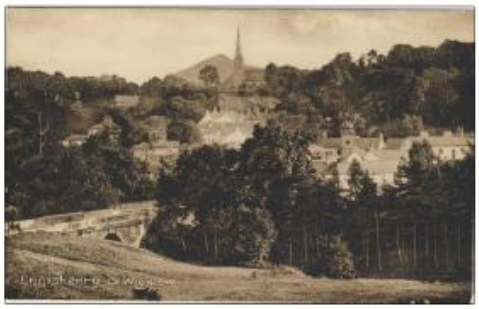
Enniskerry Village, Co. Wicklow

Biodiversity Action Plan

Report Prepared for Enniskerry Tidy Towns Group

with funding from Community Foundation Ireland Environment and Nature-Biodiversity Grants 2021.




FINAL REPORT

8th February 2024

Faith Wilson Ecological Consultant BSc (Hons) CEnv MCIEEM
Kestrel Ridge, Tigroney West, Avoca, Co. Wicklow

Enniskerry Village, Co. Wicklow

Biodiversity Action Plan

Table of Contents

Enniskerry Village, Co. Wicklow

Biodiversity Action Plan

1. INTRODUCTION

1.1 Background

Faith Wilson Ecological Consultant was commissioned by Enniskerry Tidy Towns Group to prepare a biodiversity action plan for Enniskerry Village in Co. Wicklow as shown on **Figure 1** below. The Enniskerry Tidy Towns Group successfully received funding for the study from the Community Foundation Ireland under Strand 1 of the Environment and Nature Fund 2021. The proposed study area is shown on **Figure 2** below.

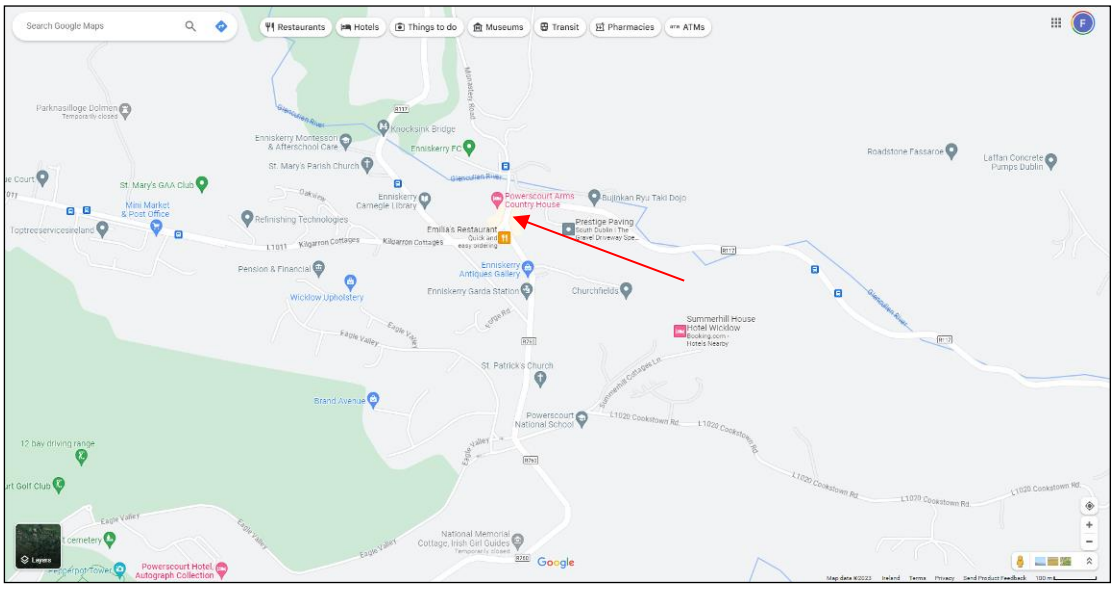


Figure 1. Enniskerry Village, Co. Wicklow.

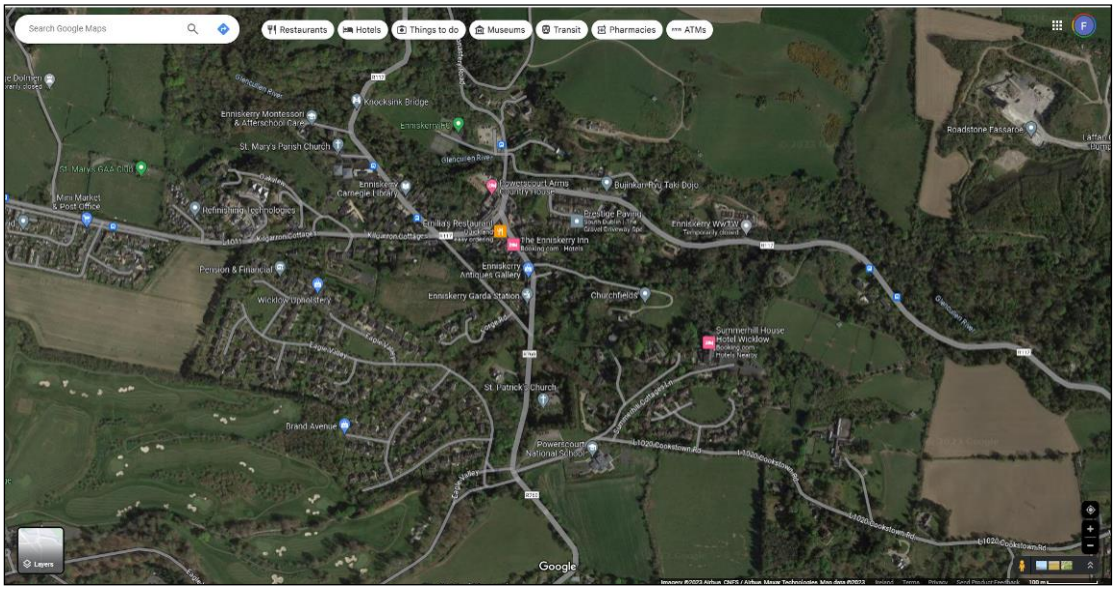


Figure 2. Enniskerry Village (Google Maps imagery).

2. METHODOLOGY

2.1 Desktop Research

A desk study was carried out to collate the available information on the ecological environment within the study area in Ennsikerry Village as shown on **Figure 3** below. The National Parks and Wildlife Service (NPWS) of the Department of Housing, Local Government and Heritage (DHLGH) database of designated conservation areas and NPWS records of rare and protected plant species was checked. Information on protected species of fauna and flora listed for protection under Annex II of the EU Habitats Directive (92/43/EEC), Annex I of the Birds Directive (79/409/EEC) and the Wildlife (Amendment) Act (2000) was also sought from NPWS, the National Biodiversity Data Centre and published sources. Recent, high resolution, colour aerial photographs were also used to identify various habitats.

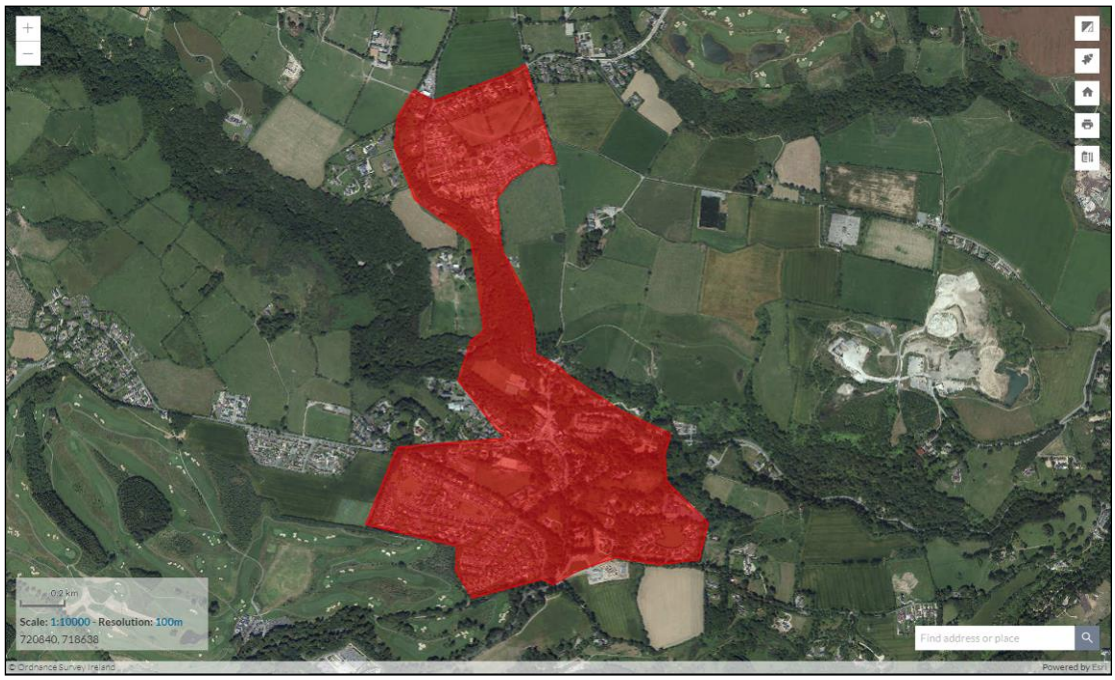


Figure 3. Enniskerry Village Study Area - shown in red (Source: National Biodiversity Data Centre).

Consideration was also given to other flora and fauna as defined under the following legislative instruments and red data books:

- species protected under the **Wildlife Act (1976 (amended 2000)),** such as bats, badger, pine marten and common frog,
- plant species listed under the **Flora (Protection) Order (2022)**,
- vascular plant species listed in the **Irish Red List for Vascular Plants**[1].
- bird species listed under the '**Birds of Conservation Concern in Ireland**' document[2],

[1] Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016). Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

[2] Gilbert G, Stanbury A and Lewis L.J. 2021. Birds of Conservation Concern in Ireland 2020 –2026. Irish Birds 43, 1-22.

- mammals listed in the **Irish Red List for Terrestrial Mammals**[3],
- amphibians and reptiles listed in the **Irish Red List for Amphibians, Reptiles & Freshwater Fish** [4],
- invasive species listed under Schedule 3 of the **'Birds and Natural Habitats Regulations 2011'** and the **EU Regulation on Invasive Alien Species (EU Regulation 1143/2014**[5].

2.2 Field Surveys

The flora and habitats within the environs of Enniskerry Village were surveyed over several visits in 2022 and 2023 using the Phase 1 habitat survey methodology (JNCC, 1993) and Best Practice Guidance for Habitat Survey and Mapping (Smith *et al*., 2011) to identify the vegetation communities and habitats present. These are described using Fossitt (2000)[6]. Plant identification follows Parnell *et al* (2012)[7], and species nomenclature follows Scannell & Synnott (1987)[8]. A number of community field events were also held.

2.3 Relevant Legislation

2.3.1 Nature Conservation Designations

International Conservation Designations

Special Areas of Conservation (SACs) are habitats of international significance that have been identified by NPWS and submitted for designation to the EU. SAC is a statutory designation, which has a legal basis under the EU Habitats Directive (92/43/EEC) as transposed into Irish law through the European Communities (Natural Habitats) Regulations, 1997, which were amended in 1998, 2005 and 2011. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the Court of Justice of the European Union (CJEU) judgements.

A Special Protection Area (SPA) is a statutory designation, which has a legal basis under the EU Birds Directive (79/409/EEC). The primary objective of SPAs is to maintain or enhance the favourable conservation status of the birds for which the SPAs have been designated.

[3] Marnell, F., Looney, D. & Lawton, C. (2019). Ireland Red List No. 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland.
[4] King, J.L., Marnell, F., Kingston, N., Rosell, R., Boylan, P., Caffrey, J.M., Fitzpatrick, Ú., Gargan, P.G., Kelly, F.L., O'Grady, M.F., Poole, R., Roche, W.K. & Cassidy, D. (2011). Ireland Red List No. 5: Amphibians, Reptiles & Freshwater Fish. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.
[5] S.I. No. 477 of 2011. The European Communities (Birds and Natural Habitats) Regulations 2011. Irish Government, Government Publications Office, Molesworth Street, Dublin 2.
[6] Fossitt, J. (2000) A Guide to Habitats in Ireland. The Heritage Council, Ireland.
[7] Parnell, J. and Curtis, T. (2012). An Irish flora (8th edn). Cork University Press.
[8] Scannell, M. and D. Synnott (1987). Census Catalogue of the Flora of Ireland - Clár de Phlandaí na hÉireann. Stationery Office Dublin, Dublin.

National Conservation Designations
Proposed NHAs are habitats or sites of interest to wildlife that have been identified by NPWS. These sites become NHAs once they have been formally advertised and land owners have been notified of their designation. NHAs are protected under the Wildlife (Amendment) Act, 2000, from the date they are formally proposed. NHA is a statutory designation according to the Wildlife (Amendment) Act, 2000.

2.3.2 Bats

Eleven species of bats occur in Ireland and all are protected under both national and international law. Nine species are resident and have confirmed breeding populations while two species are deemed to be vagrants as set out in **Table 1** below.

Table 1. Legal protection and status of the Irish bat fauna.

Common and scientific name	Wildlife Act 1976 & Wildlife (Amendment) Acts 2000 & 2010	Irish Red List status	Habitats Directive	Bern & Bonn Conventions
Common pipistrelle *Pipistrellus pipistrellus*	Yes	Least Concern	Annex IV	Appendix II
Soprano pipistrelle *P. pygmaeus*	Yes	Least Concern	Annex IV	Appendix II
Nathusius' pipistrelle *P. nathusii*	Yes	Not referenced	Annex IV	Appendix II
Leisler's bat *Nyctalus leisleri*	Yes	Near Threatened	Annex IV	Appendix II
Brown long-eared bat *Plecotus auritus*	Yes	Least Concern	Annex IV	Appendix II
Lesser horseshoe bat *Rhinolophus hipposideros*	Yes	Least Concern	Annex II Annex IV	Appendix II
Greater horseshoe bat *Rhinolophus ferruginous*		Data Deficient	Annex II Annex IV	Appendix II
Daubenton's bat *Myotis daubentonii*	Yes	Least Concern	Annex IV	Appendix II
Natterer's bat *M. nattereri*	Yes	Least Concern	Annex IV	Appendix II
Whiskered bat *M. mystacinus*	Yes	Least Concern	Annex IV	Appendix II
Brandt's bat *M. brandtii*	Yes	Data Deficient	Annex IV	Appendix II

Wildlife Act 1976
In the Republic, under Schedule 5 of the Wildlife Act 1976, all bats and their roosts are protected by law. It is unlawful to disturb either without the appropriate licence. The Act was amended in 2000.

Bern and Bonn Convention
Ireland has also ratified two international conventions, which afford protection to bats amongst other fauna. These are known as the 'Bern' and 'Bonn' Conventions. The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), exists to conserve all species and their habitats, including

bats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries, which covers certain species of bat.

EU Habitats Directive

All bat species are given strict protection under Annex IV of the EU Habitats Directive, whilst the lesser horseshoe bat (*Rhinolophus hipposideros*) and greater horseshoe bat (*Rhinolophus ferrumequinum*) are given further protection under Annex II of the EU Habitats Directive. Both are listed as a species of community interest that is in need of strict protection and for which E.U. nations must designate Special Areas of Conservation (SACs). The latter is only known from a single site and no breeding populations have been recorded to date. The former is a species of the western seaboard of Ireland and has not yet been recorded on the east coast.

Eurobats

This is a Europe-wide (and neighbouring jurisdictions including North Africa and the Middle East) agreement that originates from efforts to apply the Bonn Convention to the protection of bats within areas to which they may migrate from their European summer or winter sites. There are 33 parties (including Ireland) that have entered into a UN forum to protect the 52 species of bat (based on current knowledge) of Europe.

Threats to Irish bats:

The principal pressures on Irish bat species have been identified as follows:

- urbanized areas (e.g. light pollution);
- bridge/viaduct repairs;
- pesticides usage;
- removal of hedges, scrub, forestry;
- water pollution;
- other pollution and human impacts (e.g. renovation of dwellings with roosts);
- infillings of ditches, dykes, ponds, pools and marshes;
- management of aquatic and bank vegetation for drainage purposes;
- abandonment of pastoral systems;
- speleology and vandalism;
- communication routes: roads; and
- inappropriate forestry management.

