI) Environment and Nature - Biodiversity Grants. This grant aims 'to enhance biodiversity in communities throughout the country by combining the expertise of qualified ecologists with the skills, experience and enthusiasm of local community groups'.

Saleen and District Residents Association engaged Wild Work to work with them to produce this BAP.

1.1. About Saleen

Saleen is a small rural village in East Cork lying on the R630 regional road between Midleton and Whitegate. The village comprises two discrete clusters of development. The historic village comprises a church and a mix of housing including small estates and roadside houses concentrated along a local road (L3629) extending from the junction with the R630. The second cluster is located circa 250m north of the historic village and comprises a national school and an adjoining housing estate accessed from the R630 (Figure 1)

The name Saleen comes from the Irish An Sáilín which means "little creek" and refers to the tidal creek that lies to the west of the village.

Saleen & District Residents' Association

Saleen and District Residents' Association is a voluntary group that was formed by public meeting in 2010. The Association strives to conserve the natural environment and local heritage, while helping to promote community services, amenities and recreational facilities that are environmentally friendly, sustainable and appropriate to the area. The pride Saleen & District Residents' Association has in their community is evident from their work in the area, from the well-maintained flower beds and green areas to the projects they undertake on behalf of their community.

Since the formation of the Association, activities have included:

• Planting and maintenance of pollinator friendly plants and native trees locally.



- Maintenance of public green areas
- Development of an Amenity Park with seating, play area, mini-library and a community notice board in Saleen village.
- Installation of information plaques at several local points of historical interest.
- Conservation of stone walls at Saleen Creek using traditional methods [Multi-phase project]
- Publication of 'Times & Tales of an East Cork Community'' a book on the heritage of the local area.
- Feasibility Study for safe pathway between 'Green Acres' and Bawnard Cross.
- Installation of seating locally, such as at Jamesbrook Strand and at East Ferry pier.
- Community clean-ups, social gatherings, charity, nature and heritage walks.
- Publication of annual newsletter distributed to all 350 homes in the area.
- Fundraising concerts for local causes.

1.2. Biodiversity and Biodiversity Action Plans (BAPs)

The term biodiversity began to be used widely in the 1980s. It is a shorthand way of saying **bio**logical **diversity**. The Convention on Biological Diversity includes the places where living live in its definition of biodiversity - 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems' (United Nations, 1992). Based on that, a simpler way to describe 'biodiversity' might be 'living things and the places they naturally live', or just 'nature'

The convention has three main objectives which are to make sure that:

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





Figure 1 Saleen Village and BAP area



In 1992 Ireland was one of 168 countries that became signatories to the convention. Ireland ratified the convention in 1996. Article 6 of the convention states that each contracting party shall 'Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes'.

National Ireland published first its Biodiversity Action Plan in 2002. Action 10 of this plan was: 'Each Local Authority to prepare a Local Biodiversity Plan in consultation with relevant stakeholders'. National Biodiversity Action Plan (2023-2030) County Cork's Biodiversity Action Plan was published in 2009.



The most current plans are Ireland's 4th National Biodiversity Action Plan (NBAP) for the period 2023-2030¹ County Cork Biodiversity Action Plan 2009-2014².

In general Biodiversity Action Plans look at what species and habitats are in an area and what issues they might face. A good plan will then identify:

- the actions needed to address any issues,
- who is going to carry out the actions,
- in what timeframe,
- what resources are needed to carry out the plan,
- who can help.

¹ https://assets.gov.ie/233057/f1a92f68-e668-498d-a56c-df777a19b549.pdf

² http://www.globalislands.net/greenislands/docs/ireland 734358998.pdf



A good local Community 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, what still needs to be worked on and how future actions might be resourced.

1.3. Why is Biodiversity Important?

It could be said that biodiversity has a value in and of itself, outside of its importance to humans. But it is also very important to humans. It is possible to figure out the economic value of ecosystems and biodiversity to us, but some wonder if this is a good idea from a conservation point of view (Schröter, et al., 2014). The concept of Ecosystem Services places a value on *'the direct and indirect contributions of ecosystems to human wellbeing'* (The Economics of Ecosystems and Biodiversity (TEEB), 2020). This idea has been around since at least the 1970s, becoming more popular since the United Nations led Millennium Assessment (MA) which began in 2000Ecosystem Services can be organised into 4 broad categories:

Supporting Services	These are services, such as nutrient cycling and soil formation, which are needed for the production of all other services.
Provisioning Services	Products obtained from ecosystems, such as food or timber.
Regulating Services	The benefits obtained from the regulation of ecosystems, including services such as purification of water, flood control, regulation of the climate etc.
Cultural Services	The benefits people obtain from ecosystems through spiritual enrichment, reflection, recreation, and aesthetic experiences.

Source: (Science Communication Unit, University of the West of England, 2015) See also infographic overleaf.





EXAMPLES OF ECOSYSTEM SERVICES





1.4. Threats to biodiversity

Every 6 years, EU member states must produce a report on how they have put in place measures to protect habitats and species listed in the EU Habitats Directive and how these habitats and species are doing. This means threats and pressures on these habitats and species need to be looked at. Figure 2 below shows the percentage of Habitats Directive habitats that are affected by the top 10 combined Medium and High importance threats taken from the 2019 report for Ireland. For more information on the Habitats Directive see 1.4 Biodiversity and the Law.



Figure 2 % of Habitats Directive Habitats affected by High and Medium Impact Threats. Adapted from (NPWS, 2019a).

In Figure 2. agriculture and forestry appear to be the greatest threats to Habitats Directive habitats and species. However, agriculture covers approximately 65% of land use in Ireland and commercial forestry approximately 10.5%, while approximately 2% of Ireland is under built land. Agriculture and forestry then might be expected to have bigger impact because they cover so much more of our land area.

Habitats and species are listed in the Habitats Directive because they are threatened at a European level, and the Directive aims to restore these to favourable condition or maintain them at favourable condition. There is legislation to protect some of the sites where these



habitats and species are found. Many species, habitats and sites do not have this kind of protection. See Section 1.4 Biodiversity and the Law below.

On our planet the top five factors damaging biodiversity over the past 50 years have been:

- Changes in land and sea use
- Direct exploitation of organisms
- Climate change
- Pollution
- Invasion of alien species (Díaz, et al., 2019).

Overall, for the 2019 assessment in Ireland, 85% of Habitats Directive habitats are categorised as being in 'Unfavourable' condition.

For species, 30% were assessed as 'Unfavourable' and for 13% of species, the assessment was recorded as 'Unknown'.

Birds of Conservation Concern in Ireland

Birdwatch Ireland has produced a list of 'Birds of Conservation Concern in Ireland 4: 2020–2026' (Gilbert, et al., 2021). This assessed the conservation status of 211 Irish bird species recorded in Ireland. Birds of Conservation Concern Ireland 4 (BoCCI 4) ranks bird species as Red, Amber, or Green.



Amber listed species have an unfavourable status in Europe, have moderately declined in abundance or range, a very small population size, a localised distribution, or occur in internationally important numbers.

Green listed species do not meet any of these criteria and therefore require little direct conservation action.



In the Birds of Conservation Concern in Ireland 4: 2020–2026 report:

- 54 bird species were **RED** listed
- 79 species were AMBER listed
- 78 species were **GREEN** listed

There has been an increase of 17 species **Red** listed since an assessment from 2013. Birds of Conservation Concern in Ireland mentions issues such as drainage, afforestation on peat bogs, and changes in farmland management as threats to populations of Irish species.

Red Lists

Another way of looking at threats to Irish Biodiversity is to look at Red Lists. This is a method devised by the International Union for the Conservation of Nature (IUCN) to assess the conservation status of species. This was originally intended to look at species at a global level, but it has been adapted to be used at a regional level as well. A number of assessments for different groups have been done in Ireland. Some of these are presented in Table 1 below.

Table 1 Irish Red List Assessments for selected groups with numbers of species in each category.

Group	CR	EN	VU	NT	LC	DD	NE	RE
Vascular Plants	20	25	61	98	887	n/a	105	15
Bees	6	10	14	12	38	16	3	3
Butterflies	0	3	3	5	21	0	0	1
Macro-moths	7	9	27	20	420	4	78	14
Freshwater Fish	1	0	5	1	7	1	1	0
Amphibians & Reptiles	0	1	0	0	4	0	5	0



CR Critically Endangered:	In a particularly and extremely critical state.	
EN Endangered:	Very high risk of extinction in the wild.	
VU Vulnerable:	At high risk of unnatural (human-caused) extinction without further human intervention.	
NT Near Threatened:	Close to being at high risk of extinction in the near future.	
LC Least Concern:	Unlikely to become extinct in the near future.	
DD:	Data Deficient	
NE:	Not Evaluated	
RE:	Regionally Extinct	

More Red Lists for Ireland can be found on the website of the National Parks and Wildlife Service (NPWS)³

1.5. Biodiversity and the Law

EU Directives

Two very important pieces of legislation that are designed to protect wildlife, and as such biodiversity, have already been mentioned. These are:

- Council Directive 79/409/EEC (and as amended) 'on the conservation of wild birds' (commonly known as 'The Birds Directive').
- Council Directive 92/43/EEC (and as amended) 'on the conservation of natural habitats and of wild fauna and flora' (commonly known as '**The Habitats Directive'**).

The main instruments transposing these EU directives into Irish law is the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), and S.I. No. 293/2010 - European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, but they are also incorporated under the Planning and Development Act 2000 (and as amended).

³ <u>https://www.npws.ie/</u>



Other important EU directives concerned with environmental protection, including wildlife, are:

- Council Directive 85/337/EEC (and as amended) 'on the assessment of the effects of certain public and private projects on the environment' (commonly known as the 'Environmental Impact Assessment Directive').
- Council Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment' commonly known as the 'Strategic Environmental Assessment Directive'.
- Directive 2000/60/EC 'establishing a framework for Community action in the field of water policy', commonly known and the 'Water Framework Directive'.

National Legislation

National legislation protecting wildlife includes:

- Wildlife Acts, 1976.
- Wildlife (Amendment) Act, 2000 and as amended.
- Flora (Protection) Order, 2015 (S.I. No. 356 of 2015).
- Heritage Act 2018 (no. 15 of 2018), Part 3.

Protected Areas

Arising from the legislation discussed above, certain sites around the country have been given legal protection.

- <u>Special Protection Areas (SPAs)</u> arise from the Birds Directive and are designated to
 protect all migratory birds and 194 species and sub-species of bird that are particularly
 threatened.
- Special Areas of Conservation (SACs) arise from the Habitats Directive are designated to protect:



- Natural Habitat Types of Community Interest listed under Annex I of the Directive.
- Animal and Plant Species of Community Interest– listed under Annex II of the Directive.

SPAs and SACs across Europe form the Natura 2000 ecological network.

- Natural Heritage Areas (NHAs) have been designated under the Wildlife Acts, in order to protect habitats and / or species in them.
- <u>Statutory Nature Reserves</u> under the Wildlife Acts.
- Wildfowl Sanctuaries under the Wildlife Acts.

There is much crossover between designations so many Natural Heritage Areas are also Statutory Nature Reserves and/or SACs and/or SPAs. Many Wildfowl Sanctuaries are also SPAs.

At the time of writing there are 148 Natural Heritage Areas that have been given legal protection under the Wildlife Acts. However, there are 630 sites that were proposed as Natural Heritage Areas in 1995 that have never been given statutory legal protection. Some of these **proposed Natural Heritage Areas (pNHAs)** coincide entirely or partly with areas that do have protection under other legislation e.g., SPAs or SACs, however very many of them have no current legal protection.

The EU Habitats Directive (92/43/EEC) placed an obligation on Member States of the EU to establish the Natura 2000 network. The network is made up of Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC), and SACs, established under the Habitats Directive itself.







2. How this plan was made

2.1. Desktop Study

For background on biodiversity in and around the BAP area, a number of sources were consulted.

Species records from the National Biodiversity Data Centre (NBDC) were looked at for the 1kilometre Irish Grid squares that intersected with the BAP boundary (Appendix II).

Most of the data held by the NBDC is free to anyone to look at. Information can be downloaded from the Maps section of the NBDC website⁴. There are tutorials on how to use it in the Help section.

Recent and historical maps for the area available from the online Ordnance Survey Ireland (OSI) GeoHive⁵ service were reviewed.

Details of nearby protected sites were found on the Protected Sites page of the National Parks and Wildlife Service (NPWS) website⁶

In addition, records and information from the following sources were reviewed:

- Botanical Society of Britain and Ireland (BSBI) dataset and distribution maps BSBI records for 2kn grid squares: W86T, W86U, W86Y, W86Z. Accessed 26/11/2023.
- National Parks and Wildlife Services (NPWS) Flora Protection Order (FPO) Bryophytes database.
- NPWS Flora (Protection) Order 2022 Map Viewer Vascular Plants, Charophytes and Lichens.
- NPWS Article 17 Metadata and GIS Database Files
- CORINE Landcover mapping layer (2012).

⁴ <u>https://maps.biodiversityireland.ie/</u>

⁵ <u>https://www.geohive.ie/</u>

⁶ https://www.npws.ie/



Unpublished information such as surveys commissioned in connection with planning applications etc., were also consulted. Where data from these is used in this BAP it is referred to in the text.