2.3.3 Badgers

Badgers (*Meles meles*) are common and widespread in Ireland, and are found in all lowland habitats where the soil is dry and not subject to flooding (Hayden and Harrington, 2000). Badgers are social animals that live in complex underground tunnel systems called setts. Badger territories may vary in size from about 60-200 ha (Smal, 1995).

Badgers and their setts are protected legally under the provisions of the Wildlife Act, 1976, and the Wildlife Amendment Act, 2000. It is an offence to intentionally kill or injure a protected species or to wilfully interfere with or destroy the breeding site or resting place of a protected wild animal.

2.3.4 Otter

The otter (*Lutra lutra*) is a legally protected species under the EU Habitats Directive (where it is listed under Annex II) and is found throughout Ireland (Hayden and Harrington, 2000). The otter is listed as internationally important in the Irish Red Data book (Whilde, 1993), is classified as 'near threatened' in Ireland (Marnell, et al. 2009), on a European scale (Temple & Terry, 2007) and on a global scale by the IUCN (2009). It is listed as a strictly protected species under Appendix II of the Bern convention (Council of Europe, 1979). Because it is listed in Appendix 1 of CITES (1979), trade in otter specimens is permitted only in exceptional circumstances.

Annexes II and IV of the E.U. Habitats Directive (92/43/EEC) list the otter as a species of community interest that is in need of strict protection and for which E.U. nations must designate Special Areas of Conservation (SACs). The E.U. Habitats Directive was transposed into Irish law in the European Union (Natural Habitats) Regulations, (SI 94/1997) and 40 candidate SACs have been designated for the otter in Ireland (NPWS (2008)[9]). A Species Action Plan and a Threat Response Plan has been prepared for the otter by NPWS (2008 & 2009)[10].

Otters tend to occupy linear territories along watercourses and are rarely found far away from water. There have been a number of national surveys of otters in Ireland[11][12] which have been conducted for National Parks and Wildlife Service.

(Bailey (2006)) surveyed 35 sites within the Eastern River Basin District, of which 22 (62.9%) recorded the presence of otter, the lowest rate in the country. A more recent survey conducted in 2010 (Reid *et al.* (2013)) surveyed 65 sites within the Eastern River Basin District, of which 34 (52.3%) recorded the presence of otter.

2.3.5 Kingfisher

The kingfisher (*Alcedo atthis*) is a species listed under Annex I of the EU Birds Directive for which EU nations must designate Special Protection Areas (for birds) (SPAs).

2.3.6 Invasive Species

The Birds and Habitats Regulations (2011) which were signed on 21st September 2011 by the then Minister for Arts, Heritage and the Gaeltacht Jimmy Deenihan, included new legislation on invasive and non-native species in Sections 49 and 50.

Since then the EU Regulation on Invasive Alien Species (EU Regulation 1143/2014) also came into force on the 3rd August 2016.

---

[9] NPWS (2008). The status of EU protected species and habitat in Ireland. NPWS, Dublin.

[10] NPWS (2009). Threat Response Plan: Otter (2009-2011). National Parks & Wildlife Service, Department of the Environment, Heritage & Local Government, Dublin.

[11] Bailey, M & Rochford, J., (2006). Otter survey of Ireland 2004/2005. Irish Wildlife Manual, No 23. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin.

[12] Reid, N., Hayden, B., Lundy, M.G., Pietravalle, S., McDonald, R.A. & Montgomery, W.I. (2013). National Otter Survey of Ireland 2010/12. Irish Wildlife Manuals No. 76. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

The plant and animal species to which the Birds and Habitats Regulations (2011) apply are presented in Schedule Three. Part 1 details the plants species, while Part 3 outlines those animal or plant vector materials and are presented below.

Third Schedule: Part 1 Plants

Non-native species subject to restrictions under Regulations 49 and 50.

First column	Second column	Third column
Common name	**Scientific name**	**Geographical application**
American skunk-cabbage	*Lysichiton americanus*	Throughout the State
A red alga	*Grateloupia doryphora*	Throughout the State
Brazilian giant-rhubarb	*Gunnera manicata*	Throughout the State
Broad-leaved rush	*Juncus planifolius*	Throughout the State
Cape pondweed	*Aponogeton distachyos*	Throughout the State
Cord-grasses	*Spartina* (all species and hybrids)	Throughout the State
Curly waterweed	*Lagarosiphon major*	Throughout the State
Dwarf eel-grass	*Zostera japonica*	Throughout the State
Fanwort	*Cabomba caroliniana*	Throughout the State
Floating pennywort	*Hydrocotyle ranunculoides*	Throughout the State
Fringed water-lily	*Nymphoides peltata*	Throughout the State
Giant hogweed	*Heracleum mantegazzianum*	Throughout the State
Giant knotweed	*Fallopia sachalinensis*	Throughout the State
Giant-rhubarb	*Gunnera tinctoria*	Throughout the State
Giant salvinia	*Salvinia molesta*	Throughout the State
Himalayan balsam	*Impatiens glandulifera*	Throughout the State
Himalayan knotweed	*Persicaria wallichii*	Throughout the State
Hottentot-fig	*Carpobrotus edulis*	Throughout the State
Japanese knotweed	*Fallopia japonica*	Throughout the State
Large-flowered waterweed	*Egeria densa*	Throughout the State
Mile-a-minute weed	*Persicaria perfoliata*	Throughout the State
New Zealand pigmyweed	*Crassula helmsii*	Throughout the State
Parrot's feather	*Myriophyllum aquaticum*	Throughout the State
Rhododendron	*Rhododendron ponticum*	Throughout the State
Salmonberry	*Rubus spectabilis*	Throughout the State
Sea-buckthorn	*Hippophae rhamnoides*	Throughout the State
Spanish bluebell	*Hyacinthoides hispanica*	Throughout the State
Three-cornered leek	*Allium triquetrum*	Throughout the State
Wakame	*Undaria pinnatifida*	Throughout the State
Water chestnut	*Trapa natans*	Throughout the State
Water fern	*Azolla filiculoides*	Throughout the State
Water lettuce	*Pistia stratiotes*	Throughout the State
Water-primrose	*Ludwigia* (all species)	Throughout the State
Waterweeds	*Elodea* (all species)	Throughout the State
Wireweed	*Sargassum muticum*	Throughout the State

EU Regulation 1143/2014 on Invasive Alien Species

On 14 July 2016 the European Commission published Commission Implementing Regulation 2016/1141 which set out an initial list of 37 species to which the EU Invasive Alien Species Regulation 1143/2014 applies. The associated restrictions and obligations came into force on 3rd August 2016.

Three distinct types of measures are envisaged under the Directive, which follow an internationally agreed hierarchical approach to combatting IAS:

- Prevention: a number of robust measures aimed at preventing IAS of Union concern from entering the EU, either intentionally or unintentionally.
- Early detection and rapid eradication: Member States must put in place a surveillance system to detect the presence of IAS of Union concern as early as possible and take rapid eradication measures to prevent them from establishing.
- Management: some IAS of Union concern are already well-established in certain Member States and concerted management action is needed so that they do not spread any further and to minimize the harm they cause.

Plant species listed on the directive include:

- American skunk cabbage *Lysichiton americanus*
- Asiatic tearthumb *Persicaria perfoliata* (*Polygonum perfoliatum*)
- Curly waterweed *Lagarosiphon major*
- Eastern Baccharis *Baccharis halimifolia*
- Floating pennywort *Hydrocotyle ranunculoides*
- Floating primrose willow *Ludwigia peploides*
- Green cabomba *Cabomba caroliniana*
- Kudzu vine *Pueraria lobata*
- Parrot's feather *Myriophyllum aquaticum*
- Persian hogweed *Heracleum persicum*
- Sosnowski's hogweed *Heracleum sosnowskyi*
- Water hyacinth *Eichhornia crassipes*
- Water primrose *Ludwigia grandiflora*
- Whitetop weed *Parthenium hysterophorus*

Animal species listed on the directive include:

- Amur sleeper *Perccottus glenii*
- Asian hornet *Vespa velutina*
- Chinese mitten crab *Eriocheir sinensis*
- Coypu *Myocastor coypus*
- Fox squirrel *Sciurus niger*
- Grey squirrel *Sciurus carolinensis*
- Indian house crow *Corvus splendens*
- Marbled crayfish *Procambarus* spp.
- Muntjac deer *Muntiacus reevesii*
- North american bullfrog *Lithobates (Rana) catesbeianus*
- Pallas's squirrel *Callosciurus erythraeus*
- Raccoon *Procyon lotor*
- Red swamp crayfish *Procambarus clarkii*
- Red-eared terrapin/slider *Trachemys scripta elegans*
- Ruddy duck *Oxyura jamaicensis*
- Sacred ibis *Threskiornis aethiopicus*
- Siberian chipmunk *Tamias sibiricus*
- Signal crayfish *Pacifastacus leniusculus*
- Small Asian mongoose *Herpestes javanicus*
- South American coati *Nasua nasua*
- Spiny-cheek crayfish *Orconectes limosus*

- Topmouth gudgeon *Pseudorasbora parva*
- Virile crayfish *Orconectes virilis*

On 13 July 2017 the European Commission published Commission Implementing Regulation 2017/1263 which added a further 12 species to the current list of 37 species regulated under the EU Invasive Alien Species Regulation (1143/2014).

These are:

Plant species

- Alligator weed (*Alternanthera philoxeroides*)
- Milkweed (*Asclepias syriaca*)
- Nuttall's waterweed (*Elodea nuttallii*)
- Chilean rhubarb (*Gunnera tinctoria*)
- Giant hogweed (*Heracleum mantegazzianum*)
- Himalayan balsam (*Impatiens glandulifera*)
- Japanese stiltgrass (*Microstegium vimineum*)
- Broadleaf watermilfoil (*Myriophyllum heterophyllum*)
- Crimson fountaingrass (*Pennisetum setaceum*)

Animal species

- Egyptian goose (*Alopochen aegyptiacus*)
- Raccoon dog (*Nyctereutes procyonoides*)
- Muskrat (*Ondatra zibethicus*)

The associated restrictions and obligations came into force from 2 August 2017 for all these species apart from the Raccoon dog, which came into force on 2 February 2019.

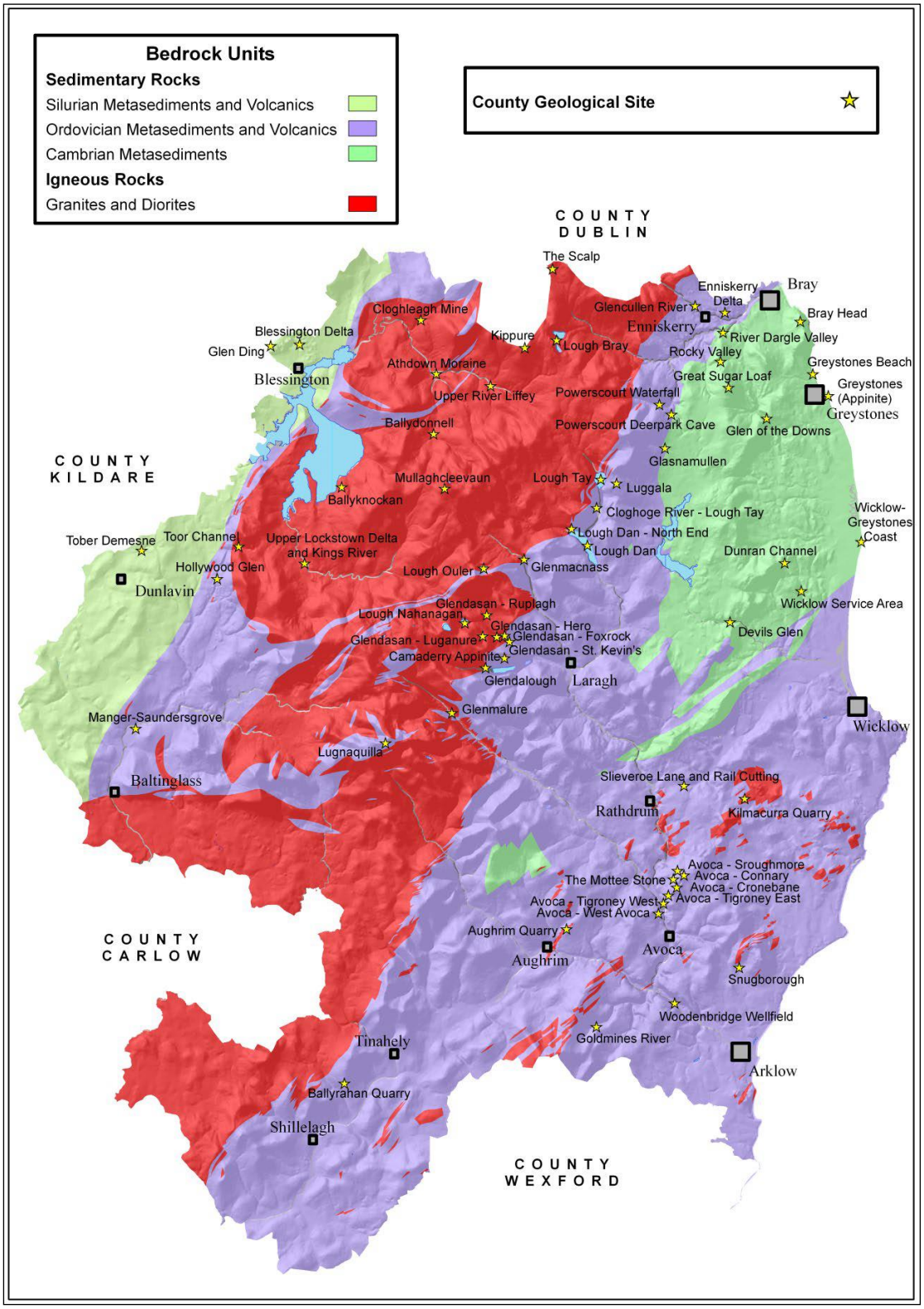
Other Invasive Species

The main guidance document that has been prepared dealing with invasive species/noxious weeds on sites is the NRA *'Guidelines on The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads'* which was published in 2010. This document details other non-native species of note.

The presence of invasive species was noted during the field surveys within the environs of Enniskerry Village.

3. RESULTS – DESKTOP RESEARCH

3.1 Underlying Geology & Soils



Enniskerry Village and the Glencullen River valley downstream of the village is underlain by greywacke rocks in what is known as the Glencullen River Formation (shown by the tan colour below) whilst elsewhere the village is surrounded by dark blue-grey slate, phyllite & schists, which form part of what is known as the Maulin Formation (as shown by the purple colour) on **Figure 4** below.

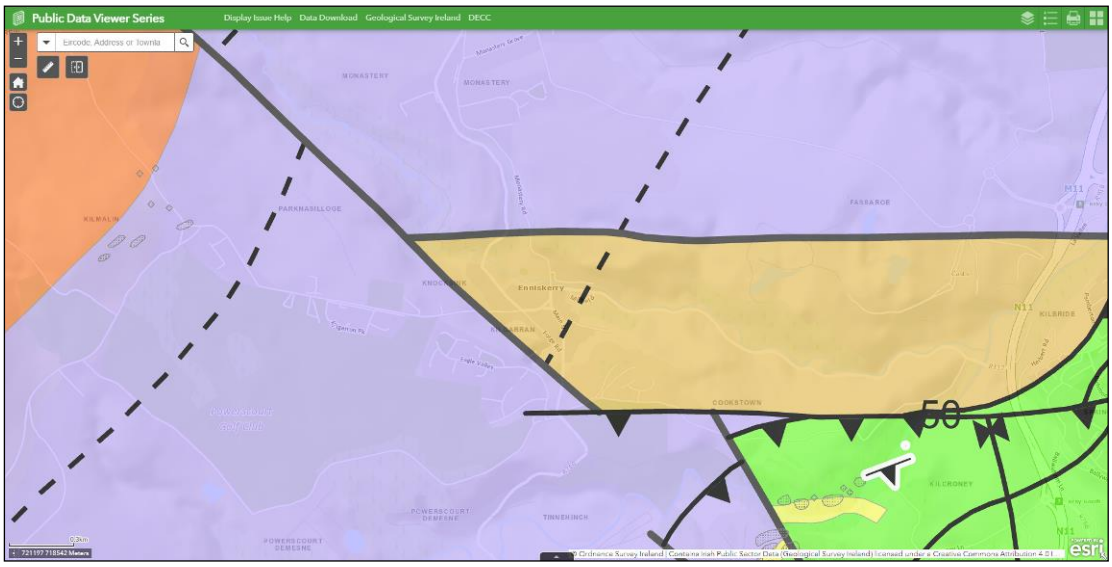


Figure 4. Geology of Enniskerry Village (Source: Geological Survey of Ireland).