2.2. Habitat mapping and other fieldwork

Habitats are where living organisms live. A habitat is made up of living and non-living

components. Living components include plants, animals, fungi and bacteria. Non-living components include soil, moisture, temperature, pH, bedrock and many others.

So that there is a common understanding of different habitat types to be found in Ireland a book called 'A Guide to Habitats in Ireland' was commissioned by the Heritage Council of Ireland and was released in 2000.



A number of experts from different fields contributed to the book, however the text was compiled by Julie A. Fossitt. 'A Guide to Habitats in Ireland' is often referred to as 'The Fossitt Guide' or simply 'Fossitt'.

Habitat classification systems, such as Fossitt, are a human way of describing the natural world. They are generalisations, and while some habitats encountered in the real world may fit a classification, others may only slightly resemble a description found in any given classification system.

Habitat types can exist in small patches intermixed with other habitat types; for example, many small patches of scrub in a grassland area. This is known as a habitat mosaic.





3. Biodiversity in and around Saleen District

3.1. Nature Conservation Sites

3.1.1 Cork Harbour Special Protected Area (Site code. 00403).

Part of Saleen Cork Harbour SPA lies within the BAP area to the south. Cork Harbour SPA comprises most of the main intertidal areas of Cork Harbour (Figure 3).

As mentioned previously, SPAs are designated to protect birds and are sites of international conservation importance. Cork Harbour is an internationally important wetland site, regularly supporting over 20,000 wintering waterfowl from as far away as Siberia. The site supports internationally important populations of Black-tailed Godwit (*Limosa limosa*) and Redshank (*Tringa tetanus*) (NPWS, 2015).

Table 2 shows the birds which are the Qualifying Interests (QI) of the SPA, that is the species requiring protection. It also shows the most recent assessment of their status within the SPA by the NPWS (NPWS, 2014), and Birdwatch Ireland (Gilbert, et al., 2021).

|--|

Common Name	Scientific Name	NPWS 2014 Assessment	BoCCI 2020-2026
Pintail	Anas acuta	Highly Unfavourable	
Northern Shoveler*	Spatula clypeata	Highly Unfavourable	
Black-headed Gull*	Chroicocephalus ridibundus	Highly Unfavourable	
Common Gull	Larus canus	Highly Unfavourable	
Lesser Black-backed Gull*	Larus fuscus	Highly Unfavourable	
Red-breasted Merganser*	Mergus serrator	Highly Unfavourable	
Cormorant*	Phalacrocorax carbo	Highly Unfavourable	
Grey Plover	Pluvialis squatarola	Highly Unfavourable	
Lapwing*	Vanellus vanellus	Highly Unfavourable	
Wigeon*	Anas penelope	Unfavourable	
Dunlin*	Calidris alpina alpina	Unfavourable	
Curlew*	Numenius arquata	Unfavourable	
Great Crested Grebe	Podiceps cristatus	Unfavourable	
Shelduck*	Tadorna tadorna	Unfavourable	



Tringa totanus	Unfavourable	
Anas crecca	Intermediate Unfavourable	
Ardea cinerea	Intermediate Unfavourable	
Haematopus ostralegus	Intermediate Unfavourable	
Limosa lapponica	Favourable	
Limosa limosa	Favourable	
Pluvialis apricaria	Favourable	
Tachybaptus ruficollis	Favourable	
Sterna hirundo	Data not presented	
	Tringa totanus Anas crecca Ardea cinerea Haematopus ostralegus Limosa lapponica Limosa limosa Pluvialis apricaria Tachybaptus ruficollis Sterna hirundo	Tringa totanusUnfavourableAnas creccaIntermediate UnfavourableArdea cinereaIntermediate UnfavourableHaematopus ostralegusIntermediate UnfavourableLimosa lapponicaFavourableLimosa limosaFavourablePluvialis apricariaFavourableTachybaptus ruficollisFavourableSterna hirundoData not presented

Species marked with an asterisk* appear in records in the National Biodiversity data Centre examined for the BAP area.

The terms in Table 2, for the NPWS Assessment of Special Conservation Interest birds in the Cork Harbour SPA (NPWS, 2014) are explained:

- Favourable means the population is stable/increasing.
- Intermediate (unfavourable) means the population declined in the range 1% 24.9% from the baseline reference value1.
- Unfavourable means the population declined in the range 25% 49.9% from the baseline reference value.
- Highly Unfavourable means the population declined more than 50.0% from the baseline reference value.

(The baseline reference value was for records made during winter months from 1995/96 to

1999/2000.)

As wetland habitats within the SPA are considered important for birds, they are considered of Special Conservation Interest. The boundary of Cork Harbour SPA was defined to include the primary wetland habitats of this site. In the 2014 NPWS Conservation Objectives Supporting Document habitats in the SPA overall were defined in 4 broad categories:





- Subtidal areas: Those areas contained within the SPA that lie below the mean low water mark and are predominantly covered by marine water (doesn't occur in the BAP area).
- 2. Intertidal areas: Areas contained between the mean high-water mark and the mean low water mark.
- Supratidal and associated habitats: Areas that are not frequently inundated by the tide (i.e. occurring above the mean high-water mark) but contain shoreline and coastal habitats and can be regarded as an integral part of the shoreline.
- 4. Lagoon and associated habitats: Lagoons and brackish lakes and their associated wetland habitats.

Using 'A Guide to Habitats in Ireland' (Fossitt, 2000) classification, the habitats in the part of the SPA inside the BAP area are mainly:

Fossitt Habitat	Habitat Code
Mud shores	LS4
Estuaries	MW4
Lowland depositing river	FW2
Tidal rivers	CW2
Lower salt marsh	CM1
Upper salt marsh	CM2
Shingle and gravel bank	CB1
Sea walls, piers and jetties	CC1





3.1.2 Great Island Channel Special Area of Conservation (Site Code 001058)

The Great Island Channel SAC lies alongside the BAP area to the north. Most of the SAC lies within Cork Harbour SPA (see Figure 3).

Qualifying interests are the following habitats:

- Mudflats and sandflats not covered by seawater at low tide
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

3.1.3 Rostellan Lough, Aghada Shore and Poulnabibe Inlet proposed Natural Heritage Area (Site Code 7IE029)

This site occupies the north-east corner of Cork Harbour and lies mostly within Cork Harbour SPA (see Figure 3). Poulnabibe Inlet is located to the west of the village. It is of local significance for its waterfowl. Although the site itself is seen to support only moderate numbers of waterfowl, the area forms an integral part of Cork Harbour, which is a wetland of international importance.

Natural Heritage Areas (pNHAs) do not have statutory legal protection, however most Local Authorities offer some protection, usually through Development Plans.

3.2. Plants and Animals of Saleen

This section of the Biodiversity Action Plan is intended to give a taste of the variety of species that have been recorded in and around Saleen and surrounds.

There are many more species and species groups recorded in the BAP area than could be gone into here. There is more information on these other groups that is publicly available, much of it from the National Biodiversity Data Centre (NBDC).

The data in this section comes from several sources. For much of the information relating to animals the data is from records held by the NBDC. This was downloaded from the map section of their website in January 2024 for the grid squares listed in Appendix II (NBDC Squares). Where other data sources are used, they are referred to in the text. Details on species recorded during fieldwork for this BAP have been sent to the NBDC.





Figure 3 Map showing site location of Saleen Villag BAP area and the EU and National environmental designated sites - Special Protection Area (SPA), and proposed Natural Heritage Area (pNHA) in the local area. Note – the majority of the SAC and pNHA overlap with parts of Cork Harbour SPA



3.2.1. Vascular Plants

Vascular plants have evolved structures for carrying water, minerals, and food through the plant. NBDC and Botanical Society of Britain and Ireland (BSBI) data shows over 200 different kinds of vascular plant have been recorded in and around the BAP area. No protected species were recorded.

There are records for St. Patrick's-cabbage (*Saxifraga spathularis*) which is one of a group of 15 or so Irish wildflowers that has puzzled scientists for a couple of hundred years. These are often called the 'Lusitanian flora of Ireland'.

St. Patrick's-cabbage is native to Ireland and the Iberian Peninsula (northern Spain and Portugal). It is not native to the United Kingdom but has been introduced there. In Ireland, St. Patrick's-cabbage is common in the south and west, but not found much anywhere else.

The Lusitanian puzzle is... why is it only common in the south and west, and how did it get to the south of Ireland after the last time Ireland was covered with ice?



Figure 4 Distribution of St. Partick's Cabbage in BSBI Online Plant Atlas 2020 (Stroh, et al., 2024)



St. Patrick's-cabbage





Many more records of vascular plants are included in the NBDC records and BAP survey results. These more common plant species are very important too. Common plants are a widespread and abundant food source for insects, birds, fish, and mammals - including humans. Some of the plants recorded in Saleen are illustrated below.



Plants recorded in the BAP area. Clockwise: Sea Aster, Wood Sorrel, Lords-and-Ladies and Lesser Celandine.

3.2.2 Non-vascular plants and other groups

Vascular plants do not include bryophytes (mosses, liverworts, and hornworts) or algae. Non-



Round-fruited Grimmia

vascular are important for biodiversity too. There are over 500 species of moss and over 200 species of liverwort found in Ireland. These species take a little more effort to identify and as such are less recorded than vascular plants. However, there are records for 10 species in the BAP area.

One species is listed as vulnerable in the Bryophyte records for the BAP area. Round-fruited Grimmia





(*Grimmia orbicularis*) is listed as vulnerable as its habitat, old walls, are threatened in their own right (Lockhart, et al., 2012).

3.2.3 Lichens

Another interesting group that has been surveyed in Saleen are lichens. Lichens are not actually a single organism, but a symbiosis between different organisms - a fungi and algae or cyanobacteria. The alga or cyanobacteria photosynthesise to produce food in the form of sugars which is used by both partners. The fungi build the structure of the lichen.

Lichens are used by some birds are nesting material, a behaviour that has been recorded in Saleen area (Whelan, n.d.).



Some of the lichen diversity recorded in Saleen. Clockwise from left: Cladonia fimbriata, Diploicia canescens and Xanthoria aureola

3.2.4 Mammals

The following mammals have been recorded in the BAP area since 2000 (Source National Biodiversity Data Centre). Included in Table 3 is any legislation the mammal is protected under and its status in the latest Terrestrial Mammal Red List (Marnell, et al., 2009)





Common Name	Scientific Name	Legislation Protected under	Red List
European Otter	Lutra lutra	Habitats Directive Annex II	Near Threatened
Eurasian Badger	Meles meles	Wildlife Acts	Least Concern
Eurasian Red Squirrel	Sciurus vulgaris	Wildlife Acts	Near Threatened
West European Hedgehog	Erinaceus europaeus	Wildlife Acts	Least Concern
Irish Hare	Lepus timidus subsp. hibernicus	Habitats Directive Annex V	Least Concern
Red Fox	Vulpes vulpes	Not protected	Least Concern
Brown Long-eared Bat	Plecotus auritus	Habitats Directive Annex IV	Least Concern
Daubenton's Bat	Myotis daubentonii	Habitats Directive Annex IV	Least Concern
Lesser Noctule (Leisler's Bat)	Nyctalus leisleri	Habitats Directive Annex IV	Near Threatened
Natterer's Bat	Myotis nattereri	Habitats Directive Annex IV	Least Concern
Common Pipistrelle	Pipistrellus pipistrellus	Habitats Directive Annex IV	Least Concern
Soprano Pipistrelle	Pipistrellus pygmaeus	Habitats Directive Annex IV	Least Concern
Grey Seal	Halichoerus grypus	Habitats Directive Annex IV	

Table 3 Mammal species recorded in and around the BAP area since 2000.



There are three species of Pipistrelle bats in Ireland: Common, Soprano and Nathusius's. The Soprano and Common Pipistrelle were only accepted as separate species around 1990.

There are records for the Soprano and Common Pipistrelle in the Saleen area from the NBDC. Nathusius's Pipistrelle only bred on the island of Ireland in 1997. It does occur in Cork, but the NBDC does not have records for it from Saleen...yet.



Pipistrelle bat

3.2.5 Birds

A total of 111 bird species were found in NBDC data for the BAP area. As birds are highly mobile, more species are likely to travel through the area.

There is more information on bird species recorded in Saleen in the section on Cork Harbour SPA earlier in this document.

In the fourth Birds of Conservation Concern Ireland (Gilbert, et al., 2021) (see previous section on Birds of Conservation Concern under **1.4 Threats to Biodiversity**) 54 (25.6%) of Ireland's regularly occurring bird species now on the Red list. The Red list overall has increased by 17 species sine the last assessment.

There was some good news in the report too, with the recovery in the populations of species such as Black-headed (*Larus ridibundus*) and European Herring (*Larus argentatus*) Gull. Both species, recorded in the BAP area, moved from Red to an Amber listing.

Table 4 Red listed bird species recorded in and around the BAP area.

Common Name	Scientific Name	BoCCI 2020-2026
Barn Owl	Tyto alba	Red List
Black-tailed Godwit	Limosa limosa	Red List
Common Kestrel	Falco tinnunculus	Red List
Common Pochard	Aythya ferina	Red List



Common Redshank	Tringa totanus	Red List
Common Scoter	Melanitta nigra	Red List
Common Snipe	Gallinago gallinago	Red List
Dunlin	Calidris alpina	Red List
Eurasian Curlew	Numenius arquata	Red List
Eurasian Oystercatcher	Haematopus ostralegus	Red List
Golden Plover	Pluvialis apricaria	Red List
Shoveler	Anas clypeata	Red List



The Curlew has one of the most evocative calls that can heard in Saleen. It is however a Red Listed species, a species of global conservation concern and is one of Ireland's most threatened birds.