The lands around the village to the south and north are overlain by glacial till in a soil formation known as the 'Clonroche soil association' which consists of a fine loamy drift with siliceous stones. West of the village toward Kilmolin and north towards Killegar the soils are coarser and are part of the 'Knockboy Association'. The river valleys are alluvial in nature, as shown on **Figure 5** below.

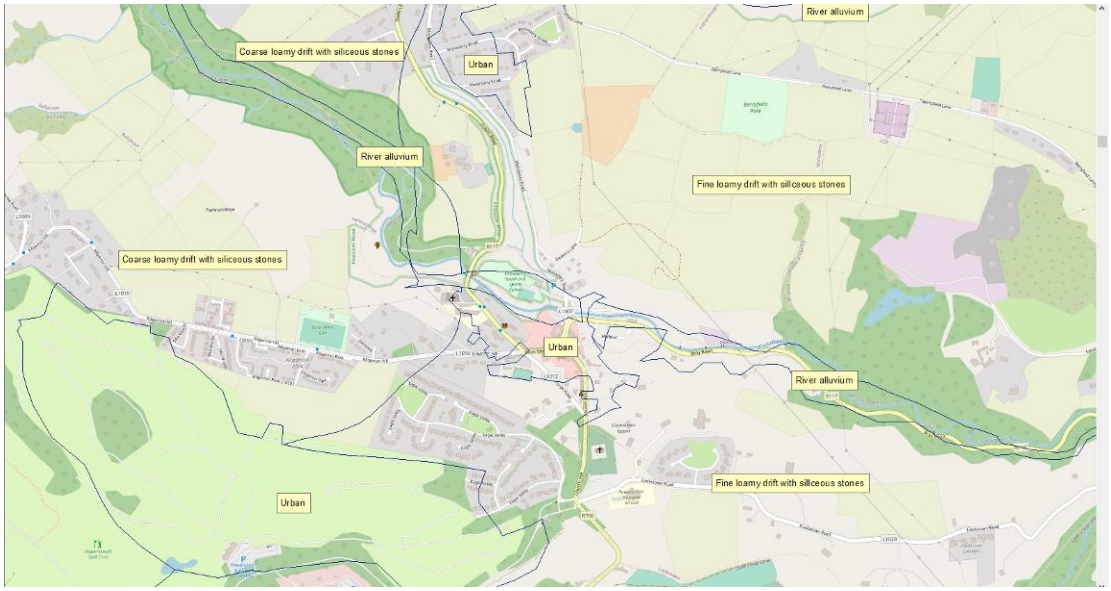


Figure 5. The soils surrounding Enniskerry Village are glacial till which is acidic in nature (Source: EPA).

3.2 Nature Conservation Designations

Lands within Enniskerry Village and in the adjoining Knocksink Wood are designated for nature conservation under both European and National nature conservation legislation as described above in **Section 2.3.1**. There are also a number of areas designated for within the wider environs of the village – the locations of these are shown on **Figure 6** below.

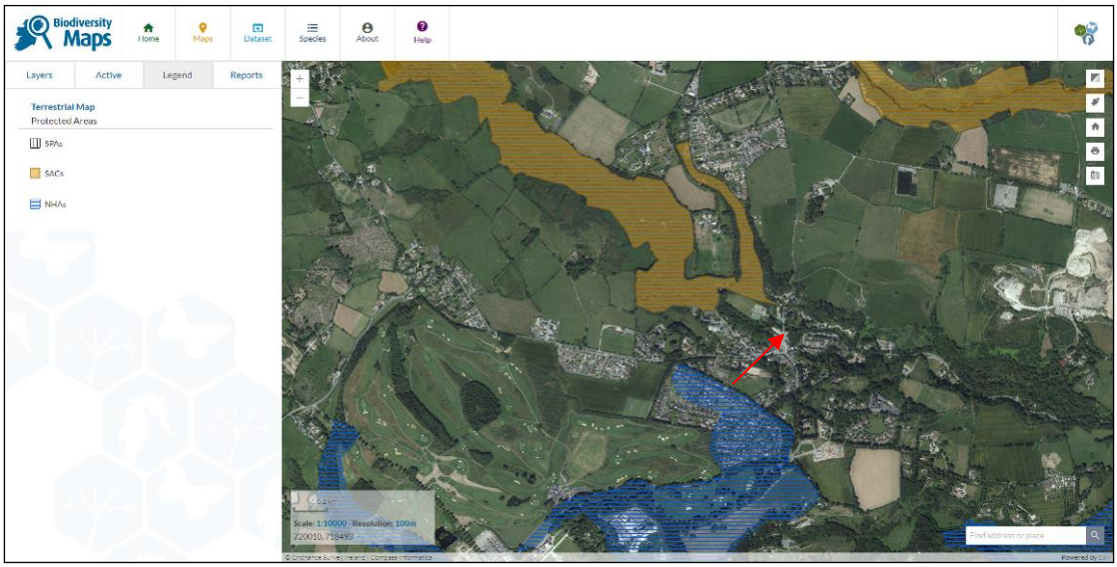


Figure 6. Areas legally designated for nature conservation within the environs of Enniskerry Village (indicated by the red arrow).

The most important of these is Knocksink Wood SAC as some of the lands within the Bog Meadow are included within the boundaries of the Knocksink Wood SAC as shown on **Figure 7**. The SAC lands are also designated as a proposed Natural Heritage Area and a Nature Reserve.

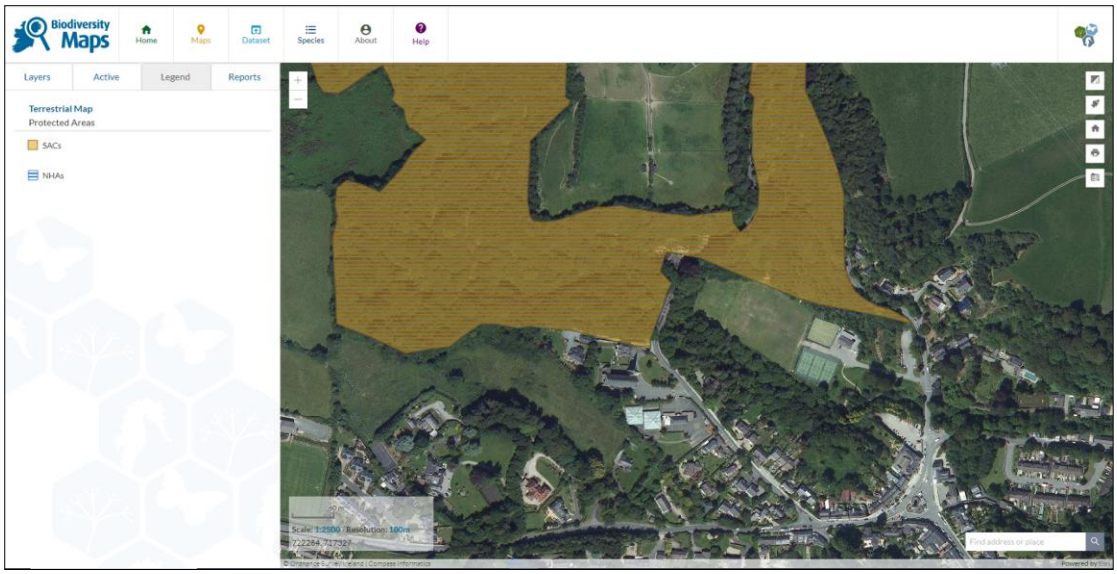


Figure 7. The boundaries of the Knocksink Wood SAC/pNHA are in close proximity to the village and include the woodland habitats in the Bog Meadow as well as the Monastery Glen.

The qualifying interests of the Knocksink Wood SAC include two priority habitats - [7220] Petrifying Springs* and [91E0] Alluvial Forests* alongside [91A0] Old Oak Woodlands. The boundary of the Knocksink Wood SAC adjoins the car park in the Bog Meadow and there are a series of tufa springs and seeps in the Bog Meadow (both within and outside the SAC boundary). Other areas designated for nature conservation in the environs of Enniskerry include:

- Ballyman Glen SAC (Site Code: 000713) – this site is also designated as the Ballyman Glen pNHA (Site Code: 000713),
- Powerscourt Woodland pNHA (Site Code: 001768), and
- Dargle River Valley pNHA (Site Code: 001754).

The site synopses for the designated SAC sites, which is a document that summarises the conservation interest of these designated sites and why they were designated, are presented in **Appendix 1** and **2**.

3.3 The Development of Enniskerry Village

A review of historic mapping for the environs of Enniskerry Village was completed. The first edition Ordnance Survey Ireland 6" series map shows that the village consisted of a small number of buildings clustered around the centre of the village as shown on **Figure 8** and 9 below.

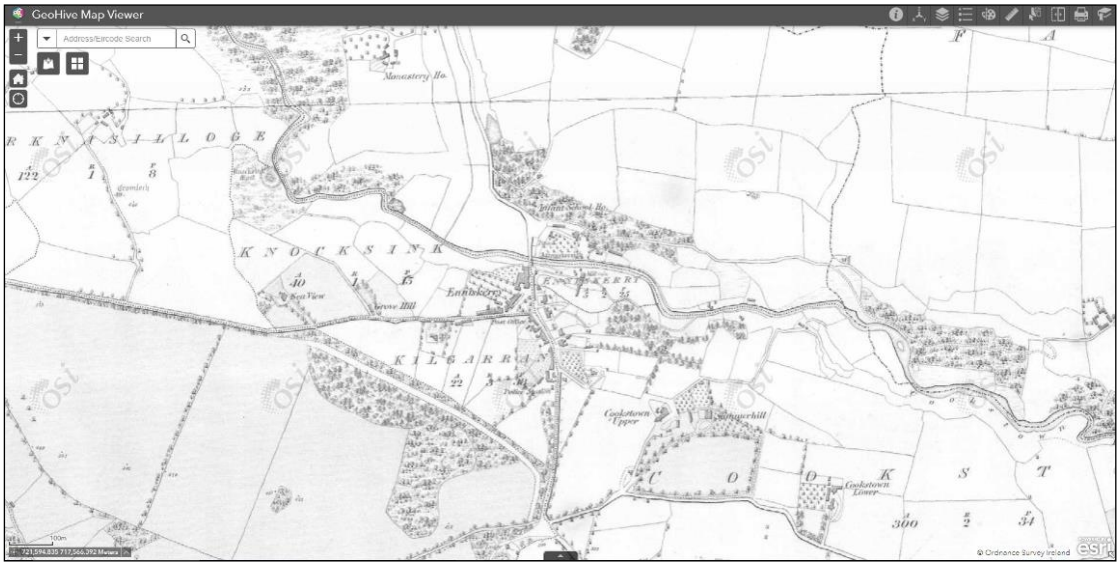


Figure 8. The undeveloped nature of Enniskerry Village in the mid-1800s (OSI First Edition 6" Map Series).

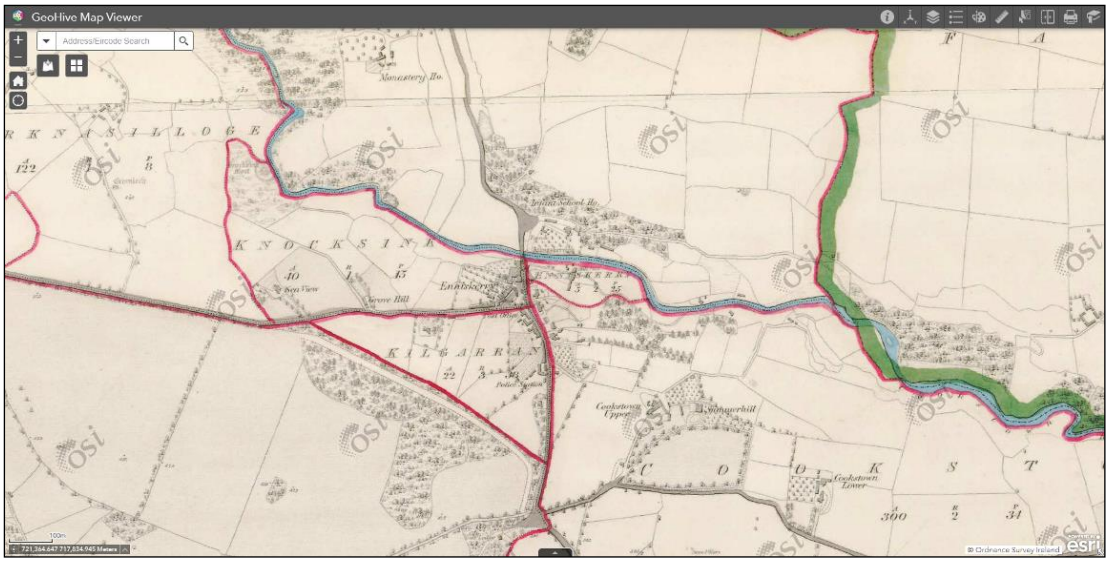


Figure 9. Enniskerry Village in the mid-1800s (OSI First Edition 6″ Map Series).

By the early 1900s the village had begun to extend southwards and the two churches had been built along with a new road linking Church Hill and Kilgarron Hill, as seen on the last 6″ edition mapping (**Figure 10**).

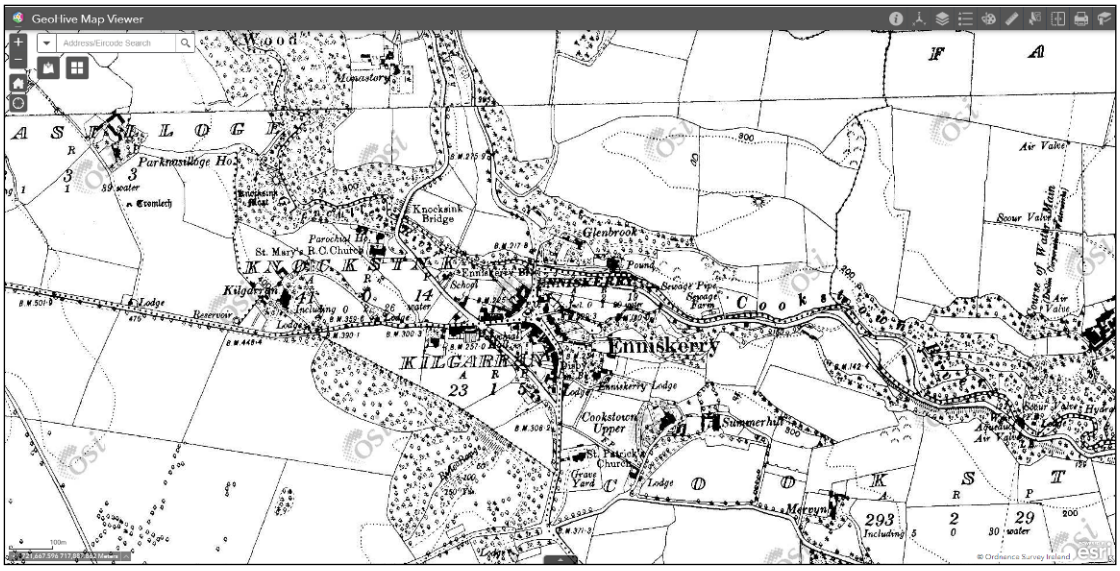


Figure 10. The OSI Last Edition 6″ Map Series.

By the time the 25″ maps were produced (**Figure 11**) the village remained relatively unchanged.

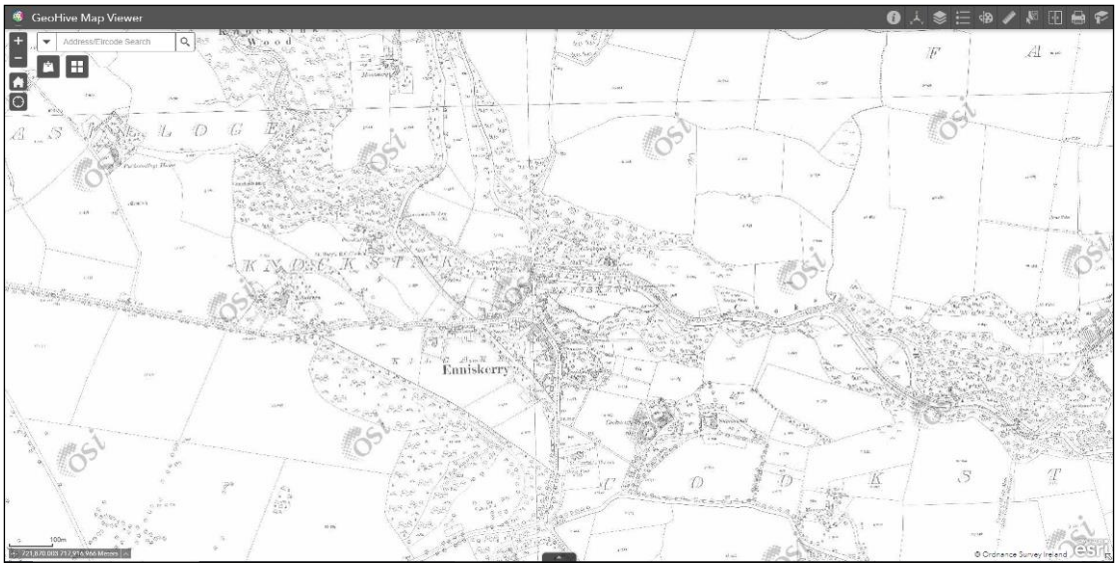


Figure 11. The OSI 25" Map Series.

Since then the village has hugely expanded with the development of housing estates such as Eagle Valley, Enniskerry Demesne, Monastery and Kilgarron as can be seen on **Figures 12** and **13** below.

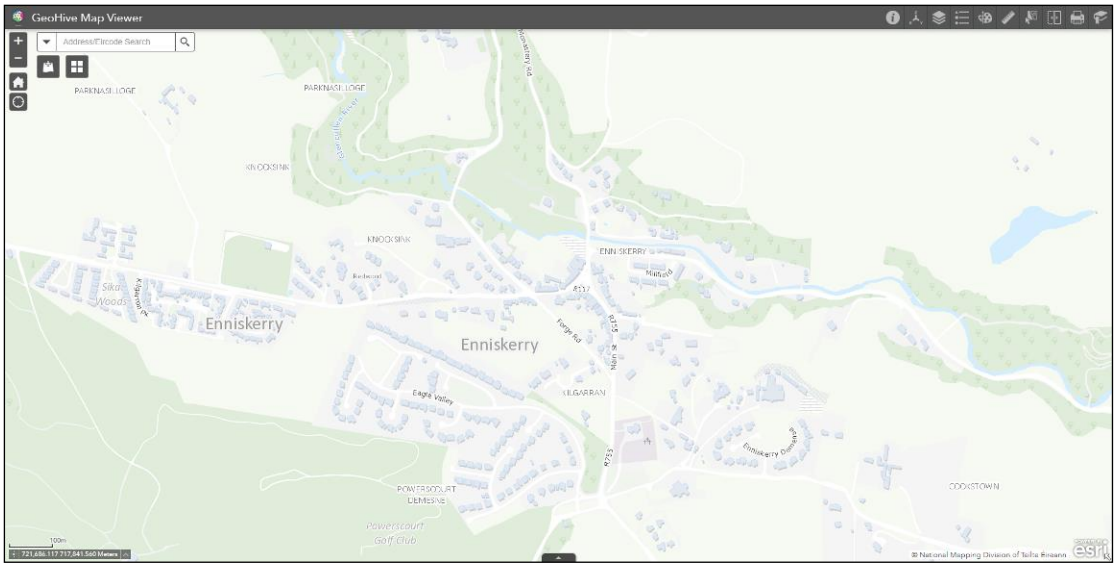


Figure 12. Current mapping.

Figure 13. Aerial view showing the developed areas, green spaces, and agricultural lands in the environs of Enniskerry.

Development in Enniskerry is controlled through the planning process. The local area plan for Enniskerry is presented on **Figure 14** below.

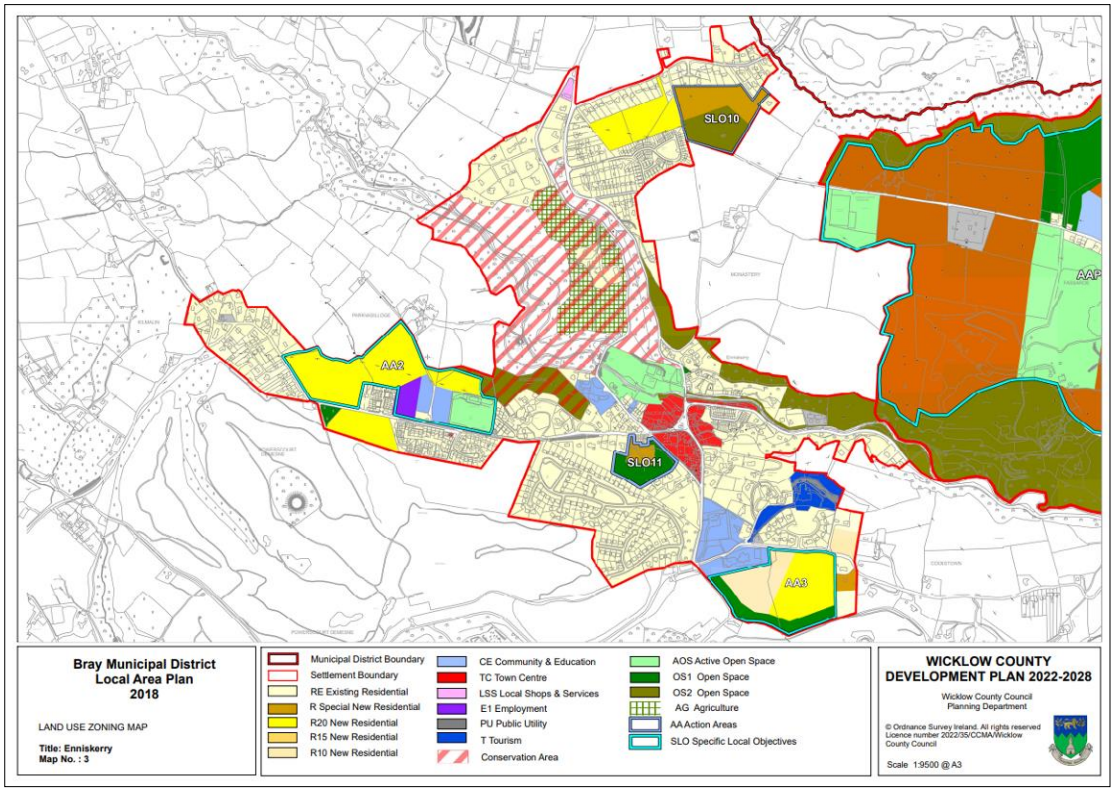


Figure 14. Local Area Plan for Enniskerry (Wicklow County Council).

3.3 Glencullen River

The Glencullen River (Glencullen_020) is located within the Ovoca Vartry Catchment (010) and within the Dargle Sub catchment (Dargle_SC_010). The Glencullen River rises near Tibradden Wood, passes down through the Glencullen Valley and through Enniskerry Village before continuing east to the coast to join the Dargle River near the N11 and enter the sea at Bray as shown on **Figure 15** below.

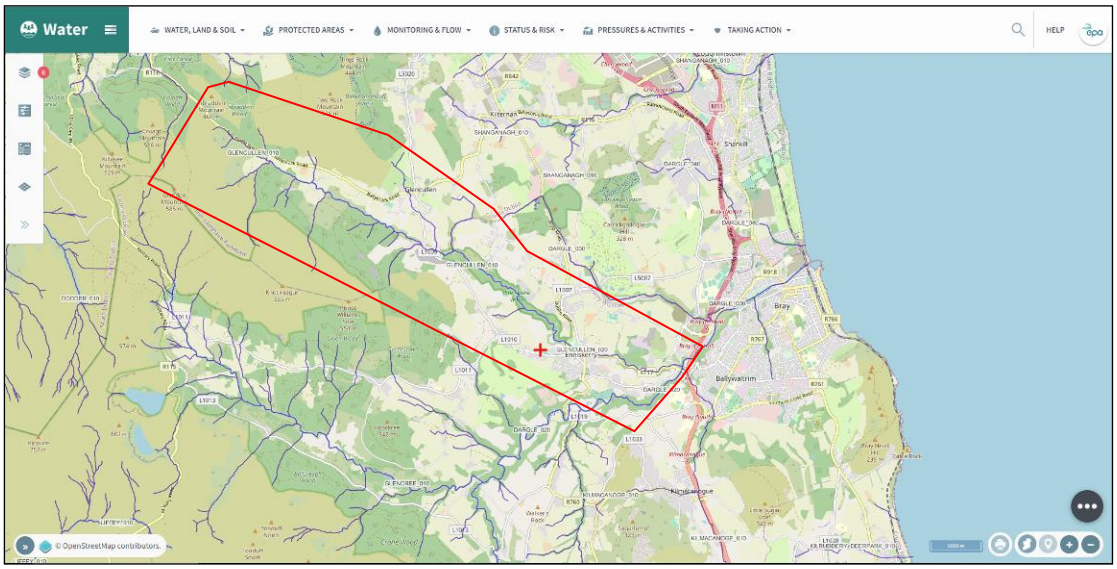


Figure 15. The Glencullen River.

Habitat Classification

Within the environs of the village the Glencullen River is best classified as an upland eroding watercourse. This river, like the Dargle, is what is called an upland oligotrophic, spate river which rises and falls quickly following rainfall events.

Upland Eroding Rivers (FW1) are described by Fossitt (2000) as follows:

> "This category includes natural watercourses, or sections of these, that are actively eroding, unstable and where there is little or no deposition of fine sediment. Eroding conditions are typically associated with the upland parts of river systems where gradients are often steep, and water flow is fast and turbulent. Rivers in spate are included. For some rivers on the seaward side of coastal mountains, particularly in the west of Ireland, eroding conditions persist to sea level because of comparatively steep gradients over short distances, and high rainfall. Small sections of other lowland rivers may also be eroding where there are waterfalls, rapids or weirs. The beds of eroding/upland rivers are characterised by exposed bedrock and loose rock. Pebbles, gravel and coarse sand may accumulate in places, but finer sediments are rarely deposited. These rivers vary in size but are usually smaller and shallower than depositing/lowland rivers - FW2.
>
> Small mountain streams that dry out periodically can be included if an obvious channel persists or wetland plants are present. The unstable rocky channels of eroding/upland rivers usually support little vegetation cover. Submerged rocks and boulders may be colonised by aquatic mosses such as *Fontinalis* spp. and *Racomitrium aciculare*. Exposed rocks and wet shaded banks may also support extensive cover of lichens and liverworts. Higher plants are generally rare or absent except in places where fine sediments are trapped. Typical species include water-crowfoots (*Ranunculus penicillatus*, *R. aquatilis*), Alternate Water-milfoil (*Myriophyllum alterniflorum*) and the aquatic form of Bulbous Rush (*Juncus bulbosus*). Plant and animal communities of eroding/upland rivers are influenced by a range of factors including bedrock and substratum type, nutrient status, water force, water quality, shade and

human impact. Habitat conditions also vary along different stretches of a river where there are riffles, runs, pools, waterfalls and backwaters".

3.5 Glencullen River – Water Quality

The Glencullen River (IE_EA_10G020500) rises to the west of Enniskerry Village as shown on **Figure 16** above – it is approximately 24km long. Water quality in the Glencullen River is monitored as part of Ireland's reporting obligations under the Water Framework Directive. Samples are taken at a number of standard sampling locations within the environs of the village. These include a station within Knocksink Wood near the car park (RS10G020320) and at the bridge in the village (RS10G020350) as shown on **Figure 16** below.

Water quality in the Glencullen River was assessed as 'Good' during the 2010 – 2015 monitoring period, and has maintained that status during the 2013 – 2018 period and during the latest 2016 – 2021 monitoring period as shown on **Figures 17, 18,** and **19** below.

The Glencullen River therefore remains classified as a waterbody "not at risk" of failing to meet the Water Framework Directive (WFD) objective of at least "good" ecological status by 2027 (see **Figure 20** below).

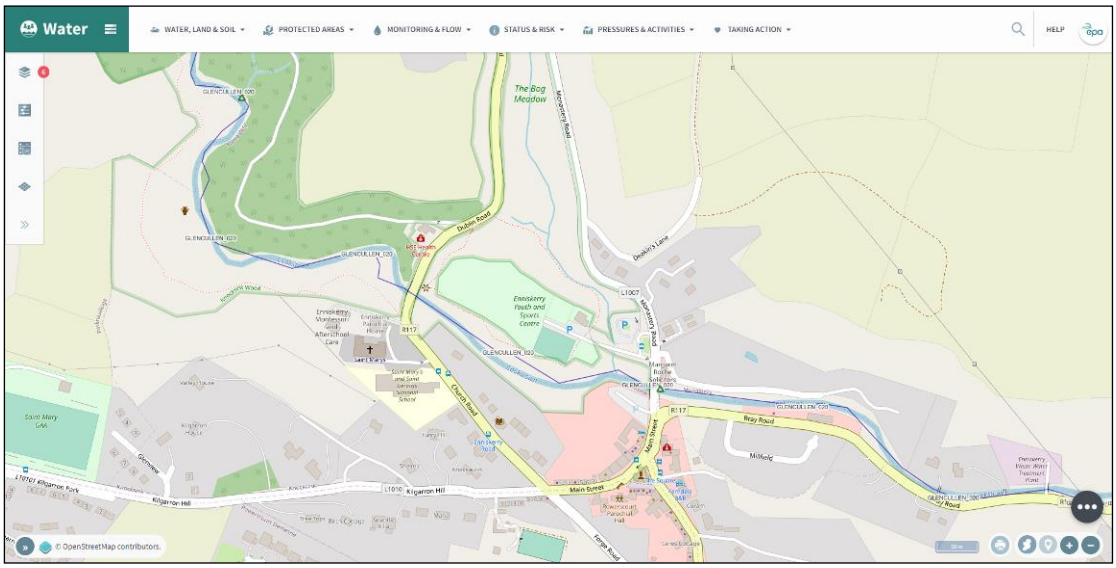


Figure 16. Water sampling locations on the Glencullen River in the environs of the village.

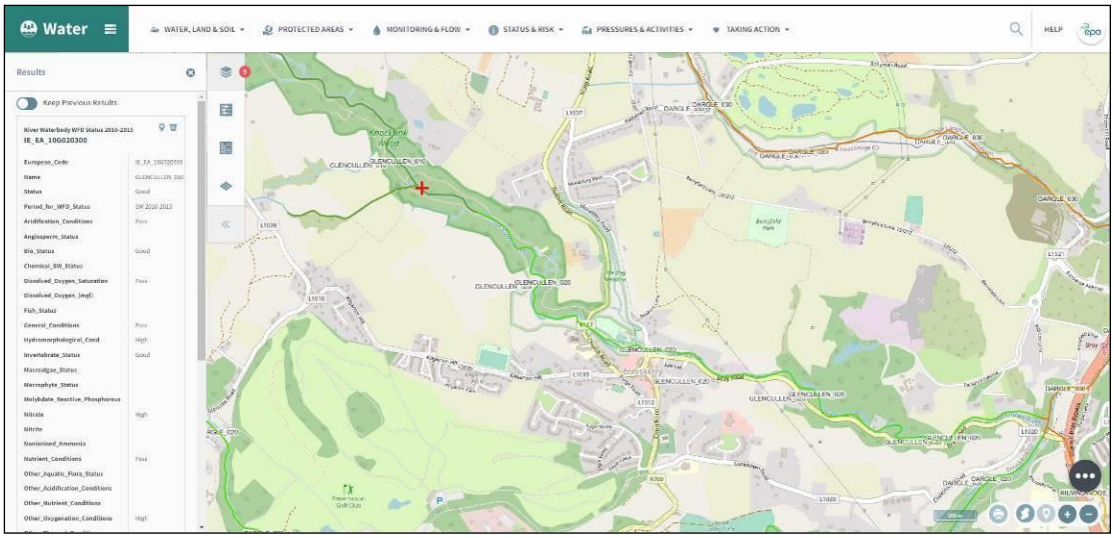


Figure 17. The Glencullen River was assessed as 'Good' status during the 2010 – 2015 monitoring period (Source: www.catchments.ie).