The first national breeding Curlew survey, undertaken between 2015 and 2017, found drastic declines of the national breeding population of Curlews. Whereas 3,300 - 5,500 pairs are estimated to have bred in the Republic of Ireland in the late 1980's, by 2017 that was down to an estimated 150

Curlew

pairs (O'Donoghue et al., 2019). This represents a

decline of 96% in the breeding population. It is thought the Curlew will become extinct as a breeding species in Ireland before 2030 (Harrison, et al., 2023).

The main threats to Curlew in Ireland have been the loss of a suitable breeding habitat due to habitat degradation and fragmentation. Predation of Curlew nests (eggs and chicks) has also been identified as excessive and threatens the viability of the Irish population.



3.2.6 Reptiles

There is only one native terrestrial reptile species in Ireland, the Common Lizard (*Zootoca vivipara*). Within the BAP area there is a single record for the Common Lizard in the NBDC data, though the record is from 1976.

The Common Lizard is also known as the viviparous lizard as it gives birth to live young in cooler climates. The mother retains the eggs within her oviducts until they hatch, where the benefit from the warmth of her basking in a sunny spot.

The lizard can occupy a wide range of habitats including coastal sites, grasslands and dunes or banks, and woodland tracks. It is also quite tolerant of human presence and will occupy railway embankments, hedgerows, and gardens. Habitats that could support the Common Lizard certainly exist in Saleen and surrounding districts.

Lizards brumate (hibernation for cold-blooded animals) over winter and emerge in spring. Courtship and reproduction occur around April – a good time to go looking for lizards and possibly update the records for Saleen!



Common Lizard





3.2.7 Amphibians

In the BAP area records for only one of Ireland's three native amphibians was found, and this was a relatively old record coming from 1997. The Common Frog (*Rana temporaria*) is

protected under the Habitats Directive and under the Irish Wildlife Acts. In the most recent assessment for the Habitats Directive (NPWS, 2019c) the species is described as 'a widespread and very abundant species throughout the country, occurring in a broad range of habitats from uplands to urban gardens. It was assessed as 'Least Concern' in the most recent Irish Amphibians, Reptiles and Freshwater Fish Red List (King, et al., 2011).



Common Frog

The other two Irish amphibians are the Natterjack Toad and the Smooth Newt. The Natterjack Toad has a very restricted distribution in Ireland and is found, as a native, only in county Kerry, although there is a translocated population in Wexford.

The distribution of the Smooth Newt, also known as the Common Newt, is described as 'widespread in Ireland, but locally distributed and under-recorded' in the recent Red List Assessment. This is another species that could be added to the Saleen species list through careful surveying.

3.2.8 Invertebrates

Humans and other mammals are in a group of animals known as vertebrates – animals that have a backbone. Less than 5% of all animal species on the planet are vertebrates. Most species of animal, over 95%, are invertebrates – they don't have a backbone.

Invertebrates include butterflies and bees, snails and squid, earthworms, jellyfish, sea anemones and corals.



Insects

The insect class contains the highest number of animal species for any class on earth. They are hugely important as a food source, as pollinators, and in nutrient cycling. They have long been used as indicators of the health of ecosystems.

Along with other invertebrate groups some insects are used to assess the health of freshwater systems all over the world, including Ireland, and are increasingly being used to assess the health of other ecosystems.

Insects are also under threat at a global scale, both in terms of abundance and in terms of species diversity (Sánchez-Bayoa & Wyckhuysb, 2019).

There are records for many groups in the insect class in data sourced from the National Biodiversity Data Centre for the Ballincollig area. These include grasshoppers (*Orthopteran*), true flies (*Diptera*), true bugs (*Hemiptera*) and beetles (*Coleoptera*). Some of those recorded groups, such as bees and butterflies, are explored in depth below because there are national monitoring or survey programmes and/or Red Lists for them.

Bees

The survival of up to 30% of Bumble Bee and Cuckoo Bee species is threatened across central and western Europe (Kosior, et al., 2007). This figure is also true for Irish bee species assessed for a 2006 Red List of Irish Bees (Fitzpatrick, et al., 2006). Most of the bees that have been recorded in the BAP area are all assessed as being "Least Concern" (i.e., not being a focus of species conservation) in that report. They are listed in Table 5 below.

Table 5 Bee species recorded in and around the BAP area.

Common Name	Scientific Name	Red List Assessment
Large Red-tailed Bumble Bee ¹	Bombus lapidarius	Near Threatened
Common Carder Bee ¹	Bombus pascuorum	Least Concern
Grey Mining Bee	Andrena cineraria	Least Concern
Gwynne's Mining Bee	Andrena bicolor	Least Concern



Small Garden Bumble Bee	Bombus hortorum	Least Concern
White-tailed Bumblebee group ²	Bombus lucorum agg.	Least Concern

¹Recorded during BAP surveys.

²Also recorded during BAP surveys.



Large Red-tailed Bumblebee.

Butterflies

There are 32 species of butterfly that are resident on the island and 3 – the Red Admiral, the Painted Lady, and the Clouded Yellow that regularly migrate to it (Regan, et al., 2010).

Two of our current species- the Comma and the Essex Skipper-only became established here after 2005.

In the NBDC records for the BAP area 5 species of butterfly have been recorded. All but one species of these butterfly is assessed as Least Concern in the most recent Red List of Irish butterflies and the Comma has not yet been assessed.



The Large Red-tailed Bumble Bee was assessed as Near Threatened in the most recent Red List of Irish Bees (Fitzpatrick, et al., 2006). In the assessment it was noted that the habitats it was most closely associated with, dunes and unimproved grassland, were in decline. It was also noted that urban areas might provide habitats the species could use



Table 6 Butterfly species recorded in and around the BAP area.

Common Name	Scientific Name	Red List Assessment
Red Admiral ¹	Vanessa atalanta	Least Concern
Small Tortoiseshell	Aglais urticae	Least Concern
Small White	Pieris rapae	Least Concern
Speckled Wood	Pararge aegeria	Least Concern
Wood White	Leptidea sp.	Least Concern

¹Recorded during BAP surveys.

Moths

In Ireland over 1,500 species of moth have been recorded (Allen, et al., 2016).

Many of these are quite small – they usually have a wingspan under 20mm- and are difficult to identify for most of us. These smaller moths are often referred to as micro-moths.

Of the 1,500 moth species in Ireland 578 species are referred to as macro-moths, and in general have a wingspan over 20mm. A Red List for Irish macro-moths was produced in 2016 (Allen, et al., 2016). In that 43 of the Irish species assessed were listed as threatened and 20 as near threatened.



Cinnibar Moth

All of the species recorded in and around the BAP since 2000 have been classified as least concern, bar two which have not been evaluated.

Common Name	Scientific Name	Red List Assessment
Brimstone Moth	Opisthograptis luteolata	Least Concern
Brown Silver-line	Petrophora chlorosata	Least Concern

Table 7 Macro moth species recorded in and around the BAP area since 2000.


Buff-tip	Phalera bucephala	Least Concern
Cinnabar	Tyria jacobaeae	Least Concern
Clouded Drab	Orthosia incerta	Least Concern
Garden Carpet	Xanthorhoe fluctuata	Least Concern
Hebrew Character	Orthosia gothica	Least Concern
Least Black Arches	Nola confusalis	Least Concern
Pink-barred Sallow	Xanthia togata	Least Concern
Poplar Hawk-moth	Laothoe populi	Least Concern
Setaceous Hebrew Character	Xestia c-nigrum	Least Concern
Dark Sword-grass	Agrotis ipsilon	Not Evaluated
Death's-head Hawk-moth	Acherontia atropos	Not Evaluated

Dragonflies and Damselflies

There are currently 24 species of Odonata (the Order to which the dragonfly and damselfly belong) resident in Ireland (Nelson, et al., 2011). These rely on freshwater particularly for the larval stage of their life cycle and the adult stage is rarely found far from freshwater.

None of the species of Odonata recorded in and around the BAP area are threatened (Nelson, et al., 2011).

Scientific Name Common Name **Red List Assessment** Least Concern **Blue-tailed Damselfly** Ischnura elegans **Common Blue Damselfly** Enallagma cyathigerum Least Concern **Common Darter** Sympetrum striolatum Least Concern Large Red Damselfly Pyrrhosoma nymphula Least Concern **Migrant Hawker** Aeshna mixta Least Concern

Table 8 Dragonfly and Damselfly recorded in and around the BAP area.





Damselflies are generally slenderer and more delicate than dragonflies. When resting, damselflies fold their wings up against their bodies while dragonflies hold their wings out at right angles to their bodies.



Blue-tailed Damselfly (left) and Migrant Hawker Dragonfly

Dragonfly Ireland 2019-2024 is a survey being run on the island of Ireland by the National Biodiversity Data Centre and the Centre for Environmental Data and Recording (Northern Ireland). It is funded by the Environmental Protection Agency.

3.2.9 Invasive Species

The International Union for the Conservation of Nature (IUCN) defines an alien species as

'a species introduced outside its natural past or present distribution; if this species becomes problematic, it is termed an invasive alien species (IAS).'

There are records for several species in the data obtained from the NBDC that are noted as invasive species. In Figure 2 at the beginning of this plan 'Alien and Problematic Species' were listed as one of the many threats to Habitats Directive habitats in Ireland, in a report to the European Union (NPWS, 2019a). 'Alien and Problematic Species' were also indicated to have an impact on Habitats Directive species in the same report.





The invasive impact level for species listed in Table 9 is taken for the National Biodiversity Data Centre. Species marked with an asterisk* are subject to control under the European Communities (Birds and Natural Habitats) Regulations 2011.

Table 9 Invasive Species recorded in and around the BAP area.

Common Name	Scientific Name	Invasive Impact Level
Rhododendron*	Rhododendron ponticum	High Impact
Cherry Laurel ¹	Prunus laurocerasus	High Impact
Bank Vole	Myodes glareolus	Medium Impact
Beech ¹	Acer pseudoplatanus	Medium Impact
Butterfly Bush ¹	Buddleja davidii	Medium Impact
European Rabbit ¹	Oryctolagus cuniculus	Medium Impact
Himalayan Honeysuckle ¹	Leycesteria formosa	Medium Impact
Harlequin ²	Harmonia axyridis-succinea	Medium Impact
Three-cornered Garlic*1	Allium triquetrum	Medium Impact
Traveller's-joy ¹	Clematis vitalba	Medium Impact
Winter Heliotrope ¹	Petasites pyrenaicus	Medium Impact

¹ Also recorded during BAP surveys.

²Recorded during BAP surveys.

Traveller's-joy is also commonly known as Old Man's Beard or Mile-a-minute. It is an invasive plant which is native to central and southern Europe. It was introduced to Ireland as an ornamental garden plant and has since escaped into our natural environment. It is particularly invasive in the southern half of Ireland. The seeds have distinctive white plumes in dense, fluffy clusters persisting over winter. These are where the name "Old Man's Beard" is derived from.

The quick growing vines of Traveller's-joy can form a dense, light absorbing canopy that suppresses all vegetation beneath it, threatening hedgerows and woodlands. Contact with the sap of Traveller's-joy can cause irritant dermatitis of the skin.





Left: Dense growth of Traveller's-joy near Saleen village. Right: Flowers of Traveller's-joy.

4.1. Habitats and Places of Biodiversity Interest in Saleen and District

Walkover surveys of the BAP area were conducted in the summer of 2023. Habitats and species encountered were recorded. Habitats were classified according to Fossitt (Fossitt, 2000) and with reference to Best Practice Guidance for Habitat Survey and Mapping (Smith, G.F. et al, 2011).

NPWS Article 17 datasets along with other available datasets and reports were consulted to establish if there were existing records for any Habitats Directive Annex I listed habitats and other ecologically sensitive habitats present within Saleen and District.

Maps were prepared using QGIS software⁷.

4.1.1. Watercourses

With over 73,000 km of river channels in Ireland, streams and rivers are a ubiquitous feature of our landscape. These rivers are a source of food and water, as well as providing a home to

⁷ QGIS.org, 2024. QGIS Geographic Information System. QGIS Association. <u>http://www.qgis.org</u>



a diverse range of plants and animals. As they cross the landscape, rivers act as ecological corridors connecting habitats and wildlife populations.

In the section on invertebrates, it was mentioned that they are often used to assess the quality of water in rivers and streams, a methodology known as biological monitoring. Some types of invertebrates are very sensitive to pollution and other disturbances to their environment, while others can cope with higher levels of pollution and disturbance.

A biological index, known as the Q-value system, is used in Irish rivers. It gives a measure of the ecological health of a river stretch based on the sensitivities of certain aquatic invertebrate to water pollution. This allows rivers to be classified into five quality classes based on the Q-value result. 'High' river water quality is when the water is not polluted at all, and 'bad' river water quality is when the water is most polluted.

High	Good	Moderate	Poor	Bad
Q5, Q4-5	Q4	Q3-4	Q3, Q2-3	Q2, Q1-2, Q1

The Q-Value index.

Ireland is signed up to the EU Water Framework Directive (WFD) 2000 which commits the country to achieving good ecological status for water bodies by the year 2027. Monitoring of rivers and other water bodies is part of Ireland's responsibilities under the WFD.

The Environmental Protection Agency (EPA) Water Programme works with others to monitor and assess the health of our rivers, lakes, estuaries and coastal waters under the WFD.

The national rivers monitoring programme run by the EPA focuses on the main river channels which are sampled for biology (invertebrates, aquatic plant, diatoms and fish). Almost half of theses rivers are also monitored physical (e.g. oxygen) and chemical (nitrogen, phosphorous) parameters.







Cloyne River is classified as a Depositing/lowland river (FW2) in Forrist. The river arises in the village of Knocknamadderee, runs for 3km from Cloyne village and joins the Saleen stream approximately 400m southwest of the village. Approximately 10-20m downstream of where it joins the Saleen stream the river becomes tidal. This point marks the beginning of Saleen Creek.

Saleen village is currently served by a septic tank system located southwest of the village within Saleen Woods. It currently discharges wastewater into Saleen Stream 20m upstream of where it meets the Cloyne River.

The WFD requires that all identified waterbodies are assigned a status to determine if it has



Figure 5 Cloyne River within Saleen Woods

achieved its environmental objective. Just under 60% of Ireland's surface and groundwater bodies are assigned status based on the results of monitoring. Cloyne River is not monitored by the EPA, so no biological data is available on the river from them.

Unmonitored rivers have to be assigned a status by other means. One method of assigning status is modelling - unmonitored streams and rivers (and other water bodies) are grouped together based on similar physical characters and similar anthropogenic pressures to water bodies that are monitored. Status information from monitored water bodies is then used to extrapolate status to unmonitored water bodies.



For the WFD, the Cloyne River is included in the Farrannamanagh_SC_010 sub-catchment as part of the Lee, Cork Harbour and Youghal Bay catchment. Using extrapolation methodology, all five river water bodies in this sub-catchment, including the Cloyne River, have been assigned "Good Ecological Status or Potential".

As part of a survey for water Habitats Directive Assessment for Wastewater Discharge License for Cloyne Agglomeration, sampling was carried out on the Cloyne River in 2002 to obtain Qvalues. The sampling site was 50m upstream of where the Cloyne and Saleen Stream meet and got a score of Q3 (3-4) which is classified as Moderate. The report cited surface runoff from an adjacent field and from cattle drinking points as possibly having a localised impact on water quality at this location (Dixon, 2003).

A second location 5m downstream of where Clone River meets the Saleen Stream was also monitored and assigned a value of Q2-3 (Poor). This lower value likely an indication of effects from the WWTP discharge. Polychaete worms were found at this sampling site indicating some saline influence, which would also have an effect of the freshwater macroinvertebrate species used to derive Q-values.

Saleen Stream

Saleen Stream (FW2) arises immediately north of the village and drains surface water and ground water arising in Saleen village. The stream flows through Saleen in a south westerly direction and is culverted under the village. Where it is not culverted Saleen Stream is a small watercourse and flows for the most part though Saleen woods and meets the Cloyne River approximately 400m southwest of the village.

Saleen Stream is not identified on the OSI River and Lake maps (EPA) Geoportal and there is no EPA data for it. The stream was however sampled for the report as the Cloyne River (Dixon, 2003). The monitoring site was situated 4m downstream of the WTTP existing discharge. value of Q1 was recorded, indicating very poor water quality. The report also noted that the site was characterised by extensive growths of sewage fungus and strong odours due to the wastewater discharge. Strong odours and sewage fungus in Saleen Stream downstream of the discharge were also noted during surveys for this BAP.





4.1.2 Coastland and Marine Habitats

Brackish Waters

Where Cloyne River becomes tidal it becomes Saleen Creek, classified as a Tidal Rivers (CW2) habitat in Fossitt. These rivers/streams are subject to regular fluctuations of salinity and turbidity.

Saleen Creek meanders continuously by large mudflats on both sides and discharges to Cork Harbour through Poulnabibe inlet.



Saleen Creek with exposed mudflats on either side

Estuaries

Poulnabibe Inlet, also called Saleen Creek, is a small Estuary (MW4) which opens into the of the lower part of Cork Harbour SPA.





Estuaries are semi-enclosed bodies of water with free connection to the open sea. The sea

water in estuaries is measurable diluted by inputs of freshwater, which combined with tidal movement means the salinity is permanently variable (Fossitt, 2000). This mix of salt and fresh water produces many complex sub-habitats (discussed in following sections).

The name Poulnabibe, meaning 'Hole of the Bibe', may refer to Baidhbe, a goddess of Celtic mythology who took the form of a crow.



Irish estuaries are important feeding areas for birds, especially during migration and in winter. Within Poilnabibe Inlet habitats like mud shores and mixed sediment shores are used by wading birds, while the upper shore and saltmarsh habitats provide important high tide water roosts. The open water within the creek and adjacent to it is important for grebes and sea ducks.

Birds regularly recorded in Poulnabibe Inlet are listed in Table 10 (NPWS, 2014); (Hilgerloh, et al., 2001). Birds marked with * are of Qualifying Interest for Cork Harbour SPA.

Common Name	Scientific Name	Common Name	Scientific Name
Black-headed Gull	Larus ridibundus	Teal	Anas crecca
Common Gull	Larus canus	Pintail*	Anas acuta
Great-crested Grebe*	Podiceps cristatus	Shoveler*	Anas clypeata
Grey Plover*	Pluvialis squatarola	Red-breasted Merganser*	(Mergus serrator
Grey Heron*	Ardea cinerea	Wigeon*	Anas penelope
Little Grebe*	Tachybaptus ruficollis	Bonaparte's Gull	Chroicocephalus philadelphia

Table 10 Birds of Saleen Creek





Lesser Black-backed Gull*	Larus fuscus	Black-headed Gull*	Chroicocephalus ridibundus
Mallard	Anas platyrhynchos	Common Gull*	Larus canus
Little Egret	Egretta garzetta	Herring Gull	Larus argentatus
Ringed Plover	Charadrius hiaticula	Kingfisher	Alcedo atthis
Mediterranean Gull	Larus melanocephalus	Dunlin*	Calidris alpina
Oystercatcher*	Haematopus ostralegus	Greenshank	Tringa nebularia
Cormorant*	Phalacocorax carbo	Redshank*	Tringa totanus
Jackdaw	Corvus monedula	Hooded Crow	Corvus corone cornix
Turnstone	Arenaria interpres	Curlew *	Numenius arquata

Salt Marshes

Salt marshes are vegetative wetland habitats found in sheltered coastal bays and estuaries. They generally develop between the mid-neap, high spring tides levels, over waterlogged mud, sand, or peat.

Two categories are recognised in Fossitt based on the variation in tidal coverage:

- 1. Lower salt marsh (CM1) is subject to more prolonged submersion.
- 2. Upper salt marsh (CM2) is subject to less frequent and less prolonged inundation by the sea.

Areas of both types of saltmarsh habitat occur in Saleen Creek in three main patches - behind the shingle spit at the western end of the inlet, and two small areas at the eastern end of the inlet (Figure 6).







Figure 6 Upper and Lower Salt Marsh in the BAP area. (McCorry & Ryle, 2009)



Saltmarshes provide unique habitats for flora, with specialist salt-tolerant species rather than high species richness (Perrin, et al., 2015). Some of the plant species that have been recorded in on the saltmarsh at Saleen include Sea-milkwort (*Lysimachia maritima*), Sea Arrowgrass (*Triglochin maritima*), Sea Plantain (*Plantago maritima*)and Sea Rush (*Juncus maritimus*).



Sea-milkwort

This habitat is also particularly important areas as a high tide wader roosts.

The saltmarsh at Saleen was included in the NPWS saltmarsh monitoring project (Coastal Site Name: Jamesbrook Hall; SMP site code: SMP0056) (McCorry & Ryle, 2009).

As part of that survey three Annex I⁸ saltmarsh habitats were recorded:

- Salicornia flats (1310)
- Atlantic salt meadow (ASM)
- Mediterranean salt meadows (MSM). (McCorry & Ryle, 2009).

The report found the main impact affecting the site was the the presence of Common Cordgrass (*Spartina anglica*). This is an invasive species of saltmarshes, mudflats and intertidal areas which can displace native species. The patches of Common Cordgrass were small, however the report did assess the overall conservation status of the saltmarsh as *unfavourable-inadequate* due to the threat of the potential to spread of the cordgrass.

Shingle and Gravel Banks

Shingle and Gravel Banks (CB1) is a habitat type where shingle (cobble and pebbles) and gravel have accumulated to form elevated ridges or banks above the high tide mark (Fossitt, 2000).

These banks are used by as roosting sites for wading birds with main roosting area in Saleen Creek being on the inner side of the shingle bank at the mouth of the creek (Atkins, 2020).

⁸ Habitat types whose conservation requires the designation of Special Areas of Conservation.





Figure 7 Main roosting area (circled) in Saleen Creek is on the inner side of the shingle bank (Atkins, 2020)

Where the banks are vegetated, they contain typical salt-tolerant colonisers of stony banks like Sea Beet (*Beta vulgaris*), Cleavers (*Galium aparine*), Sea Campion (*Silene uniflora*) and Sea Mayweed (*Tripleurospermum maritimum*).



Shingle Bank in BAP Area





Coastal Constructions

Sea walls, piers and jetties (CC1) is a habitat classification in Fossitt for coastal constructions that are partially or totally inundated by sea water at high tide, or subject to wetting by sea spray or wave splash (Fossitt, 2000). In the BAP area sea walls run along most of the shoreline along the northern side of Poulnabibe Inlet.

The Sea wall in the BAP are constructed using red sandstone rock which is predominantly laid in a vertical fashion. It is believed that the walls were constructed in the early 1800's to border the southern side of the road from Saleen village to East Ferry, known as the Strand Road. These roads are not depicted on the Grand Jury Map No. 6 published in 1811(compiled from research done in 1790's) but are evident in the sketches of the area by Henry Morgan, in 1849, which show parts of the coastal road and stone walls.

Many of the walls are low level structures and as you make your way westwards the height of the walls above the shore rises and the structural importance increases as they are more open to coastal erosion and damage from the sea and winds blowing in from across the harbour. Sections have also been damaged by trees that have fallen during storms.



Sea walls at Saleen

In the past, when sections of walls suffered damage due to erosion from the sea or from general wear and tear and ageing, attempts were made to repair them with mass concrete structures. The result is that we now have stone walls dating back to the early 1800's which are interspersed with concrete sections. In addition, there are many sections of these walls which have stones missing and, in some cases, whole sections of walls no longer exist.



Since 2019, Saleen & District Residents' Association has worked in multiple phases to conserve sections of the walls. The conservation is being carried out using traditional methods and techniques in a manner which is sympathetic to the style of stonework used in the original construction of these walls, including the use of lime mortar, and that preserves the lichen biodiversity on the walls. Over 40 species of lichen have been recorded on the walls (Whelan, n.d.)

Littoral Habitats

These are habitats of the seashore in the littoral or intertidal zone which is defined in Fossitt as the area between the upper limit of the supralittoral zone (the spray zone on rocky shores and the strandline on sediment shores) and the mean high water springs tide mark (Fossitt, 2000).

Intertidal habitats found within the inlet include Mixed substrata shores (LR4), Mixed Sediment Shores (LS5) and extensive areas of Mud Shores (LS4) and some mixed sediment shores (LS5).

The main habitats of importance for waterbirds are the mud shores and mixed sediment shores which are used by waders and dabbling ducks The mudflats are normally exposed during low tides. Large numbers of waterfowl congregate on the mudflats from late summer to early spring



1Example of some of the habitats within Poulnabibe inlet Inlet. Clockwise: Mixed Sediment Shores, Mudflats and Shingle and Gravel Banks





4.1.3 Grassland

There is a considerable amount of grassland in the BAP area. Much of this managed for specific purposes such as agriculture or amenity purposes. There are areas of grass that are green spaces within housing estates, schools and the village and how these are currently utilised varies with location.

Amenity grassland



Amenity grassland at Green Acres

Amenity grassland (improved) GA2 is managed for purposes other than grass production. This habitat is associated with amenity areas in the BAP area such as the public grass areas at Saleen village, Green Acres, churches and estates.

Due to this management regime of regular mowing, they generally have low

biodiversity value. Other than grasses, opportunistic herbs such as Creeping Buttercup (*Ranunculus repens*), Ribwort Plantain (*Plantago lanceolata*) and White Clover (*Trifolium repens*) are often found in them.

The grass at Scartleigh National School shows how different management can improve the biodiversity value of amenity grassland. The school was surveyed during the summer holidays when the grass was left uncut allowing large swaths of White Clover (*Trifolium repens*) to flower. This had numerous bumblebees feeding on it, including the Large Red-tailed Bumblebee.

The top of the earth banks behind the were also left uncut allowing rough grassland to develop. Such areas are great for bumblebee nest and hibernation sites.





Clover left to flower over the summer at Scartleigh School

4.1.4 Woodland

In Ireland there is very little semi-natural woodland; that is woodland where most plant species are native species. It is estimated that only about 1% to 2% of Ireland's land cover is semi-natural woodland (Perrin, et al., 2008). Old semi-natural woodlands are of greater value from a biodiversity and nature conservation value than other woodland types.