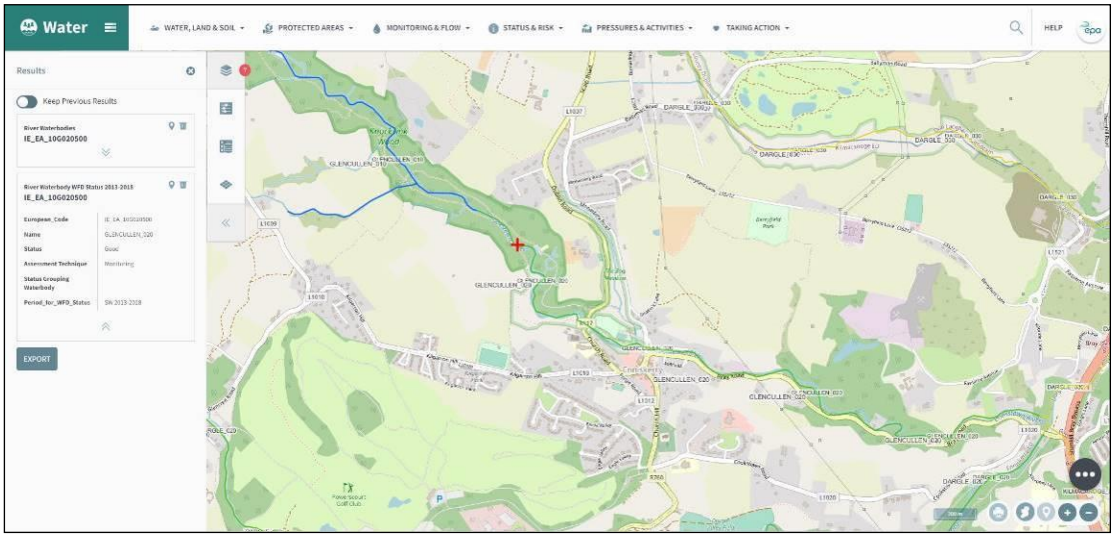


Figure 18. The Glencullen River was assessed as 'Good' status during the 2013 – 2018 monitoring period (Source: www.catchments.ie).

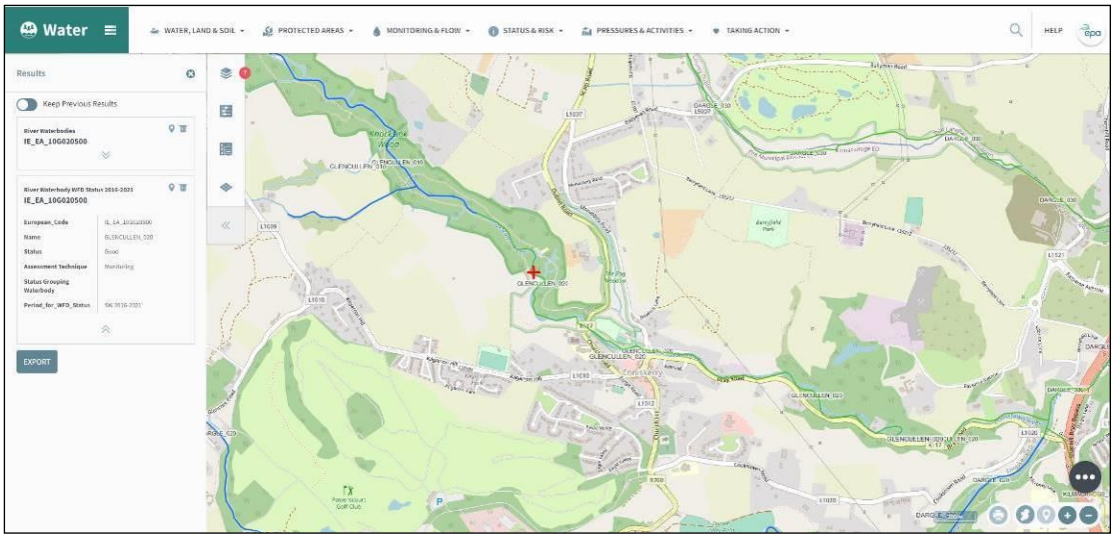


Figure 19. The Glencullen River was assessed as 'Good' status during the 2016 – 2021 monitoring period (Source: www.catchments.ie).

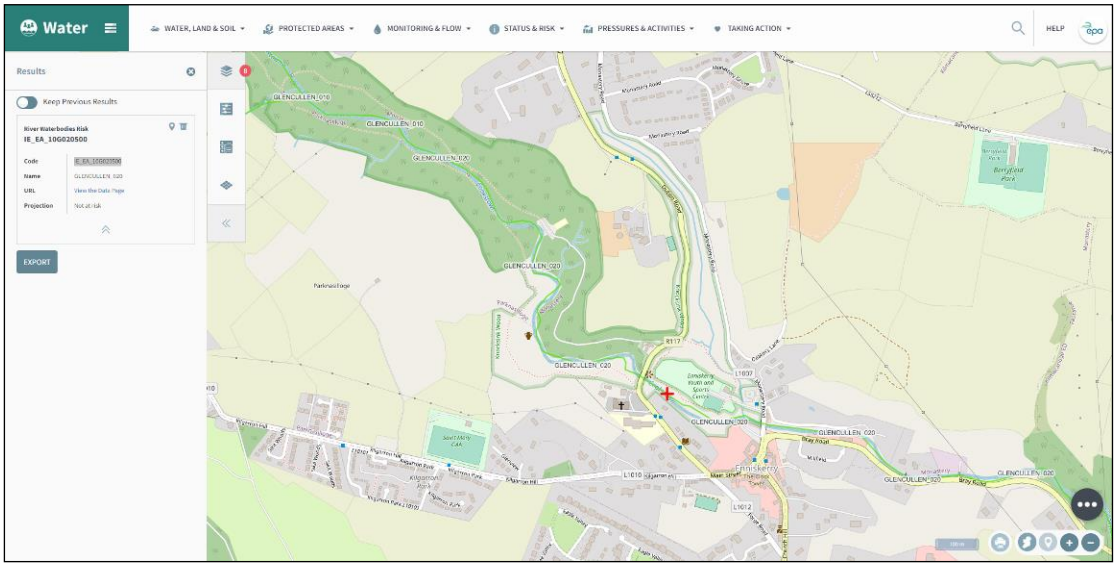


Figure 20. The status of the Glencullen River remains as a waterbody 'Not At Risk' during the 3rd cycle of the Water Framework Directive (Source: www.catchments.ie).

3.6 Geological Heritage Sites in the vicinity of Ennsikerry

Geodiversity is the often forgotten foundation for much of the biodiversity which has been identified for conservation through SAC or NHA designation, it is unsurprising that many of the most important geological sites are actually in the same areas as SAC and NHA sites. A number of sites in the environs of Enniskerry are listed as a geological heritage site by the Geological Survey of Ireland. These include:

- Glencullen River (Site Code: WW024)
- Enniskerry Delta (Site Code: WW020)
- River Dargle Valley (Site Code: WW051)
- The Scalp (Site Code: WW05)

The locations of these sites are shown on **Figure 21** below. Further information on these sites is presented in A**ppendix 3**.

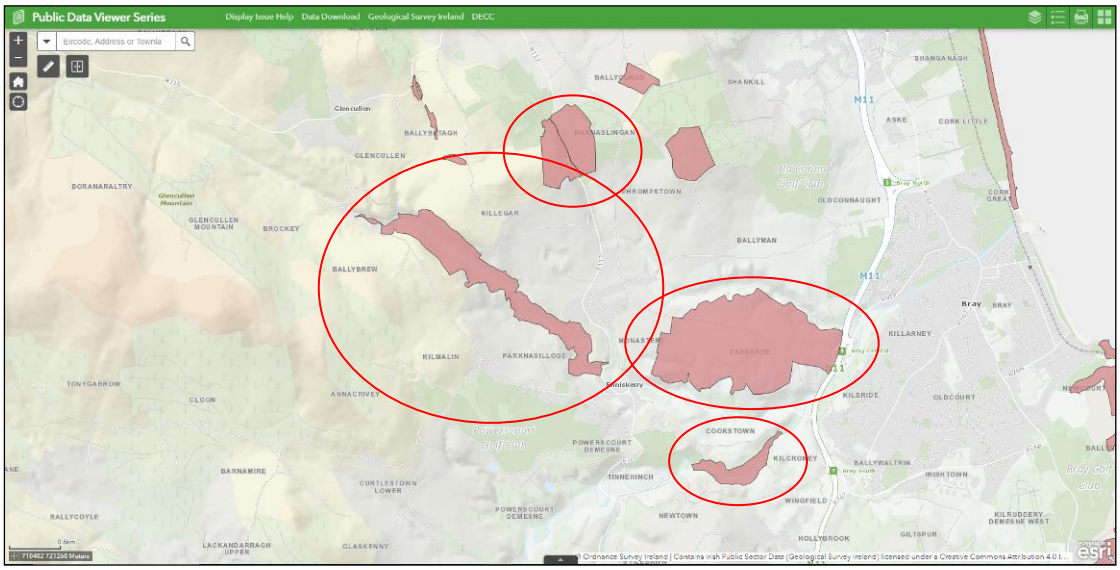


Figure 21. Geological Heritage Sites in the vicinity of Enniskerry.

3.7 Biodiversity Records

A review of biodiversity records from within the study area in the village held by the National Biodiversity Data Centre was completed. This included a search for recorded from within the environs of the study area and from the 2km square grid O21I in which the village is located.

These are presented in **Table 1** and **Table 2** respectively in **Appendix 4**.

They include records of:

- Amphibians
- Birds
- Ferns
- Flowering plants
- Fungi
- Insects – beetles
- Insects – butterflies
- Insects – dragonflies
- Insects – bees and wasps
- Insects - moths
- Insects – caddis fly, may fly, stone fly and true flies
- Insects - millipedes
- Mosses
- Liverworts
- Slime moulds
- Mammals

51 species have been recorded in the village and submitted to the National Biodiversity Data Centre, while 543 species have been recorded in the larger study area.

4. RESULTS – FIELD SURVEYS

Various sites in Enniskerry Village were surveyed during the project including the main village square, housing estates, the graveyard, the Bog Meadow, Monastery glen and the general environs. A few of the highlights of the survey are presented below.

4.1 Undesignated Annex I Habitats along the Glencullen River.

The Glencullen River and adjoining woodland on the southern bank of the river form an important ecological extension of the Knocksink Wood SAC and the land contains a number of habitats of international importance which form part of what are called the 'Qualifying Interests' of the adjoining SAC. These are currently undesignated.

These include areas of Petrifying springs with tufa formation (Cratoneurion) [7220] and pockets of wet woodland dominated by ash, willows and alder which are young examples of the habitat type 'Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0]'.

Plate 1. Wet woodland with Yellow flag (*Iris pseudacorus*) in the Knocksink Wood SAC in the Bog Meadow.

A large number of tufa springs were identified within the Bog Meadow over the course of this survey. They are located on both banks of the Glencullen River and within the woodland habitats of the SAC in the Bog Meadow itself.

Over the years these habitats have been damaged within the Bog Meadow as it was developed for amenity purposes with the construction of playing pitches, car parking and walking tracks which necessitated drainage and altered the course of springs within the lands. These works would also have been the source of many of

the invasive species, such as the Winter heliotrope, which is a ubiquitous feature of the car park.

These habitats are further threatened by the presence of the non-native invasive species.

4.2 Tufa Springs in the Bog Meadow and Enniskerry Village

These springs were the subject of a detailed survey by Dr Joanne Denyer who surveyed an area of the Bog Meadow and adjacent woodland at Enniskerry with Faith Wilson on 8th July 2023. The aim of the survey was to assess whether any calcareous springs and seepages within the survey area are examples of Annex I priority petrifying spring habitat *7220.

These are rare habitats across Europe hence their designation and protection under the EU Habitats Directive. The presence of these springs in the woods in Knocksink, and in the Ballyman Glen, is one of the main reasons why these areas were given protection under the EU Habitats Directive and designated as Special Areas of Conservation.

Plate 2. Tufa deposits on the edge of Monastery Road.

Petrifying springs are a specialised habitat that forms where calcareous waters deposit tufa (a porous rock made of calcium carbonate). The tufa formation may be small deposits around the bases of plants within the spring, or can comprise very large mounds and cascades. A characteristic suite of plant and moss species are associated with tufa spring.

Plate 3. Tufa deposits on the edge of the stream in the Bog Meadow.

Plate 4. Tufa springs within the wet woodland in the SAC in the Bog Meadow.

Plate 5. Tufa cascade on the Glencullen River bank.

Plate 6. Tufa springs within the wet woodland in the SAC in the Bog Meadow.

The results of the spring survey are summarised in **Table 1** below and the mapped springs/ seepages are shown on **Figure 22**.

The main areas of petrifying spring which were surveyed are:

- the stream that runs through the site, partly within Knocksink SAC (Table 1, Spring ID 5),
- a large seepage zone in the northern part of the site within Knocksink SAC (Table 1, Spring ID 1), and
- a large seepage zone in the southern part of the site, outside of the SAC (Table 1, Spring ID 2).
- There were also two potential seepage zones to the south of the river, but these were outside of the main survey area and viewed from a distance only.

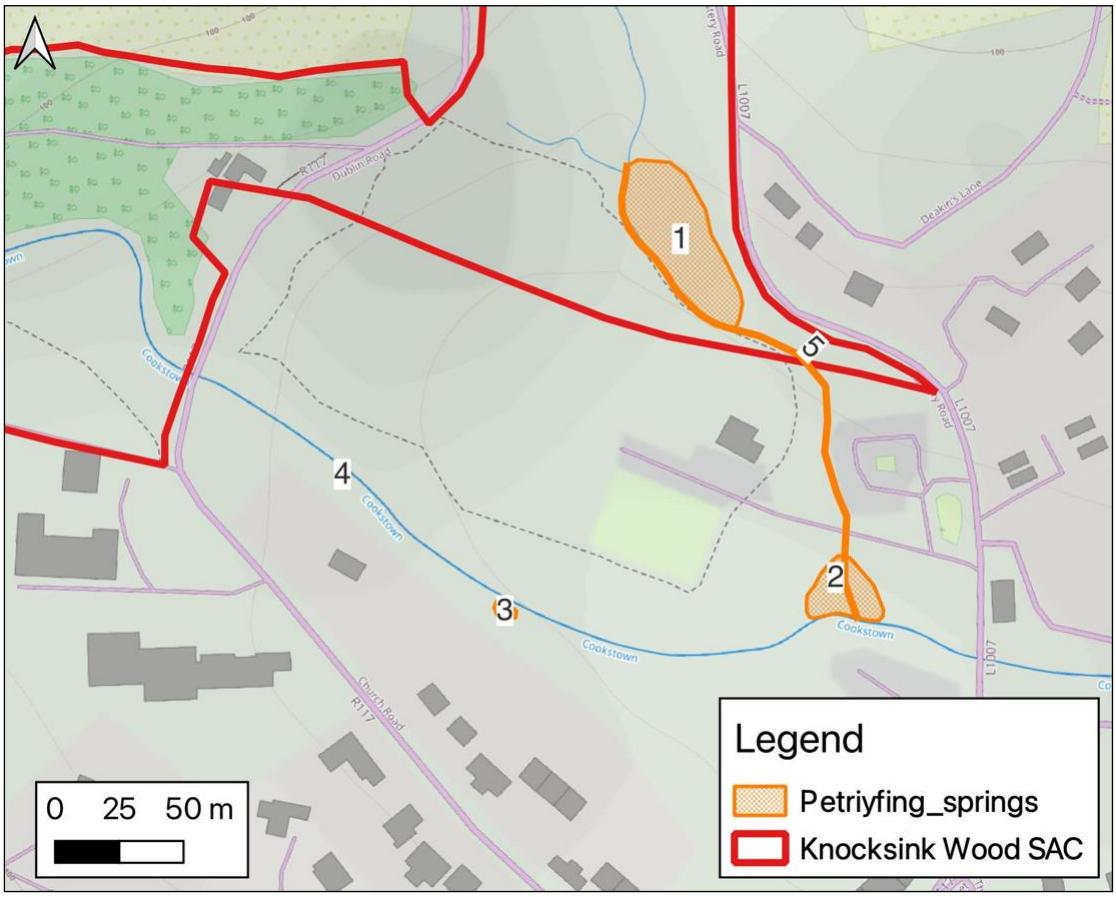


Figure 22. Location of recorded petrifying spring/ seepages.