Looking at aerial imagery of the BAP area, it is notable that there are areas with good tree cover, particularly compared to the surrounding countryside. These include Saleen Wood, other Coillte owned woodland to the south and south-east of the village, patches of woodland on either side of the eastern side of Poulnabibe Inlet and wooded areas along Ferry Road

Some of this woodland, mainly the areas along Ferry Road, is the legacy of tenant treeplanting in the eighteenth and nineteenth centuries. In 'A register of trees. 1790-1860' there are records for the trees planted in the region. A total of 178,150 trees were planted in the parish of Aghada, with 24,440 planted in Rathcoursey between 1812 and 1824 (McCracken & McCracken, 1976).

Some notable trees can be found near Saleen. In Castle Mary, just outside the BAP area there are four trees listed in the Heritage Trees of Ireland database. These range from 100 to 500



years old and are recorded as Heritage Type "Trees with character" or "Exceptional specimen trees"⁹.

But throughout Saleen there are old trees, large trees, trees with unusual shapes, or trees that may be valued by the community for some other reason. Some may be many hundreds of years old. Some may be native, others non-native. Native trees especially can be very valuable for other wildlife as they grow older, and even when they have died.

As they get older, native oaks can support 100s of different species including species of fungi, moss, lichen, other plants, birds, mammals, a huge variety of invertebrates such as the caterpillars of different moth and butterfly species, and beetles. Some non-native trees that are quite old can also be good for wildlife. As well as being important for wildlife, because they have lived for so long, old trees might be important to local people because they are remembered over generations. Older trees can develop interesting shapes as they age and might be valued by people because of the way they look.

While these trees may not make it onto the Heritage Trees of Ireland, they are no less worthy of celebration and recording. A recording scheme for Significant Trees has been set up by Wild work and is discussed further under the Actions Section.

Saleen Community Woodland

Saleen Community Woodland lies to the south of the village. The main trees in the wood are willow (*Salix spp.*) and Downy Birch (*Betula pubescens*) and Alder (*Alnus glutinosa*) with occasional Oak (*Quercus sp.*) and some non-natives including Sycamore (*Acer pseudoplatanus*) and Beech (*Fagus sylvatica*).

In the ground cover Bramble (*Rubus fruticosus agg.*) and Ivy (*Hedera hibernica*).dominate. Other plants include sedges such as Remote Sedge (*Carex remota*) and Wood Sedge (*Carex sylvatica*) and forbs such as Wild Angelica (*Angelica sylvestris*), Hogweed (*Heracleum sphondylium*) Yellow Pimpernel (*Lysimachia nemorum*).

⁹ https://www.ouririshheritage.org/content/archive/topics/projects/heritage-trees-of-ireland



Overall the woodland would be classified as 'Wet willow-alder-ash woodland' (WN6) according to A Guide to Habitats in Ireland (Fossitt, 2000). This classifies the woodland as 'semi-natural'. Semi-natural is generally used for stands that resemble the potential natural woodland cover of Ireland. A high proportion of non-native trees in a woodland stand will detract form its semi-natural status, but overall non-native trees in Saleen Community Woodland are not common.

4.1.5 Hedgerows

Hedgerows (WL1) are a type Linear Woodland in the Fossitt classification. As a habitat, hedgerows have may have elements of woodland, scrub, and grassland. They act as a corridor for plant and animal species to disperse through the landscape. They also provide shelter and food for species including pollinating insects, birds, and mammals. Bats are known to use hedgerows, treelines and old stone walls when hunting for food.

There is considerable research into the carbon sequestration capability of hedgerows (Black, et al., 2014), so any reduction in their extent could add to problems associated with climate change.

In Ireland hedgerows have widely been used to mark field boundaries and protect livestock for at least the last 300 years and to mark townland and other significant boundaries for over 1000 years. They are a significant element of our rural landscape, visually and culturally (Foulkes, et al., 2013).

While Ireland has one of the lowest levels of woodland cover in Europe, it is estimated that hedgerows cover more area than all our broadleaved woodland and hold 15% of our broadleaved trees (Hickie, 2004).

Hedgerow in the BAP area is found mostly within agricultural land. Most hedgerows in the area were intensively managed with evidence of frequent flailing or cutting resulting in a hedgerow under 4m high, often with gaps between woody and/or thorny hedgerow species.





4.1.6 Scrub

Scrub (WS1) is also a woodland type in Fossitt and can consist of low growing trees or shrubs, including brambles and gorse.

Many people think of scrub as a nuisance, but scrub plays a valuable role in our landscape. Patches of scrub help create a mosaic of habitats habitat that support invertebrates, reptiles, amphibians, small mammals and birds.



Scrub at Garranekinnefeake Cemetery

4.1.7 Stone walls and other stonework

Old stone walls are also an important habitat type and are included as the habitat type Stone walls and other stonework BL1 in the Fossitt classification. Stone walls have characteristics of habitats like stone cliffs and other bare rock habitats. Old walls with traditional lime mortar can have a diverse range of plants. Ferns and other plants, including mosses, as well as lichens can find a home here. Stone walls can be important linear features for some bat species when commuting between roots and foraging habitats.

A particularly nice example of the biodiversity old stone walls support can be found along road running from the village to the estuary. These walls support diverse plants such as Harts-



tongue Fren (*Asplenium scolopendrium*), Lesser Clenndine (Ficaria verna), Atlantic Ivy (*Hedera hibernica*), Navelwort (*Umbilicus rupestris*).

Other structures included in this category are old gravestones, which provide a home for 'saxicolous' lichen to grow. Saxicolous means 'living on (colous) rock (saxi)'.



Example of an old stone wall in Saleen and lichen covered headstones at Garranekinnefeake Cemetery

4.1.8 Buildings (and gardens)

Buildings and artificial surfaces, (BL3) is also habitat type in Fossitt. While artificial surfaces such as roads, paved carparks and AstroTurf pitches may not be of much biodiversity value, some buildings can be.

Many of us might think of old buildings such as churches as being somewhere that bats might

feel at home, but they will happily use modern buildings too. Some bird species will use old buildings. Peregrine Falcon have been spotted on Shandon Cathedral in Cork City, and on the chimney of the old waterworks building on the Lee Road. However, they have also been spotted using the County Hall – a much more modern building.



Swallow nest at Church of the Mother of God, Saleen.



The House Martin, its relative the Swallow, and the similar looking Swift, all summer bird visitors to Ireland, will build nests on buildings. And of course, the Barn Owl gets its common name from a type of building that it likes to use.

Most houses in Saleen and district have a garden, and these can be a great place for attracting and watching wildlife. Even a window-box managed in the right way can be a micro nature reserve. Lots of ideas to help you make your garden more wildlife friendly are listed in the Resources Section.

4.1.9 Flower beds and borders

Flower beds and borders (BC4) is the habitat designation in Fossitt for ornamental flower beds and borders where herbaceous plants or dwarf shrubs dominate.

Often planted for human enjoyment, this habitat can be also very useful to pollinators, particularly if species are planted to provide nectar and pollen throughout the year. Examples of these habitats occur at Saleen village, at the area bordering the outer green at Saleen and at Green Acres.



Flower beds and borders in Saleen





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Table 11 Habitats recorded in the BAP area.

	Fossitt Habitat Name	Fossitt Code
Watercourses	Lowland depositing river	FW2
	Tidal rivers	CW2
	Lower salt marsh	CM1
Coastland	Upper salt marsh	CM2
	Shingle and gravel bank	CB1
	Sea walls, piers and jetties	CC1
Grassland	Improved agricultural grassland	GA1
Grassianu	Amenity grassland (improved)	GA2
	Wet willow-alder-ash woodland	WN6
	(Mixed) broadleaf woodland	WD2
Woodland and	(Mixed) Conifer woodland	WD3
scrub	Conifer woodland	WD4
50105	Scrub	WS1
	Hedgerows	WL1
	Treelines	WL2
Cultivated and built	Stone walls and other stonework	BL1
land	Buildings and artificial surfaces	BL3
	Flower beds and borders	BC4







In order to help inform and carry out these suggested actions, links to some key resources are indicated throughout this section. Additional resources are available in the Resources Section.

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

4.1. Management Structure

To effectively manage the implementation of this Biodiversity Action Plan, a structure to manage and communicate the plan needs to be put in place. Saleen and District Residents Association are best placed to lead this initially, but linkages with other groups in the community should be made.

Number	Management Structure	Year
MS-1	Establish a management structure to oversee the implementation of this plan.	1
MS-2	Carry out an annual review of the plan and its progress with key stakeholders	2-5

4.2. Pesticides

Pesticides include herbicides, fungicides and insecticides. Pesticides have been implicated in the decline of insect groups such as bees (NBDC, 2019), and others.

It will not be possible to eliminate the use of pesticides in all areas, but where possible alternative methods of control such as mulching or mechanical removal could be promoted. See for examples (Washington State Department of Enterprise Services, n.d.) and (Seattle Public Utilities, 2012). For example, the gravel beds in Saleen village are managed without pesticides using hand weeding.





The gravel beds in Saleen managed without pesticides.

For some invasive alien species pesticides may have to be used as an option of last resort, but this should always be done with using Sustainable Use protocols.

There are also suggestions on alternatives to pesticides on the website of the All-Ireland Pollinator Plan, <u>https://pollinators.ie/</u> and there are details on where to find more information in the Resources section.

Number	Pesticides	Year
P-1	Review sources of information and ideas for reduction of pesticide: Pesticide Free Towns ¹⁰ and Environmental Protection Agency (EPA) - Greener Gardening, Your Guide to Chemical-Free Affordable Gardening. ¹¹	1
P-2	Develop a Pesticide Policy with reference to the Sustainable Use Directive (Directive 2009/128/EC) and the All-Ireland Pollinator Plan for Saleen and District Residents Association. Share this plan with other groups in the area.	1/2

¹⁰ <u>https://www.pesticide-free-towns.info/</u>

¹¹ <u>https://ctc-cork.ie/wp-content/uploads/2021/03/Greener-Gardening-web-sept-2014.pdf</u>



P-3	Eliminate the inappropriate use of pesticides.	1-5
P-4	Communicate the biodiversity benefits of reduced pesticide use and provide information to the local community to help eliminate the inappropriate use of pesticides and reduce pesticide use to the absolute minimum.	1-5

4.3. Invasive Species

A number of problematic, non-native species have been recorded in and around the BAP area. These are listed in Table 9 Invasive Species recorded in and around the BAP area. The problems caused by each species and how to manage it are particular to individual species.

A very important piece of information that is needed to deal with these species is their location – where they are. For that it is important to know what they look like. There are handy guides on how to identify them on Ireland's Invasive Species Website¹².

Winter Heliotrope was recorded in several places. Winter Heliotrope forms dense stands with a compact canopy that excludes native vegetation. These stands last through the growing season. This plant is notoriously difficult to control.

Repeated strimming or mowing can weaken the plant. However as both rhizomes and aerial plant parts have the potential to generate new individuals, this method is not recommended. The only effective treatment protocol for Winter Heliotrope is chemical, and this is only partially effective. Therefore, the main aim suggested in this action plan is to reduce the spread of the plant to uninvested areas by ensuring contractors and volunteers know how to identify the plant and do not spread it through their activities.

Small stands of Traveller's-joy can be treated mechanically. Small seedlings can be pulled by hand. Larger stems have to be cut, the roots grubbed out and the material placed off the ground so it won't re-root. The King County Noxious Weed Programme (King County, 2010) advises the following methods for manual control:

¹² <u>https://invasives.ie/</u>



- Cut vines on trees or fences at waist height, dig the root out.
- Upper vines can be left on the trees where they will die back or can be removed if it is safe to do so.
- Make sure remaining vines are not touching the ground because it can form roots at stem nodes.
- Vines growing along the ground should be dug up and removed.
- Pull small plants and seedlings when the soil is damp during winter or spring.

Although plants can be dug up year-round, it is ideal to do so during the winter, when most plants are dormant, to minimize disturbance to the surrounding vegetation (King County, 2010). Stems should be cut before the plant sets seed. Contact with the sap of Traveller's-joy can cause irritant dermatitis of the skin so appropriate clothing should always be worn.

Complete eradication of Traveller's-joy from a site may take several years and will require continued monitoring and follow-up to deal with re-growth and subsequent seedling germination.

Number	Invasive Species	Year
ISI-1	Ensure volunteers know how to identify Winter Heliotrope and understand its mode of transmission.	1
IS-2	Undertake manual removal of Traveller's Joy at Saleen Wood.	1-5
IS-3	Report invasive alien species sightings to the National Biodiversity Data Centre using the online invasives recording form or app.	1-5
IS-4	Take part in invasive Species Week by holding an event (see examples from 2023 events ¹³).	2-5
IS-4	Stay aware of new potential invasive species arriving in Ireland by regularly visiting the Species Alert page on Invasives.ie ¹⁴ .	1-5
IS-6	Promote responsible disposal/composting of garden via social media.	1-5

¹³ <u>https://invasives.ie/what-can-i-do/invasive-species-week/2023-may/</u>

¹⁴ <u>https://invasives.ie/species-alerts/</u>



IS-7 Be aware of invasive and potentially invasive plants and ensure that 1-5 these are not included in planting schemes.