Table 1. Summary of mapped petrifying spring/ seepages

Spring ID	Annex I habitat	Comment	Photograph
1	*7220	Large seepage zone with paludal tufa and oncoids and ooids. Where the water flows down a bank into the stream below there is cascade tufa. Some areas are heavily deer trampled with deep soft mud and have lower flora cover. At least 4 positive indicator species are present. The spring is at least 'High' national ranking.	Trampled area with *Equisetum telmateia* abundant and deep soft mud with oncoids/ ooids and paludal tufa.  Cascade tufa with *Palustriella commutata* abundant 
2	*7220	Large area of tufa cascade on the riverbank where a stream joins the river. There is iron staining at the edge of the river and a soft seepage zone either side of the stream. At least 4 positive indicator species are present. The spring is at least 'High' national ranking and possibly 'Very High' (requires full survey to assess).	Tufa cascade where stream enters river 

Spring ID	Annex I habitat	Comment	Photograph
			Cascade tufa and seepage upstream of stream 
3	Possible *7220	Viewed from the other side of the riverbank as outside survey area	n/a
4	Possible *7220	Viewed from the other side of the riverbank as outside survey area	n/a
5	*7220	Stream flowing from NW to SW. Stream crust and tufa dams are present throughout the length and it is associated with seepages and cascade tufa in areas 1 and 2. It is culverted under the car-park. At least 3 positive indicator species are present. The stream is at least 'High' national ranking (requires full survey to assess).	Stream crust tufa within stream 

The Annex I priority petrifying spring/ seepage/ stream areas 1, 2 and 5 are linked together and located partly within the SAC. They are of at least high national conservation importance. As the southern seepage area (2) is part of a larger spring complex within the SAC, it should be assessed as being of at least National Importance.

Petrifying springs are highly sensitive to changes in water chemistry and water flow and direct disturbance. Any proposed development in the area must assess potential impacts to the recharge area of the petrifying spring in terms of both water flow and water chemistry. This will relate to both any disruption of flow and also changes to water chemistry from changes in surface water discharge from the site.

Ecological impact assessment for petrifying springs requires input from a petrifying springs ecologist and hydrogeologist experience in assessing this habitat. Refer to the latest national petrifying springs guidance[13] for more information.

[13] Denyer, J., Eakin, M., & Gill, M. (2023). Guidelines for the Assessment of Annex I Priority Petrifying Springs in Ireland. Irish Wildlife Manuals, No. 142. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

4.3 Otters at Enniskerry

Otters are an elusive river creature and thankfully they still occur on the Glencullen River. They were recorded there during the Otter Survey of Ireland in 1982 as shown on **Figure 23**.

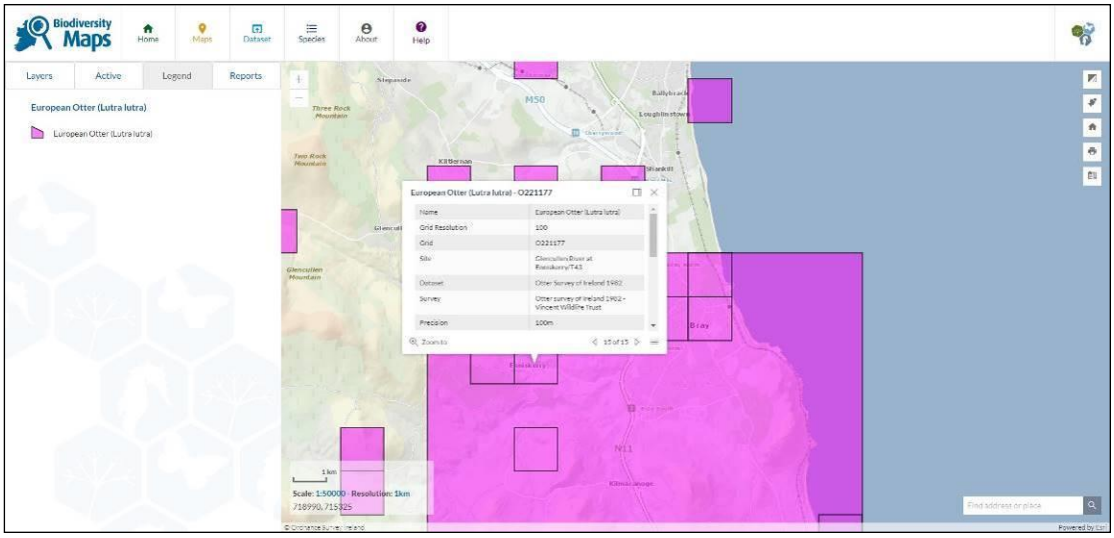


Figure 23. Otters were previously recorded in Enniskerry in 1982.

The Glencullen River was more recently surveyed for Otter during March-June 2020 by Triturus[14] who completed an Otter survey of this and other watercourses in the area (Ballyman Glen and the River Dargle) for Dun Laoghaire Rathdown County Council.

They report that:

"a total of *n*=30 otter signs were recorded on the Glencullen River, the highest total of all watercourses surveyed. The density of otter signs along 12.3km of channel (2.4 records per km) was the 3rd highest recorded in the survey area, although this overall density was considerably reduced given the absence of signs from the upper, higher-energy, higher-gradient reaches of the channel (i.e. above c.200m elevation, upstream of Glencullen Bridge area). Spraints accounted for the majority of signs (*n*=24), most of which were associated with prominent instream boulders. A low number of latrines and a set of prints were also recorded".

Otter holts (which are where otters breed) were also recorded on the Glencullen River. Two holts were identified – one upstream and one downstream of the village. Both were located in mature mixed broad-leaved woodland.

Otters are very vulnerable to disturbance and this was also assessed in the study through scoring the river on a Human Disturbance Index (HDI).

They reported that:
"The Glencullen River (EPA code: 10G02) (also known locally as the Cookstown River) featured the lowest mean HDI score (0.37) for any watercourse surveyed (i.e.

[14] Brazier, B. & Macklin, R. (2020). Dún Laoghaire-Rathdown otter survey. Report prepared by Triturus Environmental Ltd. for Dún Laoghaire-Rathdown County Council. November 2020.

lowest disturbance watercourse overall). The majority of survey sections (20 of 25 sections) featured low disturbance levels, with the remaining five sections being of moderate disturbance. Typically, HDI scores were only lowered due to adjoining land use practices, with the river channel itself demonstrating a high degree of naturalness throughout much of its length. The Glencullen River supported the highest number of otter signs recorded along any survey watercourse (*n*=30 signs), with all signs - including two holts – located in low disturbance areas of channel. Notably, no otter signs were recorded in the uppermost ten survey sections, despite low disturbance levels".

4.3 Swifts at Enniskerry

Swifts are a migratory species which travel from tropical Africa to breed in Ireland every year. Swift numbers have declined by over 40% in the past twenty years. The main cause of this decline is loss of their breeding sites. They nest in buildings in towns. Their traditional nests can usually be found at the top of walls or in cavities in brick work. They gain access to the tops of walls by climbing behind the fascia board. When repairs or renovation work are carried out to roofs and guttering the birds can no longer gain access to their traditional nesting site. Since Swifts are colonial birds, repair or renovation work can often affect more than one pair of birds.

Swifts used to breed in the Clock Tower in the village.

Enniskerry and Powerscourt were recently surveyed as part of the County Wicklow Swift Survey, which was completed in 2019. The village was surveyed on two occasions and a maximum number of two birds were encountered (both in Powerscourt, none in the village) but no nests were confirmed at that time.

Oran O' Sullivan, the project manager, reported that during the survey there was all sorts of film making operations going on, which didn't help. He also noted that the eaves along the shops and houses in the village are permanently festooned with wiring, cables etc., (for seasonal lighting). He wondered if this might restrict Swift access to nesting sites.

A swift walk and talk was organised as part of the biodiversity action plan on the 12th July 2023. No swifts were observed/recorded.

Can we bring the swifts back to Enniskerry?

4.4 Bats at Enniskerry

The Bat Conservation Ireland database has records of roosts and other observations of bat species from the environs of Enniskerry.

The following species have been recorded from the general environs of the village:

- Common pipistrelle (*Pipistrellus pipistrellus* (45kHz)),
- Soprano pipistrelle (*Pipistrellus pygmaeus*),
- Leisler's bat (*Nyctalus leisleri*),
- Daubenton's bat (*Myotis daubentonii*),
- Whiskered bat (*Myotis mystacinus*),

- Natterer's bat (*Myotis nattereri*), and
- Brown long-eared bat (*Plecotus auritus*).

Knocksink Wood is of very high importance for bats with seven species recorded here.

Brown long eared bats traditionally roosted in St. Patrick's Church.

A community bat walk took place on the 25th May 2023 as shown on **Figure 24**. Three species of bats were heard and seen on the night.

These were:

- Common pipistrelle (*Pipistrellus pipistrellus* (45kHz)),
- Soprano pipistrelle (*Pipistrellus pygmaeus*), and
- Leisler's bat (*Nyctalus leisleri*).

Sonograms of their echolocation calls are shown on **Figures 25, 26** and **27** below.

Figure 24. Bats recorded during the bat walk on 25th May 2023.

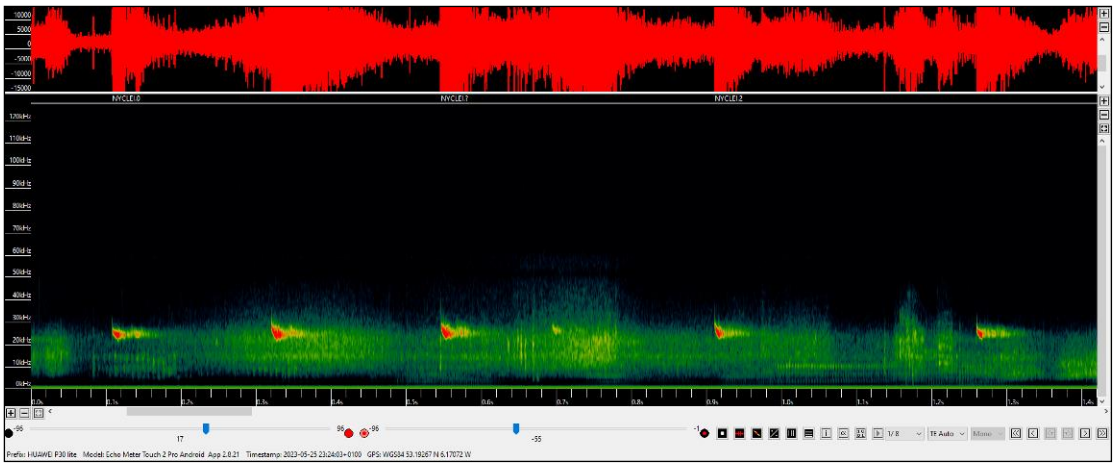


Figure 25. Sonogram of Leisler's bat in Enniskerry.

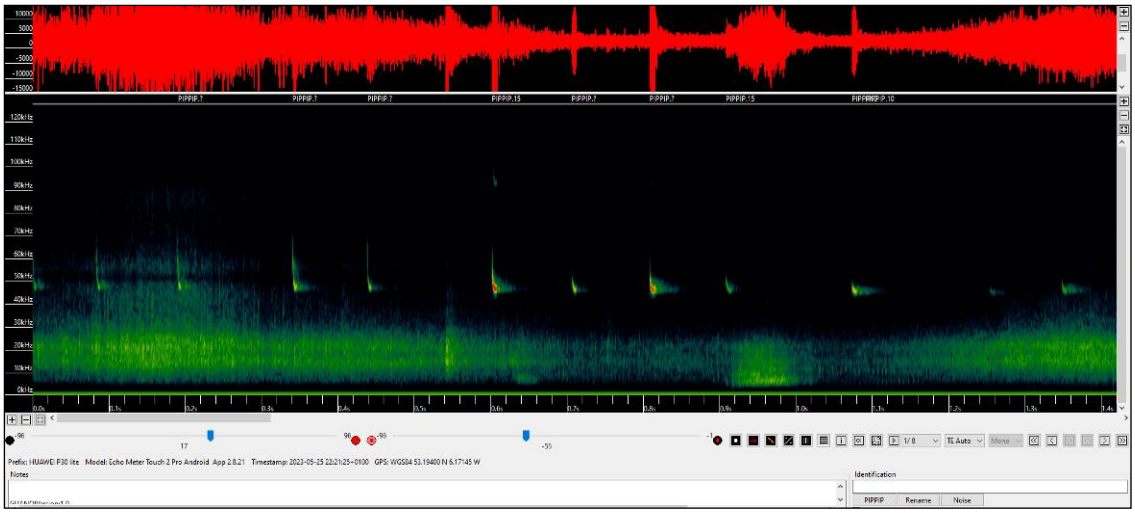


Figure 26. Sonogram of Common pipistrelle bat in Enniskerry.

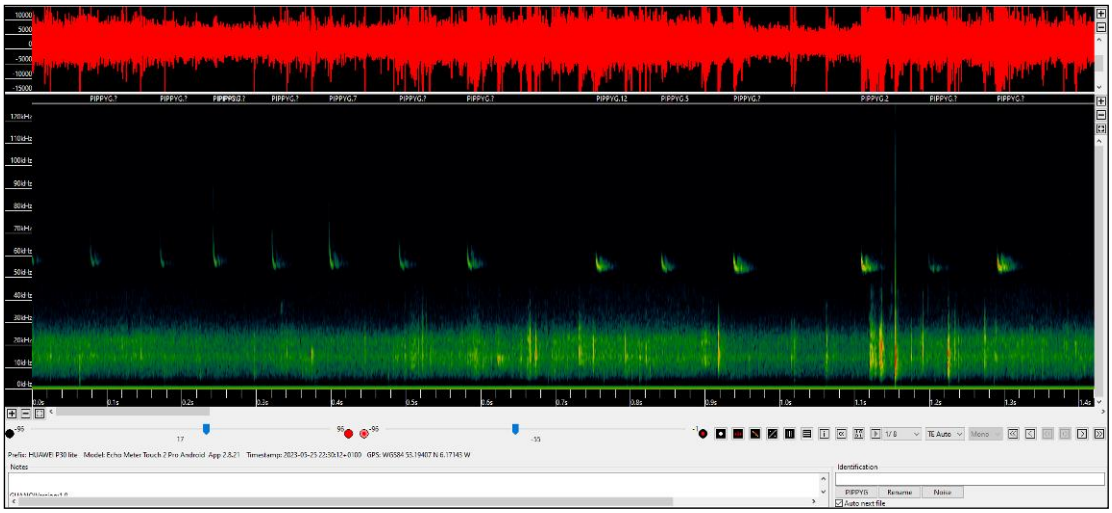


Figure 27. Sonogram of Soprano pipistrelle bat in Enniskerry.

4.5 Glencullen River

The Glencullen River rises on lands within the Wicklow Mountains SAC (Site Code: 002122). These lands are also designated as a Special Protection Area (Wicklow Mountains SPA (Site Code: 004040)). These sites are designated for a range of habitats and species including otter.