4.4. Biodiversity Corridors

The wooded areas, hedgerows and treelines, scrub, rivers and other habitats in the BAP area connect provide some connectivity across the landscape in Saleen and District, and this connectivity extends beyond the BAP area.

Connectivity through biodiversity corridors is vital to ensure recruitment of wildlife into the BAP area and its dispersal across and beyond the BAP area. In an increasingly fragmented landscape, it is important to ensure these corridors are preserved, but equally that opportunities are taken to increase and expand them.

Objective 14.1.13 in the current (2022-2028) Cork Council Development Plan (Vol.1) highlights the council's commitment to protecting such features: "*The concept of corridors promotes the connection of green and blue infrastructure features with the aim of strengthening the overall network. Linear landscape features such as rivers, hedgerows and road verges that enhance the movement of wildlife through the landscape are known as 'ecological corridors'. Protecting and enhancing such corridors is important particularly in the context of how we manage important habitats that are part of or support the Natura 2000 network"* (Cork County Council, 2022)

While important for wildlife, these features are also important for people in the area who value the opportunity to engage with wildlife in their daily lives. Outdoor lighting can disrupt functioning of hedgerows and treelines as wildlife corridors and the placement of any future outdoor lighting will need careful consideration by the Council when reviewing planning applications, particularly any near the estuary.





Number	Biodiversity Corridors	Year
BC-1	Identify opportunities to preserve, extend and enhance biodiversity habitat corridors within the BAP area and to connect with corridors in adjacent areas.	2-5

4.5. Rivers and Streams

Everyone in the community can help to maintain the quality of rivers and streams which flow through the operational area. This includes not littering, thinking about the types of chemicals that we may be putting into water through our daily activities such as bathing, laundering or washing the car. There are links to information on simple things individuals can do in the Resources Section.

Number	Rivers and Streams	Year
RS-1	Work with our Community Water Officer from our Local Authority Waters Programme (LAWPRO) ¹⁵ to design a Citizen Science programme to monitor water quality in the rivers and streams in the operational area.	1
RS-2	Work with our Community Water Officer to implement the programme to include activities with local schools	2

¹⁵ <u>http://watersandcommunities.ie/about/</u>



4.6. Grasslands

Changing the way areas of amenity grasslands are managed is an easy win for biodiversity. The All-Ireland Pollinator Plan recommends two main management methods for grasslands:

Long flowering meadow:

Here an area of grass can be left to flower through the year and not cut until September. The cuttings are removed. Removing the cuttings reduces nutrients so year by year there should be an increase in the ratio of Saleen. flowers to grasses in areas managed in this way.



Bumblebee feeding on Dandelion at Saleen.

Many species, including some pollinators, will use resources in long flowering meadows other than pollen and nectar offered by flowers. Seeds provide food, thick grass swards are used for nesting, and seed heads and stems are used as overwintering sites. If these resources are removed, the species associated with these resources disappear too. Biodiversity of these meadows will be greatly increased if different parts of the meadow are left uncut for more one year.

Short flowering (4- 6-week) meadows:

Here an area of grass is not cut until mid-April, and cuttings are removed. The delay to mid-April allows Dandelions to flower for pollinators in early spring, and to be cut before they set seed. Grass is then cut ideally on a 6-week rotation and clippings removed. This means a cut at the end of May and not cutting again until mid-July which allows Clovers, Self-heal and other pollinator resources to flower.

One or both these methods could be used while other areas of amenity grass in estates (or



gardens, sports clubs, schools etc.) can still be maintained as lawn or play areas.



Picture: https://pollinators.ie/resources/

Wildflower Seed Mixes- Caution advised!

It is more sustainable and cost effective to let meadows regenerate naturally through timely mowing and removal of cuttings. The plants that grow naturally in the regenerating lawn or meadow will also be the ones best suited to the unique conditions of that particular meadow.

With the increase in interest in helping pollinators and other wildlife, sowing wildflower seeds has become very popular in gardens and community spaces.

While we see shops and online websites advertising "wildflower seed bombs" and "native wildflower mixes", the truth is many of these contain seeds that are not native to Ireland and are not appropriate for planting in the natural environment apart from in pots or planters.

Best practice advice from agencies such as the All-Ireland Pollinator Plan and Grassland experts is to avoid wildflower seed mixes and to work with nature and allow the natural seedbank in the ground to flourish instead.





The best meadows for wildlife contain lots of native wildflowers and a high percentage of native grasses. They are less colourful than flower meadows but are full of native biodiversity.



Flower Meadow - Attractive to humans

Wildflower Meadow - Attractive to wildlife

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However, if your grass has been regularly cut and fertilised for years there may few wildflower seeds in it, and they will struggle to compete with the grass. The process can be sped up by sowing Yellow Rattle. This is a hemi-parasite which weakens grass and allows wildflowers to better compete.

You can also increase the flora diversity by harvesting local wildflower seed and seeding or planting plugs. Wildflower seed from local sites can be collected and grown as plugs over the winter, for planting out the following spring. Identify sources (sites) of native wildflowers in the community or collaborate with other community groups around Cork to identify donor sites for wildflower seed.

There are guides in the Resources Section on how to collect seed from native plants and save them successfully for sowing yourself and information on where you can learn more about managing grasslands for biodiversity.



No Mow May

#NoMowMay¹⁶ is an annual campaign asking everyone to put away the lawnmower during the month of May to help our native wildlife. There has been some criticism to the campaign as providing resources for a few weeks and then removing them is counterproductive.

However, #NoMayMow is a great way to get the conversation started about how we manage our grassy areas and if we can do it in a way that is better for wildlife. It can often lead people to extent no/less cutting into **#LetItBloomJune**, **#HelpThemFlyJuly** and **#NoMowSummer**!

Number	Grasslands	Year
GL-1	Identify where lawn/amenity grass management can be changed to short flowering (4- 6-week) meadows, such as at Green Acres and the public grass areas at Saleen village.	1-5
GL-2	Along roadside verges adopt long flowering meadow management.	1-5
GL-3	Promote the benefits of short/long flowering meadows to the community.	1-5
GL-4	Visit some local species rich grass land for inspiration. Promote the recent publication "The Grassland Trail" booklet, which showcases publicly assessable grasslands ¹⁷ .	1

4.7. Pollinator Friendly Planting

Saleen & District Residents Association works hard to manage their planted areas so they are pleasing to people and useful to pollinators. The All-Ireland Pollinator plan has made this easier by providing many resources with lists of pollinator friendly plants (see Resources Section). It is important to have flowering plants throughout the year. AIPP Pollinator Friendly Planting Code¹⁸ has suggestions for plant species that flower from early spring to autumn.

¹⁶ <u>https://pollinators.ie/no-mow-may/</u>

¹⁷ https://pollinators.ie/wp-content/uploads/2024/03/The-Grasslands-Trail-2023.pdf

¹⁸ <u>https://pollinators.ie/wp-content/uploads/2022/12/Pollinator-Planting-Code-Guide-2022-WEB.pdf</u>



Number	Pollinator Planting	Year
PP-1	Continue to focus on pollinator-friendly planting in all planting schemes initiated and managed by Saleen and District Residents Association.	1-5
PP-2	Further planting of pollinator friendly native trees at the open green area at Green Acres.	
PP-3	Work with any other groups to focus on pollinator-friendly planting in all planting schemes managed by them in the BAP area.	1-5
PP-4	Provide information to the local community to encourage the use of more pollinator-friendly plants in private gardens, schools, church grounds, businesses etc.	1-5

4.8. Hedgerows

It would hard to overstate the value of hedgerows as wildlife habitats and corridors in intensively managed agricultural lands.

But to be of the most value to wildlife, hedgerows need to be maintained and managed. Severely cutting back hedges every year and cutting below 1.5 metres has detrimental effects on hedge health and vigour. Herbicide use, nutrient run-off and cattle poaching all affect hedgerows and in particular the species diversity of the ground flora at the base of the hedgerow.

As a continuous hedgerow makes a better wildlife corridor, it is worth filling in the gaps by establishing new plants. Replanting gaps in hedgerows can be a great opportunity to increase the range of species in the hedgerow.

Teagasc¹⁹ has excellent resources on best practice management for hedgerows for biodiversity including a series of recorded webinars. Another great resource is their video

¹⁹ <u>www.teagasc.ie/environment/biodiversity--countryside/farmland-habitats/hedgerows/</u>



simplifying the rules and regulations around hedgerow management and removal²⁰. Many more resources can be found in the Resource Section which can be shared with landowners.

Most of the hedgerows in Saleen are on private land, but there is the opportunity to work with landowners to plant new hedgerow/restore hedgerow.

There are examples of community groups securing funding and carrying out hedgerow restoration projects. The document "Municipal District Climate Innovation Funding Hedgerow Restoration Project (2021/2)²¹ gives a run-down of key considerations if undertaking a hedgerow restoration project.

Gardens throughout the BAP area also have hedges, mainly of non-native species. Residents should be encouraged when laying/replacing garden hedges to use a native hedgerow mix of species, particularly instead of invasive species such as Cherry Laurel.

Number	Hedgerows	Year
H-1	Promote the planting of native hedges with native tree and shrub species. A good time for an awareness campaign is during National Hedgerow Week which takes place in May.	1-5
H-2	Identify landowner to partner with to run a hedgerow restoration project.	1-5
H-3	Encourage Scartleigh National School to use hedgerows as an educational tool (see Resource Section)	2

4.9. Old Stone Walls and Other Stonework

Many of the plant species that grow on walls do not cause any structural issues and are good for biodiversity. Some plants can cause structural issues and would need to be carefully managed by the relevant landowner as if not done the right way, both the walls, as well as

²⁰ www.teagasc.ie/news--events/daily/environment/hedges---rules-and-regulations.php

²¹ <u>https://hedgerows.ie/wp-content/uploads/2022/08/Municipal-District-Climate-Innovation-Funding.pdf</u>



biodiversity will be damaged. Cork County Council produced a booklet on the Care of Historic Walls²² that gives advice on how to balance the preservation of historic walls with their value for nature.

Because relatively few species of plant can grow on walls and because they stand out against the stone, they can be a good educational resource for starting to learn how to identify plants.

Number	Stone walls	Year
SW-1	Encourage Scartleigh National School to create an educational programme highlighting biodiversity on our stone walls. Information is available from Heritage in Schools ²³	2/3

4.10. Walking Trails

One of the Specific Development Objectives with the Cork County Development Plan (Cork County, 2022b) for Saleen is to develop and maintain amenity walk (Section 3.18.3, Objective number U-01, U-02 and U-03²⁴).

There is also potential for the development of an informal walking trail for the local community. A possible path is illustrated in Figure 8. This takes advantage of roads and informal paths already within the wooded areas. An access road (a) is maintained in Saleen wood to the village septic tank. Beyond this there is an informal path through the woodland (b) which requires maintenance to remain accessible. There is road access to the wooded area at location (c) (see map below).

As the walk would be adjacent to Cork Harbour Special Protection Area and Rostellan Lough, Aghada Shore and Poulnabibe Inlet proposed Natural Heritage Area (pNHA), is partially on

²² <u>https://www.corkcoco.ie/sites/default/files/2022-10/care_of_historic_stone_walls.pdf</u>

²³ www.heritageinschools.ie/content/resources/old%20stone%20walls/Old%20Stone%20Walls%20-%20Plants.pdf

²⁴ https://www.corkcoco.ie/sites/default/files/2022-06/volume-4-south-cork.pdf


public roads and Coillte owned woodland the NPWS, Cork County Council and Coillte will need to be consulted.



Figure 8 Possible route of Saleen Community Walk



Road access and informal path at location c





Number	Walking Trail	Year
WT-1	See Reference Section for further reading on developing a community walking trail.	2
WT-2	Develop a community walking trail in Saleen in collaboration with Coillte, Cork County Council and National Parks and Wildlife Service.	1

4.11. Poulnabibe Inlet

The understanding of the importance of the SPA and pNHA would be enhanced if local students use it as an education resource. Incorporating information about the site into lessons on environment, geography and history will help students feel more connected to their community and local landscape.

As mentioned in the section on estuaries habitats like Poulnabibe Inlet are hugely important for waterbirds, both resident and migratory, providing food, shelter and breeding habitat for many species. As areas of natural beauty, they are also popular for a wide range of recreational activities which can cause disturbance to wildlife. A bird that has been disturbed tends to fly or move away from its area and be more vigilant, spending less time conducting activities necessary for survival and reproduction.

A study was carried out on disturbance to waterbirds in South Dublin Bay, an area heavily used for recreation, especially walking, jogging and dog-walking. The study found that birds



Information signs at Poulnabibe Inlet.



were largely habituated to people and dogs moving predictably along paths, and these caused very little disturbance. Most of the disturbance events were caused by dogs and people leaving paths to go onto the beach or fields used by birds (Phalan & Nairn, 2007)

The study concluded that waterbirds in Dublin Bay are managing to co-exist alongside high levels of human activity but are exposed to levels of disturbance likely to affect their survival during periods of stress, such as in mid to late winter.

At least once instance of dog walker walking onto the salt marshes with an unleashed dog was noted during surveys for this BAP. Most dog owners may simply be unaware of the impact of their behaviour on the wildlife of the estuary. A combination of signage at the estuary and social media campaigns may help dog owners become more aware of the impacts of their behaviour. A study at Canterbury University "Reducing Dog Disturbance to Wildlife",

found signage that was clear, concise and respectful was found to be the most effective at encouraging responsible dog owner behaviour . Some examples of Dog Walking Codes are provided in the Resources Section.

Number	Poulnabibe Inlet	Year
PI-1	Encourage local school to include Poulnabibe Inlet and the species found there in lessons on biodiversity/environment. Invite local bird watcher/member of Bird Watch Ireland to give talks to the students.	2-5
PI-2	Run social campaigns to raise awareness of the effects of bringing dogs onto the salt marshes and estuary. Consider information signs.	1-5
PI-3	Support Rostellan Lough, Aghada Shore and Poulnabibe Inlet pNHA to be granted full NHA status.	1-5

4.12. Buildings and Gardens

While some bird species will nest on buildings, not all buildings are suitable. Part of the reason that Swift numbers are thought to be falling is due to changes in the way we maintain our old buildings and the way we design new buildings. Birdwatch Ireland has produced a





guide on how to help Swifts, which includes using Swift bricks and boxes. They also have useful

Number	Buildings and Gardens	Year
BG-1	Publicise guidance available on the installation of Bird and Bat Boxes ¹ .	1-5
BG-2	Publicise guidance available on the managing your garden for wildlife ¹ . More guidance is available in the Resources Section.	1-5
designs for Dird and Dathewas		

designs for Bird and Bat boxes.

4.13. Churches and Graveyards

As graveyards have great emotional value for members of the community, this needs to be borne in mind when actions are being considered. Communication and consultation with congregations and cemetery users is very important and interpretive signage is often useful in this regard.

The organisation called 'Caring for God's Acre' has lots of information on how to balance the religious and commemorative aspects of churchyards and graveyards with the opportunities they have for biodiversity. This is available from the Caring for God's Acre website, which also has great educational resources for schools²⁵.

Holy Trinity Church and The Church of the Mother of God both have only small areas of grass, but even these managed for pollinators will help.

CG	Churches and Graveyards	Year
CG-1	Share biodiversity resources with churches	1-5
CG-2	Commission a lichen survey at Garranekinnefeake Cemetery	2/3

²⁵ <u>https://www.caringforgodsacre.org.uk/</u>



4.14. Scartleigh National School

The grounds of Scartleigh National School provide some excellent resources for bumblebees. During the summer the grass is left uncut and was full of clover and feeding bumblebee. The banks behind the school had areas of long tussocky grass at the top that would be used as nesting sites for some of our bumblebee species and by hibernating queen bumblebees. The coarse tussocky grass areas also overwintering habitat for many other insects.

Mowing the tops of the banks occasionally in rotation with no more than 50% of the area cut in any one year will maintain this habitat for bumblebees and many other invertebrates. There are resources specifically for the management of tussocky/rough grassland in the Resource Section under Managing Grassland for Bumblebees.

SNS	Scartleigh National School	Year
SNS-1	Continue to manage the lawns at the school with no cut during summer months to allow clover to bloom. Cut as late as possible before new school term. See recent article by All-Ireland Pollinator Plan ²⁶ .	1-5
SNS-2	Manage the banks at the back of the school for pollinators. Lower parts manage as long-flowering meadow. Top parts with rotational cut every few years leaving at least 50% uncut each time. Remove cuttings.	1-5
SNS-3	Explore Resources for Schools in the Resources Section for more ideas on how to help nature at your school.	

4.15. Outreach and Education

It is important to raise awareness so that everyone in Saleen knows and values their local wildlife and understands the best ways to help it. Throughout the Actions Section suggestions have been given for species promotion to do with the relevant action. Some more general actions are suggested here.

²⁶ <u>https://pollinators.ie/pitches-for-pollinators-how-schools-can-help-bees-over-the-summer/</u>



OE	Outreach and Education	Year
OE-1	 Partner with local conservation charities/local biodiversity experts to run events to learn about the wildlife in and around Saleen. Events could include: Dawn Chorus Wetland Bird Identification Bat Walk Pollinator Identification Lichen Talk/Walk 	2-5
OE-2	Promote the actions you have taken for nature on social media.	

4.16. Survey and Monitoring

One big step to helping species in Saleen and surrounds is getting to know which ones are here. Hopefully the section on Plants and Animals is a step in that direction. Details on species recorded during fieldwork for this BAP have also been sent to the NBDC.

Recording species in Saleen and sending that information to the NBDC helps to build up a picture of how well, or badly, species are doing. For example, The Common Lizard has been recorded in Saleen but the species the record is quite old. Does this mean there are no Common Lizards now, or are there less people sending in records?

The NBDC has a handy app to make recording simple²⁷. Wild Work has a map linked to the records sent to the NBDC. Simply type **Wild Work** Comments Section of the app. or the Additional Information section on the website and your records will be added to our map as well (see Figure 9).

There is an incredible choice of citizen science survey and monitoring schemes, programmes and activities organised by various bodies in Ireland that apply to habitats and species in Saleen. A selection of some of those that are running at the time of writing are listed below.

²⁷ https://docs.biodiversityireland.ie/biodiversity-data-capture





Figure 9 Wild Work Citizen Science map for Saleen - lets fill it up!



These may change over time but the organisations running those listed are likely to run further relevant schemes.

Most of these can be done as an individual, but some could be done on a household basis, as a family, or as a school, a group, an organisation, or a business.

They could even be shared between schools, groups, organisations, and businesses as a project. This would build relationships, knowledge, and a valuing of nature in Saleen across the community. It could also be fun!

Later in the life of this Biodiversity Action plan the knowledge gathered could be shared, perhaps culminating in a community wide Bioblitz or a similar celebration of Nature at a community event.

For some groups of organisms, such as bats and moths, specialist knowledge, equipment and/or licenses may be required to survey. This may require commissioning specific survey and may require a funding source.

For some groups, such as birds and plant, surveys could be done on a seasonal basis and run via social media in a 'Spot the Bird of the Month' fashion with ID tips etc. and links to NBDC, Birdwatch Ireland etc.

The timing of surveys and monitoring could be considered in relation to habitat management actions. Monitoring of bumblebees and butterflies, for example, is worthwhile in itself but could also be used to track the success of other actions such as managing grassy areas in a more pollinator friendly manner and developing nesting sites for mining bees.

Bear in mind though that one cold, wet summer could affect this in a 5-year period! If practical, it might be worth doing survey work in year 1 and starting management actions in year 2. Surveys can be inexpensive (or free!) and depending on the species surveyed, do not require special knowledge.



Survey	Survey Group
Bumblebee Monitoring Scheme	National Biodiversity Data Centre
Butterfly Monitoring Scheme	National Biodiversity Data Centre
Flower-Insect Timed Count (FIT Count)	National Biodiversity Data Centre
Ladybird Atlas 2025	National Biodiversity Data Centre
Irish Hedgehog Survey	National Biodiversity Data Centre
Swift Survey	Birdwatch Ireland
Irish Garden Bird Survey	Birdwatch Ireland
Garden Wildflower Hunt	Botanical Society of Britain and Ireland
Spring Flowering Plants Project	National Biodiversity Data Centre
New Year Plant Hunt	Botanical Society of Britain and Ireland
Backyard Biodiversity	National Biodiversity Data Centre
Explore Your Shore!	National Biodiversity Data Centre

Some survey/monitoring actions suggested as being of particular relevance to Saleen and district area are listed below.

Number	Survey and Monitoring	Year
SM-1	Establish a Bumblebee Monitoring Walk using NBDC methods. A suggested route is along Saleen village, the gardens at the outer green and Saleen Wood	
SM-2	Establish a Butterfly Monitoring scheme using NBDC methods. The same route as the Bumblebee Walk can be used.	
SM-3	Log all actions taken for pollinators on https://pollinators.biodiversityireland.ie/	
SM-4	Hold a BioBlitz to record more of the biodiversity in Saleen.	
SM-5	Consider a citizen science bat survey of the operational area. There are relatively inexpensive bat recorders now available that can be used by non-experts, although an expert would be useful to help identify locations for roosts, etc. You can also request a bat walk or talk from Bat Conservation Ireland (fee based) ²⁸	

²⁸ <u>https://www.batconservationireland.org/get-involved/request-bat-walk-talk-event</u>



4.17. Training

There are lots of training resources available online that can be accessed for free – but they should be from reliable sources.

There may be amateur experts in the community that might volunteer to help. For some training funding may have to be accessed. Consider running joint training events with neighbouring Tidy Towns or other groups—it may reduce cost and foster co-operation in other areas.

Some suggested areas for training are suggested below. The NBDC/pollinators.ie have resources, including videos, for some of these on their website.

- Bumblebee Monitoring
- Butterfly Monitoring
- Invasive Species Identification
- Wildlife Friendly Grassland Management
- Wildlife Friendly Hedgerow Management
- Wildlife Friendly Scrub Management
- Bird Identification (Common species)
- Use of National Biodiversity Data Centre Mapping Tool

Action	Training	Year
TR-1	Develop a list of training needs to meet actions from this Biodiversity Action Plan. See Resource Section for links to free online training courses.	1







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6. Resources

While all resource links were correct at the time of publishing, links will change or go dead over time. If the document/website is still online under another link, often searching the title provided in the table below will locate it at its new home.

Online Training Courses on Irish Nature

A number of nature-based organisations have online training courses that everyone can take part in. The majority of these are free to take. In addition, these organisations will often offer in person courses, though these usually have a fee attached.

Various- Ireland's Biodiversity Learning Platform	https://learn.biodiversityireland.ie/	
Bats	https://training.batconservationireland.org/	
Plants	https://bsbi.org/training-courses	
Wetland Bird Species	https://birdwatchireland.ie/our-work/surveys-research/research- surveys/irish-wetland-bird-survey/iwebs-training/	
Gardens and Buildings		
Gardens and Buildings		
Gardens and Buildings Gardens All Ireland Pollinator Plan	https://pollinators.ie/gardens/	
Gardens and Buildings Gardens All Ireland Pollinator Plan Gardening for Biodiversity: Juanita Brown	https://pollinators.ie/gardens/ https://laois.ie/gardening-for-biodiversity/	
Gardens and Buildings Gardens All Ireland Pollinator Plan Gardening for Biodiversity: Juanita Brown Gardening for wildlife RSPB	https://pollinators.ie/gardens/ https://laois.ie/gardening-for-biodiversity/ https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/	
Gardens and Buildings Gardens All Ireland Pollinator Plan Gardening for Biodiversity: Juanita Brown Gardening for wildlife RSPB Wildlife Trust Wildlife Gardening	https://pollinators.ie/gardens/ https://laois.ie/gardening-for-biodiversity/ https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/ https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/	





Resources for Schools

The Bórd Bia website has a page with loads of other useful tips	https://www.bordbia.ie/primary-school/organic-gardening-for-primary- schools/worksheets/
Teachers Resources – Heritage in Schools	https://www.heritageinschools.ie/teachers-resources/strand/living-things- science/p3
Resources for Schools - Notice Nature	https://www.noticenature.ie/education/primary-schools/
Catchments.ie Water – Education Resources	https://www.catchments.ie/education/
Cork Nature Network Educational Resources	https://www.education.corknaturenetwork.ie/membership-account- 2/membership-levels/
Green Schools Resources	https://greenschoolsireland.org/resources/
Science Foundation Ireland. Teacher Resources	https://www.sfi.ie/engagement/curious-minds/teacher-resources/
Schools All Ireland Pollinator Plan	https://pollinators.ie/schools/
Investigating Hedgerow Habitats	https://www.sfi.ie/site-files/primary-science/media/pdfs/col/curious-minds- resource-investigating-hedgerow-habitats.pdf
The Bórd Bia website has a page with loads of other useful tips on organic gardening, wildflower meadows etc. in English and as Gaeilge with links to primary school curriculum – but useful for everyone	https://www.bordbia.ie/primary-school/organic-gardening-for-primary- schools/worksheets/
All-Ireland Pollinator Plan	
Lots of resources here on actions. Particularly useful ones for Saleen are listed linked below:	https://pollinators.ie/
All Ireland Pollinator Plan 2021-2025	https://pollinators.ie/wp-content/uploads/2021/03/All-Ireland-Pollinator- Plan-2021-2025-WEB.pdf