The Triturus Otter Survey in 2020 described the river as follows:

"The Glencullen River (EPA code: 10G02) (also known locally as the Cookstown River) rose near Glenadoo Mountain on the Wicklow/Dublin border before flowing for approx. 12km in a south-easterly direction and joining the River Dargle upstream of Bray town. One of the major watercourses within DLR jurisdiction, the Glencullen River retained high levels of naturalness throughout. The upper reaches, upstream of Glencullen Bridge, were typically narrow, shallow and high-energy as they flowed over a steep gradient through low-intensity agricultural pasture and rural areas, with only occasional encroachment from residential properties. The highly-natural channel form continued downstream of Glencullen Bridge, with the river displaying typical upland eroding watercourse characteristics such as a steep, V-shaped valley

form, cascading profile with deep plunge pools, bedrock and boulder-dominated substrata and natural riparian buffers (some afforestation was present, however). The river gradient decreased as it flowed through Knocksink Woods SAC (000725), an extensive area of natural mixed-broad-leaved woodland dominated by beech, hazel and oak. Levels of both otter seclusion and river naturalness were high here.

The river retained a high degree of naturalness as far as the confluence with the River Dargle upstream of the M11. Whilst some modifications were present downstream of Enniskerry village, such as retaining walls along roads and occasional small weirs and localised human access, the river form was largely unaltered and provided excellent otter habitat, overall, in addition to good fisheries habitat (for both brown and sea trout). Riparian buffers were invariably natural throughout and the naturally steep valley form prevented human access in most areas.

Contemporary EPA biological water quality data was available for the Glencullen River at several locations. In the upper reaches (stations RS10G020050 and RS10G020300), the river achieved Q4-5 (high status) in 2018. Just upstream of the River Dargle confluence, the river achieved Q4 (good status) in 2018. Historical data suggests that water quality in the lower reaches has declined (from high status) since the 1980s. Given the high-quality water of the upper catchment, the EPA River Waterbodies Risk projection was 'at risk' at the time of survey. The lower reaches (downstream of Enniskerry) were considered 'not at risk'".

They also assessed the naturalness of the watercourse (how modified it is) and reported:

"The Glencullen River (EPA code: 10G02) (also known locally as the Cookstown River) demonstrated a high degree of naturalness throughout its 12.3km length. In total, 21 of 25 survey sections achieved hydromorph scores of ≥0.8, i.e. high status. This was reflected in the high number of otter signs recorded along the river (the highest of any survey watercourse)".

They reported that "the river was largely natural and unmodified throughout, although some sections received hydromorph scores of ≤0.7 given modified riparian land use (e.g. forestry plantations, retaining walls) and or the presence of minor instream barriers (i.e. weirs). No sections scored less than 0.6 (i.e. no bad, poor or moderate status areas). A total of seven sections achieved the maximum hydromorph score possible (i.e. 1.0) given excellent channel morphology, channel vegetation, substrate diversity & condition, bank structure & stability, banktop vegetation and flood plain interactions in addition to a lack of barriers to continuity and natural riparian zones (i.e. mature woodland/treelines such as Knocksink Woods). The mean hydromorph score for the river was 0.9, equating to 'high' WFD status".

Let's keep the Glencullen River Wild and Natural!

4.6 Invasive Species Survey of the Bog Meadow (Knocksink Woods SAC)

Invasive alien species are plants and animals that are introduced accidently or deliberately into a natural environment where they are not normally found, with serious negative consequences for their new environment. They represent a major

threat to native plants and animals on a global scale and are considered as one of the most significant drivers of ecological change.

Ireland's Draft 4th National Biodiversity Action Plan contains a target to;
"*Prevent or reduce the rate of introduction and establishment of invasive alien species by 50%, and control or eradicate such species to eliminate or reduce their impacts*".

The Third National Biodiversity Action Plan (2017 - 2021) contained the following target:
"*By 2020, invasive alien species and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new invasive alien species*"

Action 28 of the First National Biodiversity Plan (2002), required Ireland to prepare strategies, in consultation with Northern Ireland, to control introduced species and to prevent, or minimise future (accidental or deliberate) introduction of alien species, which might threaten biodiversity both within and outside protected areas.

There are many invasive species that can be found in Ireland including terrestrial plants, aquatic plants and animal species which can cause damage to native ecosystem functions and their services.

With support from the LAWPRO Community Water Development Fund Enniskerry Tidy Towns commissioned an invasive species survey of the Glencullen River within the environs of the village[15]. This study examined the publically accessible areas of the river in the village (i.e. in the environs of the Bog Meadow, the Monastery Glen and the rear of Crimmins Garage). The study found that invasive species are a real problem in this area – mostly arising from garden escapes. Species recorded included:

- Japanese Knotweed (*Fallopia japonica*)
- Rhododendron (*Rhododendron ponticum*)
- Three cornered leek (*Allium triquetrum*)
- Cherry Laurel (*Prunus laurocerasus*)
- Butterfly-bush (*Buddleja davidii*)
- Wilson's Honeysuckle (*Lonicera nitida*)
- Snowberry bush (*Symphoricarpos alba*)
- Winter Heliotrope (*Petasites pyrenaicus*)
- Giant Viper's-bugloss (*Echium pininana*)
- Canadian Fleabane (*Conyza canadensis*)
- Montbretia (*Crocosmia x crocosmiiflora*)
- Pendulous Sedge (*Carex pendula*)
- Alexanders (*Smyrnium olusatrum*)
- Old Man's beard (*Clematis vitalba*)
- Sycamore (*Acer pseudoplatanus*)
- Eastern Grey Squirrel (*Sciurus carolinensis*)

[15] Wilson, F. (2023). Glencullen River, Enniskerry Village - Invasive Species Survey & Management Plan. Report for Enniskerry Tidy Towns. May 2023.

A number of other garden species had been introduced to the edges of paths running through the Bog Meadow within the SAC. These included Sweet William and Daffodils, while Foamflower (*Tiarella cordifolia*) was noted in the Monastery Glen section of the SAC.

The introduction of garden species to the SAC is not permitted and needs to stop.

4.7 St. Patrick's Graveyard

Beech Walk
Beech are not native trees and cast a very dense shade, and therefore do not support a lot of biodiversity. Beech and sycamore can outcompete native vegetation and the biodiversity they support. Mature trees, however, do support many species and so shouldn't be removed, but where possible plant a native trees instead of a non-native one.

The earth bank under the Beech trees is completely bare – so presuming no weedkiller has been used there, this shows just how dense the shade is.

Areas of bare earthen banks contain the tell-tale holes that show it is inhabited by insects – solitary bees and wasps – particularly if south facing.

Possible Biodiversity-Friendly Management of the Graveyard
Any work undertaken within a graveyard should not destroy or have a negative impact on the built and natural heritage and character of the place but rather should enhance the character and setting of the graveyard.

It is misguided to tidy graveyards from a heritage point of view. On one single grave the following native species were identified:

- Selfheal (*Prunella vulgaris*)
- Young oaks (*Quercus* sp.)
- Barren strawberry (*Potentilla sterilis*)
- Speedwell (*Veronica* sp.)
- Germander speedwell (*Veronica chamaedrys*)
- Cowslip (*Primula veris*)
- Dandelion (*Taraxacum* agg.)

Mowing in the graveyard could be done less frequently – perhaps just once per month or every six weeks and manage the area as a short meadow – for optimum conditions for wildflowers.

If the conifers within the graveyard die, they could be replaced with native trees such as Mountain Ash.

Other native plants found in the grounds of the church include Oak saplings where there is light, various native succulents/Stonecrops (*Sedum* spp.); Cowslips; Yarrow (*Achillea millefolium*); Bird's-foot trefoil (*Lotus corniculatus*), Ladies bedstraw (Galium verum). Mowing too often will mean these plants do not get to flower. These species are indicative of the alkaline/calcareous conditions and are ghostly reminders of

what our semi-natural grasslands around Enniskerry looked like before intensive agriculture. Non-natives include Purple Toadflax

There is a Swallows' nest inside the church porch with quite a mess of droppings directly underneath. To avoid the mess and therefore make the Swallows more welcome, a platform could be built underneath to collect droppings. Ensure the platform is far enough below the nest to avoid predation. Netting was previously erected here to exclude the swallows.

4.8 Other Biodiversity Observations

Town Clock and Square shops
Planters and hanging baskets are dominated by Petunias, which although they look stunning and really make the village look very attractive are of little value for pollinators. The All Ireland Pollinator Plan has great information and ideas for planting pots/hanging baskets in town and village centres for optimum benefits for biodiversity.

From the Pollinator Planting Code:
'Traditional annual bedding plants like Geraniums, Begonias, Busy Lizzy, Petunias, Polyanthus or Salvia splendens have virtually no pollen and nectar and are of little value to pollinators. If you are choosing bedding plants, do not select F1 and F2 hybrids. If you are using annuals you should try to select scented, single-flowered varieties. The block planting of these can be an excellent source of food for pollinators'.

Church Hill
Vegetation on buildings can provide mini habitats for invertebrates and foraging areas for birds and other species. Native species such as ivy and honeysuckle support more species but ornamental species such as climbing hydrangea can also be useful particularly on a north facing wall. With all climbers be careful not to allow them to climb into eaves.

Ivy on stone walls in and around the village offers invaluable food and shelter for biodiversity, particularly when it is allowed to mature and flower, and cutting back should be minimal.

One plant – 140 different insect species
Ivy is often considered to be a threat to buildings, trees and in need of 'tidying up'. The Jersey Biodiversity Centre gives an excellent explanation of its ecological importance, as presented below:

Ivy is, arguably, the most important flowering plant for pollinators in the autumn which is at a time when there is often less on offer for them to feed on. Many late-flying pollinators depend heavily on Ivy for pollen and nectar at this time of year. Ivy (*Hedera helix* spp *hibernica*) is a native evergreen plant which is widespread and common. Their flowers appear between early September to early November. As well as their flowers being vital in the autumn for many insect pollinators, their berries, which ripen in winter, are a very valuable food source for overwintering birds such as blackbirds and thrushes and they are largely responsible for dispersing the seeds which produce more plants elsewhere. Ivy is also an important winter hibernation

site for many insects due to its dense foliage.

Ivy is vital to a wide variety of native pollinators such as hoverflies, butterflies, flies, wasps, solitary bees and bumblebees with, for instance, as many as 140 different insect species feeding on Ivy in the autumn including many overwintering queen bumblebees which rely on this plant to help them survive the winter and also 89% of pollen collected by honeybees in autumn comes from Ivy.

Ivy takes around 10 years of growing before it is able to flower and so for them to be available to pollinators then they must be left to grow for at least this amount of time.

Often the Ivy seen growing in gardens, amongst flower borders and up trees, is the juvenile form of the plant and has lobed glossy leaves with no flowers but it is this plant that will eventually provide vital food sources for pollinators if allowed to grow until it matures and its leaves become an oval shape and it flowers.

So, given that this plant is so vital to many pollinators as a late-flowering food source enabling them, or their young, to survive the winter and that it also gives excellent winter protection to many other species it is very important that if you do have Ivy in your garden and up your trees then please do resist cutting it down!

Despite the common myth, Ivy does not kill trees. It has its own root system so does not tap into the tree's vital resources. It only uses trees in order to climb higher to get maximum sun exposure for photosynthesis. But if Ivy appears to be swamping trees, and it is getting into their leaf canopy where it can affect the tree's own ability to photosynthesize, then it can be thinned out, or reduced, but this should be kept to a minimum as complete removal does much more harm than good for insects and other wildlife.

Any 'Old Man's Beard' should be pulled up – this species is very invasive and damaging to native vegetation, including trees.

Forge Road
One whole side of Forge Road is dominated by a Laurel (*Prunus laurocerasus*) hedge. The leaves and stems of this plant contain cyanide – its natural, evolved protection against insects – which makes it a bad choice for biodiversity.

The only biodiversity plus here was the Bramble growing through the hedge.

On the opposite wall there is plenty of Ivy-leafed toadflax (*Cymbalaria muralis*), and above and around the wall there is very valuable Hedge mustard (*Alliaria petiolata*) and native ferns – these should be protected.
Any development in the area above this wall (behind Kilgarron Cottages) should observe minimum prescribed distance from the line of trees and protect trees from plant machinery and other activity before any works begin.

Planning Biodiversity Action in the Village
The opportunities for biodiversity action in the village are mostly limited to community spaces and public areas as the majority of lands are in private ownership.

However if everyone took one or two biodiversity actions in their back garden or communal space where they live, work, are educated or play those actions would really add up.

Some of these ideas for biodiversity actions are explored below.

Plate 7. If you are planting a hedge if you use native species you will support more biodiversity than non-native ornamental species. Blackthorn in flower in the spring.

Plate 8. Old stone walls such as this provide habitats for many invertebrates and nesting birds as well as wall flora such as these Rustyback and Black spleenwort ferns.

Plate 9. Bare ground on earthen banks can provide habitat for nesting solitary bees and beetles.

Plate 10. Bramble tangles provide important habitat for wildlife.

Plate 11. Three cornered leek within the woodland at the Bog Meadow. This is an invasive species so eat as much of this one as you like and try to control its spread in the village.

Plate 12. Species such as Honey spurge (*Euphorbia mellifera*) can easily become invasive outside your garden – be careful what you plant.

Plate 13. Could you create a mini woodland in the village with native species such as our beautiful violets below the trees?

Plate 14. Gravelled areas can be a great place to establish native species such as Ox eye daisy or other wildflowers that need low nutrient levels. Please do not sow 'wildflower' mixes in the countryside. They may contain invasive species or plants that are not native to or appropriate to Ireland. Why not collect seed yourself from local populations?

Plate 15. Hedge mustard (*Alliaria petiolata*) – the food plant of the Green veined white and Orange tip butterflies. Did you think it was a weed?

Plate 16. Bramble and dog rose give bird's safe places to roost and forage in.

Plate 17. Oak – one of our most important native species.

Plate 18. Could you consider planting native primroses instead of non-native daffodils for spring planting?

Plate 19. Ivy – a really important food plant for wildlife – used by Holly blue butterflies as their food plant and many birds and small mammals eat the berries.

Plate 20. Elder – rich in flowers and berries in our hedgerows.

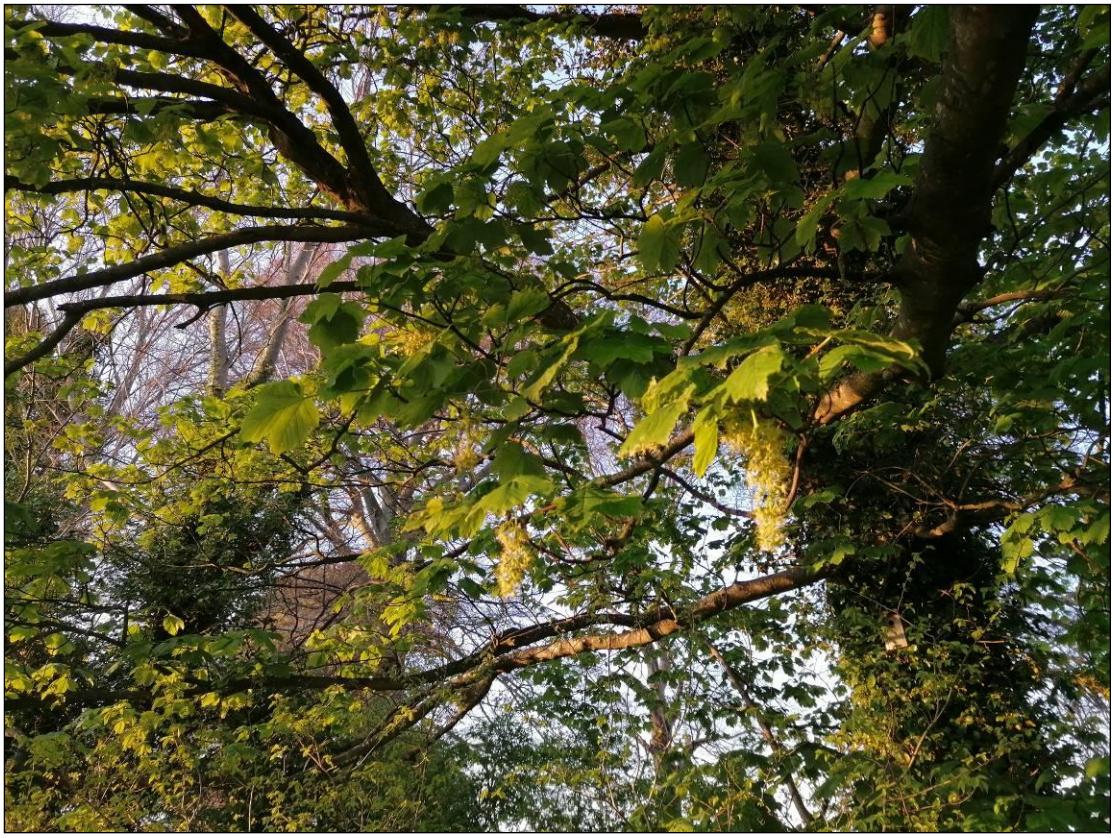


Plate 21. Although Sycamore is not native to Ireland it supports many insects.