Local communities. Actions to help Pollinators	https://pollinators.ie/wp-content/uploads/2024/02/AIPP-A5-Community- guidelines-2023-WEB.pdf	
Managing Grassland for Bumblebees		
Farm Wildlife: Rough grassland	https://farmwildlife.info/how-to-do-it/existing-wildlife-habitats/rough- grassland/	
Management for bumblebees – how farmers can bring back the buzz.	https://www.sruc.ac.uk/media/1mnkd4ar/tn639-bumblebees.pdf	
Pesticide Reduction		
Greener Gardening Your Guide to Chemical-Free Affordable	https://www.epa.ie/publications/circular-economy/resources/greener-	
Gardening. EPA	gardening.php	
Fresh Air, Fresh Savings, Greener Gardening Your Guide to	https://www.mywaste.ie/wp-content/uploads/2020/04/SRWMO-Greener-	
Chemical-Free Affordable Gardening	Gardening-Booklet-Onscreen-Use-AW.pdf	
Pesticide Action Network U.K.	https://www.pan-uk.org/	
Pesticide Free Towns	https://www.pesticide-free-towns.info/	
Citizen Science Surveys		
Wild Work Citizen Science Portal	https://wildwork.ie/citizen-science-portal/	
NBDC Ireland's Citizen Science Portal	https://records.biodiversityireland.ie/	
Bumblebee Monitoring Scheme	https://biodiversityireland.ie/surveys/bumblebee-monitoring-scheme/	
Butterfly Monitoring Scheme	https://biodiversityireland.ie/surveys/butterfly-monitoring-scheme/	
Significant Trees Projects	https://wildwork.ie/significant-trees-project/	
Dragonfly Ireland 2019 – 2024	https://www.biodiversityireland.ie/projects/monitoring-scheme-	
	initiatives/dragonfly-ireland-2019-2024/	
Citizen Science Stream Index	https://lawaters.ie/citizen-science/	
Ireland's Biodiversity Learning Platform	https://learn.biodiversityireland.ie/collections	





Rivers and Streams

River Monitoring –Aquatic Invertebrates – good 2 pages explaining river monitoring.	https://www.epa.ie/media/epa-2020/monitoring-amp-	
	assessment/freshwater-amp-marine/River-Monitoring-Invertebrates-fact-	
	sheet-final.pdf	
Useful Tips to Conserve Water at Home. Green Schools Ireland	https://greenschoolsireland.org/water/	
10 Ways to Keen Our Lakes and Rivers Clean, People Service	https://www.peopleservice.com/wp-	
Inc	content/uploads/2018/08/22250_10/Ways_Elier_ndf	
12 Things You Can Do to Clean Un Your Divers and Streams	bttps://www.chf.org/icip.us/more things.you.con.do/12 things.you.con.do	
12 Things fou Can Do to Clean Op four Rivers and Streams.	nttps://www.cbi.org/join-us/more-things-you-can-do/12-things-you-can-do-	
Chesapeake Bay Foundation	<u>to-clean.ntml</u>	
Water Pollution: Keeping Our Rivers Clean. Monaghan County Council	https://monaghan.ie/environment/water-pollution/	
Farming near rivers. Practical measures to protect	https://www.duhallowlife.com/ird-duhallow-life-raptor-life/sustainable-	
watercourses. IRD Duhallow	farming-brochure	
Watercourse Management. Farming for Nature.	https://www.farmingfornature.ie/your-farm/resources/best-practice-	
	guides/watercourse-management/	
Local Authorities Waters Program, catchments.ie		
Local Authorities Waters Program. Contacts.	https://lawaters.ie/our-team/#filter=*	
catchments.ie	https://www.catchments.ie/learn/	
Semi-natural Grasslands		
Biodiversity, well-being, educational, and financial benefits	https://www.forestresearch.gov.uk/tools-and-resources/urban-regeneration-	
of nature friendly amenity grass management and links to	and-greenspace-partnership/greenspace-in-practice/benefits-of-	
other resources. Forest Research (U.K.)	greenspace/grassland-habitats/	
NPWS Grasslands	https://www.npws.ie/research-projects/grasslands	





Botanical Society of Britain and Ireland Grassland Project	https://bsbi.org/irish-grasslands-project	
Semi-natural grasslands in Ireland -	https://www.teagasc.ie/media/website/news/daily/pdfs/Semi-natural-	
precious resources under threat	grasslands-in-Irelandprecious-resources-under-threat.pdf	
All-Ireland Pollinator Plan. What a meadow should look like.	. https://pollinators.ie/wildflower-seed/what-a-meadow-should-look-like/	
Hedgerows and Treelines		
Irish Hedge Laying Association	https://hedgelaying.ie/	
Planting a Native Hedgerow or Woodland: Bórd Bia	https://www.bordbia.ie/globalassets/lifestyle/resources/organic-gardening-	
	english/planting-a-native-hedgerow-or-woodland.pdf	
Wildlife Hedgerow: The Conservation Volunteers	https://treegrowing.tcv.org.uk/grow/planting/hedge	
	https://pollinators.ie/wordpress/wp-content/uploads/2018/04/How-to-	
Heagerows for Polimators. All Ireland Polimator Plan	guide-Hedgerows-2018-WEB.pdf	
Teagasc Hedgerows	https://www.teagasc.ie/environment/biodiversitycountryside/farmland-	
	habitats/hedgerows/	
Irish Hedgerows: Networks for Nature	https://www.farmingfornature.ie/wp-content/uploads/2020/08/Irish-	
	Hedgerows-Networks-for-Nature.pdf	
Educational Resources for schools	https://www.dlrcoco.ie/sites/default/files/atoms/files/hedgerow toolkit for	
	schools booklet as a3 spreads.pdf	
	https://hedgerows.ie/free-hedge-inars-for-primary-schools-in-ireland/	
Old Stone Walls		
Dry Stone Walling Association of Ireland.	https://www.dswai.ie/	
Dry Stone Wall Building. Teagasc.	https://www.teagasc.ie/rural-economy/rural-	
	development/diversification/dry-stone-wall-building/	
Stone Walls Wall Plants Heritage in Schools	http://www.heritageinschools.ie/content/resources/old%20stone%20walls/O	
Stone wails, wail Plants, Hentage in Schools.	Id%20Stone%20Walls%20-%20Plants.pdf	





Invasive Species		
Invasive Alien Species in Ireland	https://invasives.ie/	
Invasive Alien Species in Ireland – Identification guides	https://invasives.ie/resources/identification-guides/	
Ireland's Regulated Invasive Alien Plant Species	https://shop.biodiversityireland.ie/products/irelands-regulated-invasive-	
	alien-plant-species	
The Management of Noxious Weeds and Non-Native	https://www.tii.ie/tii-library/environment/construction-	
Invasive Plant Species on National Roads. National Roads	guidelines/Management-of-Noxious-Weeds-and-Non-Native-Invasive-Plant-	
Authority.	Species-on-National-Road-Schemes.pdf	
Ireland's Regulated Invasive Alien Plant Species	https://shop.biodiversityireland.ie/products/irelands-regulated-invasive-	
	alien-plant-species	
Trails		
A Guide to Planning and Developing Recreational Trails in	https://www.sportireland.ie/sites/default/files/2019-	
Ireland	10/a guide to planning and developing recreational trails in ireland.pdf	
Irish Trails Strategy. Irish Sports Council	https://www.corksports.ie/documents/Irish-Trails-Strategy.pdf	
Recreational Trails Education and Training Programme	https://www.sportireland.ie/sites/default/files/2019-	
Guide	10/sport ireland trails programme guide.pdf	
Wild Work: Best Practice Guidelines for the Management of	https://wildwork.ie/wp-content/uploads/2023/09/Wild-Work-Best-Practice-	
Walking Trails	Guidelines-for-the-Management-of-Walking-Trails.pdf	
Public Rights of Way and the Local Authority Development	https://publications.opr.ie/view-file/67	
Plan		
Dog Walking Codes		
Exe Dog Walking Code	https://www.exe-estuary.org/visitor-information/codes-of-conduct/exe-dog-	
	walking-code/	





Bird Wise Coastal Codes	https://northkent.birdwise.org.uk/wp-content/uploads/2022/04/Coastal- Codes-of-Conduct-A6-booklet-REVISED.pdf
Artificial Lighting	
Dark Skies Ireland	https://www.darksky.ie/about/
Link to Dark Skies Publications	https://www.darksky.ie/lighting-documents/#guidelines
Bats & Lighting	https://www.batconservationireland.org/wp- content/uploads/2013/09/BCIrelandGuidelines_Lighting.pdf



7 Appendices: Further information related to the actions.

Appendix I 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 a qualified ecologist or Wild Work staff 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...





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 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.

Appendix II NBDC Squares

Species records downloaded for this BAP from the NBDC website were from the following 2km Grid Squares: W86U, W86Z, W86T, W86Y and the 1km square W8567.







Appendix III Useful Contacts and Sources of Funding

Wild Work	www.wildwork.ie
SECAD	https://www.secad.ie/
Birdwatch Ireland Cork Branch	https://birdwatchcork.com/
Local NPWS ranger	https://www.npws.ie/contact-us/south-western- division
Local Authority Waters Programme (LAWPRO)	https://lawaters.ie/team/communities-team/#filter=*
Cork Nature Network	https://corknaturenetwork.ie/
An Taisce the National Trust	www.antaisce.ie
Sustainable Water Network	www.swanireland.ie
Notice Nature	www.noticenature.ie
National Biodiversity Data Centre	www.biodiversityireland.ie
Irish Wildlife Trust	www.iwt.ie
Irish Seed Savers	www.irishseedsavers.ie
Bat Conservation Ireland	www.batconservationireland.org
Botanical Society of Britain and Ireland	www.bsbi.org.uk
Heritage Council	www.heritagecouncil.ie

Sources of Funding for Biodiversity Projects

ChangeMakers	https://changemakers.ie/
Community Foundation for Ireland	https://www.communityfoundation.ie/
The Wheel (list of funds available	
through their digital resource	https://www.wheel.ie/funding
Funding Point)	
EU LIFE Programme	https://cinea.ec.europa.eu/programmes/life_en
Royal Irish Academy	https://www.ria.ie/
Rethink Ireland	https://rethinkireland.ie/
Patagonia	https://eu.patagonia.com/ie/en/how-we-fund/
Heritage Council	https://www.heritagecouncil.ie/funding
National Parks and Wildlife	https://www.npws.ie/news/npws-grants-small-
Service: grants for small recording	recording-projects-2022-0
projects	



Native Woodlands Scheme	https://www.gov.ie/en/service/803ef3-native-	
	woodland-conservation-scheme/	
Cork County Council	https://www.yourcouncil.ie/en	
Community Water Development	https://lawaters.ie/funding/	
Fund		
Community Environment Action	https://datacatalogue.gov.ie/dataset/community-	
Fund (Local Agenda 21)	environment-action-fund-local-agenda-21	
The Ireland Funds	https://irelandfunds.org/	
LEADER Programme	https://www.gov.ie/en/service/87e09-leader-	
	programme-for-rural-development/	
The Outdoor Recreation	https://www.gov.ie/en/collection/181e2-outdoor-	
Infrastructure Scheme (ORIS):	recreation-infrastructure-scheme/	
Bat Conservation Ireland small	https://www.batconservationireland.org/get-	
grants scheme	involved/volunteer-time-2	

Environmental Awareness Days

World Wetlands Day	February
World Wildlife Day	3 March
National Tree Week	March
World Water Day	March
International Day of Forests	21 March
UN Earth Day	22 April
National Biodiversity Week	May
National Hedgerow Week	May
International Day for Biological Diversity	22 May
World Environment Day	June
World Oceans Day	8 June
World Conservation Day	July
International Bog Day	July
National Heritage Week	August
World Habitat Day	October
National Climate Action Week	October
World Soil Day	December



Appendix IV: About Wild Work and SECAD

Wild Work²⁹ is a unique initiative with biodiversity at its heart. We support everyone committed to helping nature; and our particular focus is to connect business, biodiversity and local communities. We support the work of local and national organisations involved in the conservation and protection of our natural environment. With our practical expertise, we help people create and care for meadows, woodlands, beaches, rivers and other natural habitats, both in urban and rural settings. We strive to work in line with best practice, with nature and not against nature and we value research as a key component of our work. Our aim is to understand the bigger picture, so we can help people do the right thing.

We work with:

- Local community groups and individuals
- Businesses big and small
- Schools and colleges
- Farmers
- Local authorities and other state bodies
- Conservation organisations and charities

Wild Work's Social Ethos

To benefit society and nature, we want to foster people's good will to ensure that our local flora, fauna and habitats are protected, valued and enhanced. We also want people who connect with the Wild Work movement to benefit positively in terms of improved health and well-being. To educate and raise awareness, we follow a place-based approach, working with nature and the environment in a positive way to have a real and practical impact on environmental issues; because increasing people's awareness, respect and

²⁹ Visit <u>www.wildwork.ie</u> for more information.



understanding, helps them care more effectively for our natural world. **To support employment activation**, we provide quality work experience opportunities for people and aim to contribute to the creation of fulfilling jobs, particularly in the biodiversity sector.

About SECAD

Wild Work is a SECAD Initiative, developed in response to a need identified by SECAD from years of experience in supporting environmental projects in local communities. Established in 1995, SECAD Partnership CLG is a Local Development Company with charitable status. SECAD has evolved over the years to manage a wide range of funds and services on behalf of various Irish government departments, state bodies and other organisations. SECAD is overseen by a voluntary board of directors made up of representatives from all sectors of society and the workplace.

As a Local Development Company, SECAD works with a range of different clients and stakeholders including: community and voluntary groups; disadvantaged target groups; job seekers; businesses (including private and social enterprise); farmers; schools; and the corporate sector. SECAD operates across various regional territories, as well as on a national basis. Primarily, the organisation works within the county (administrative area) of Cork in the area east and west of Cork Harbour. SECAD provides supports for the following: tourism (including infrastructure, marketing, training, networking); enterprise development; food producers; employment; rural and coastal towns and villages; community and youth services; community infrastructure; environment (including natural, built and cultural heritage, conservation, biodiversity etc); and social inclusion (working with people on low incomes, long term unemployed, disadvantaged communities and young people).

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