Plate 22. Peacock caterpillars on Nettle. Could you leave a few clumps for them in a sunny spot?

Plate 23. Resist the temptation to mow the dandelions and leave them for the emerging bumblebees in spring. Who knows what else might flower…

Plate 24. The lichens on old stonework, walls and trees are a symbiotic relationship between a fungus and an algae. Some are indicators of good air quality. Please don't go cleaning them off.

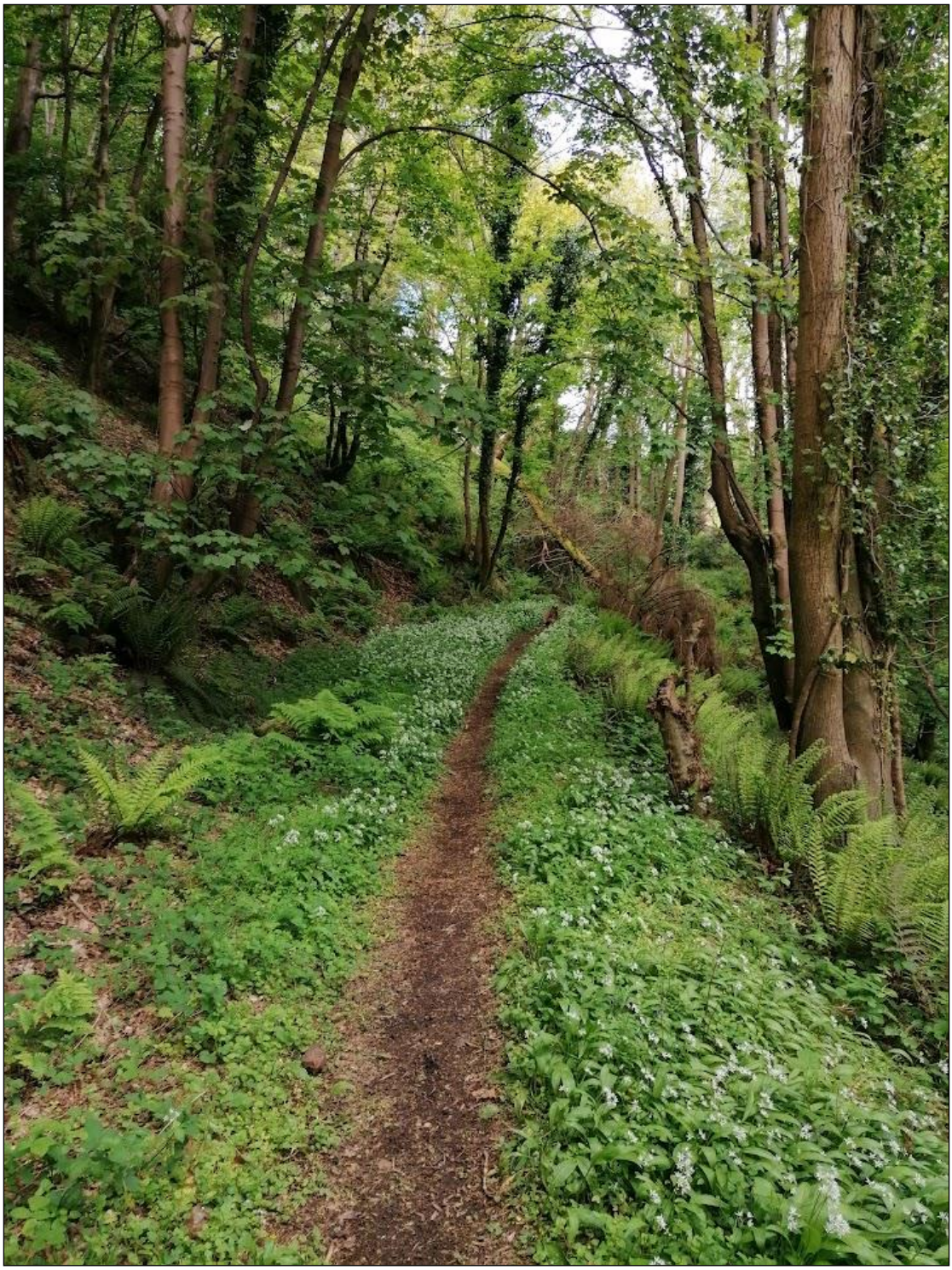


Plate 25. How special to have a Nature Reserve on your doorstep.

Plate 26. Yellow archangel and wild garlic – a special plant in the woods at Knocksink.

Plate 27. Native spring flora on roadside verges. No herbicide use here!

Plate 28. Dumping in the Knocksink Nature Reserve.

Plate 29. A balance needs to be struck between enjoying the built heritage of the village and leaving cover for wildlife on stone walls.

Plate 30. Will our ash trees go the way of our elm in the 1970s? This is a flowering Wych elm.

Plate 31. Could this bridge offer bats roosting potential?

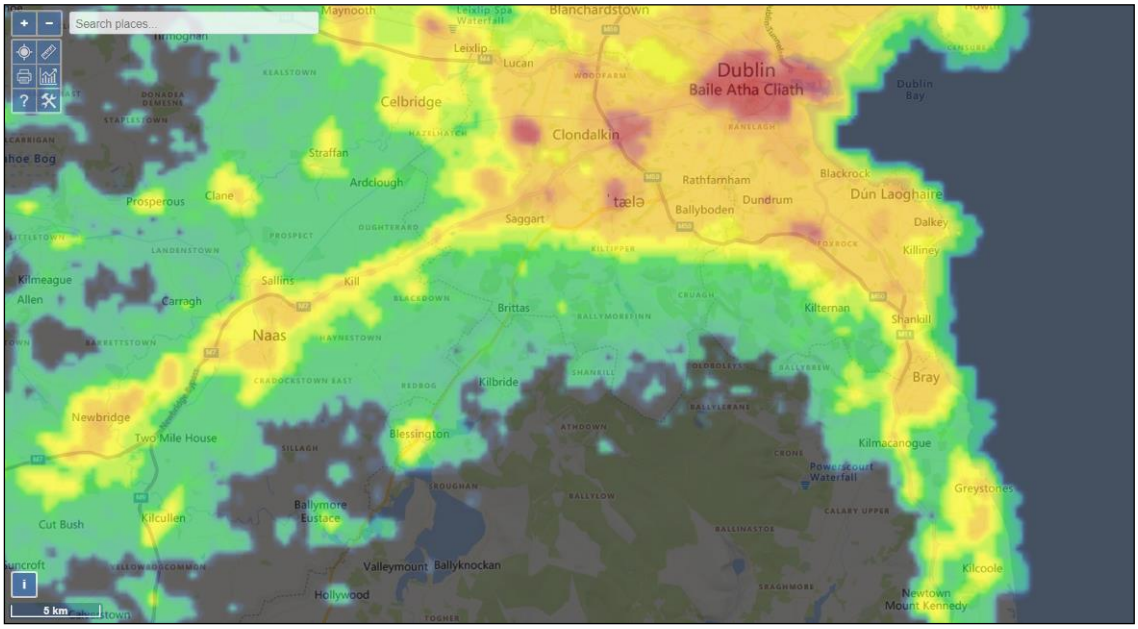


Plate 32. Lighting should be kept to a minimum so we can all enjoy the night sky and not disturb nature.

5. RECOMMENDATIONS FOR BIODIVERSITY ENHANCEMENT

Forty actions and ideas for how to respond to the biodiversity crisis are set out below. Which will you do?

5.1 Meadow Management

This action can be undertaken by anyone with a small area of grass, a local housing estate or a larger piece of land and will provide habitat for a wide variety of invertebrates including many pollinators.

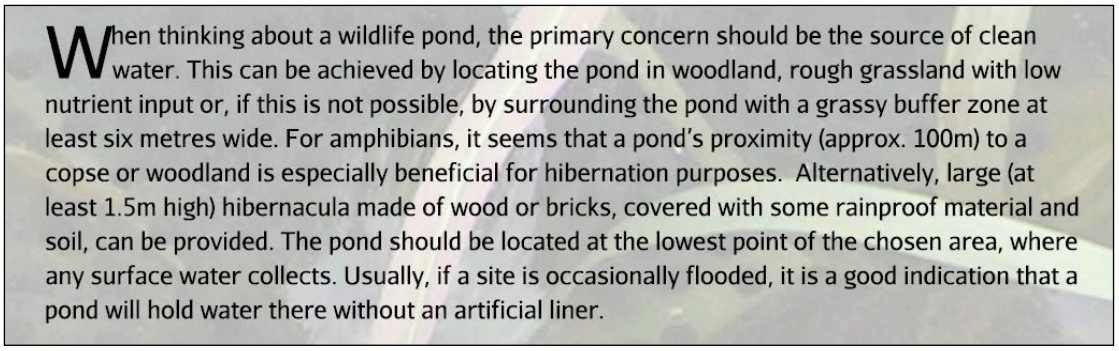
Guidance is available from the All Ireland Pollinator Plan on how to manage both long flowering and short flowering meadows. Short flowering meadows shouldn't be cut until after the 15th April allowing dandelions to flower (an important resource for pollinators to forage on in spring) and then cut every six weeks – see **Figure 28** below. Long flowering meadows can be left till the autumn, the seeds allowed to fall and all the cuttings then removed to reduce fertility over time.

Figure 28. Managing a short flowering meadow.

5.2 Create a Wildlife Pond

A garden wildlife pond could also be something that people might be interested in doing in their back garden or elsewhere in the village such as in the school grounds. A pond is a great way to attract wildlife. Something as small as 1-2m² could provide frogs with somewhere to breed.

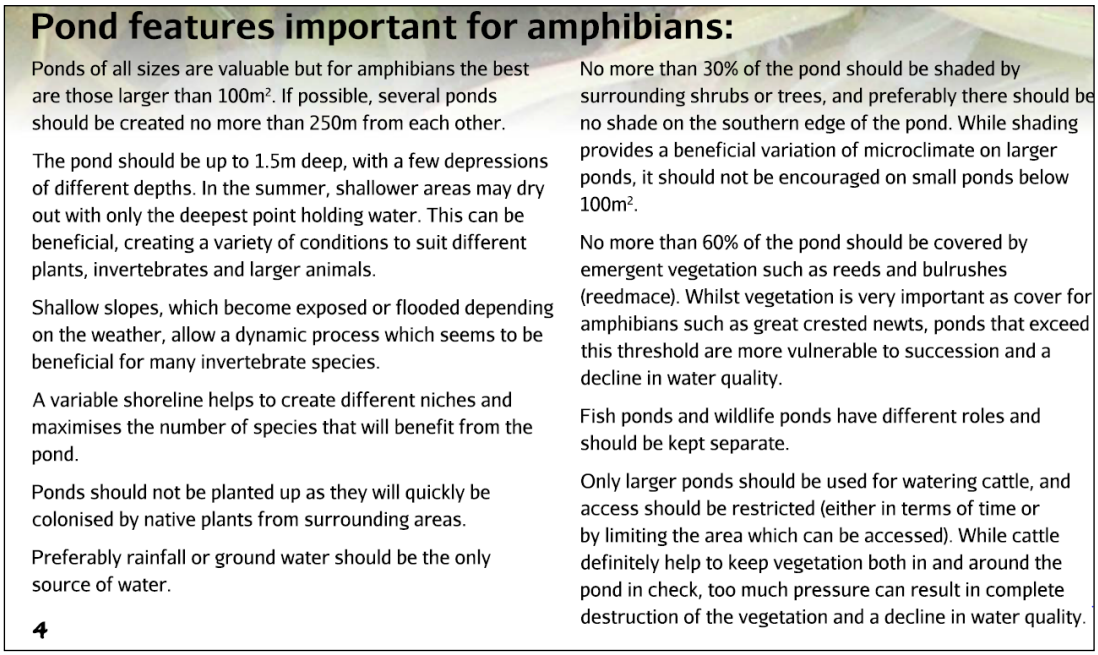
The pond should be designed to provide habitat for breeding frogs in that they need to have a minimum depth of 60cm of water present all year round following the advice provided by the amphibian conservation charity Froglife as set out below:



Suitable species for planting in a pond include:

- Marginals - Yellow flag iris (*Iris pseudacorus*), Marsh marigold (*Caltha palustris*), Water plantain (*Alisma plantago-aquatica*), Water forget-me-not (*Myosotis scorpioides*), Brooklime (*Veronica beccabunga*), and Ragged robin (*Lychnis flos-cuculi*).
- Emergents - Greater spearwort (*Ranunculus lingua*), Branched bur-reed (*Sparganium erectum*), Purple loosestrife (*Lythrum salicaria*), Water mint (*Mentha aquatica*).

Care should be taken when purchasing aquatic plants from nurseries as many species have the potential to become invasive. Attention is drawn to the invasive species listed under the Birds and Natural Habitats Regulations 2011.



5.3 Hibernaculum for Frogs

In addition to the design recommendations for the pond/water feature above it is also recommended that a hibernaculum for frogs is created within the village. This is done by creating a pile of stones or logs with gaps between them in a mound in an undisturbed part of the property – preferably near a pond/water feature that could be used for breeding.

5.4 Native Tree and Shrub Species Suitable for Planting in Gardens or in the Village

Any native species used for planting in the environs of Enniskerry should be suitable for neutral/calcareous soils.

Suitable shrub/small tree species include: Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Guelder rose (*Viburnum opulus*), Spindle (*Euonymus europaeus*), Elder (*Sambuccus nigra*), Hazel (Corylus avellana), Wych elm (*Ulmus glabra*), Crab apple (*Malus sylvestris*), Dog rose (*Rosa canina*).

Suitable tree species include; Oak (*Quercus robur*), Whitebeam (*Sorbus aria*), Silver birch (*Betula pendula*), Willows (*Salix cinerea*, *Salix caprea*, *Salix aurita*).

All species should be of certified Irish genetic provenance as they are best adapted to Irish growing conditions – nurseries that supply the Forest Service Native Woodland Scheme grow stock form Irish collected seed.

5.5 Measures for Butterflies in Enniskerry

Butterflies present in Enniskerry Village include;

- Comma (*Polygonia c-album*)
- Common Blue (*Polyommatus icarus*)
- Holly Blue (*Celastrina argiolus*)
- Large White (*Pieris brassicae*)
- Small White (*Pieris rapae*)
- Orange-tip (*Anthocharis cardamines*)
- Painted Lady (*Vanessa cardui*)
- Peacock (*Inachis io*)
- Purple Hairstreak (*Neozephyrus quercus*)
- Red Admiral (*Vanessa atalanta*)
- Ringlet (*Aphantopus hyperantus*)

- Small Tortoiseshell (*Aglais urticae*)
- Speckled Wood (*Pararge aegeria*)
- Wall (*Lasiommata megera*)

We need to consider the life cycle of butterflies and some other principles to conserve them in our communities. This is shown on **Figure 29** below.

Therefore we need to think about:

- Providing food plants for caterpillars
- Nectar supply for adult butterflies
- Keeping ivy (both immature and mature) on trees and walls
- Providing shelter for butterflies – roosting habitat
- Providing overwintering habitats for butterflies
- Do not buy a "butterfly kit" with caterpillars or release adult butterflies

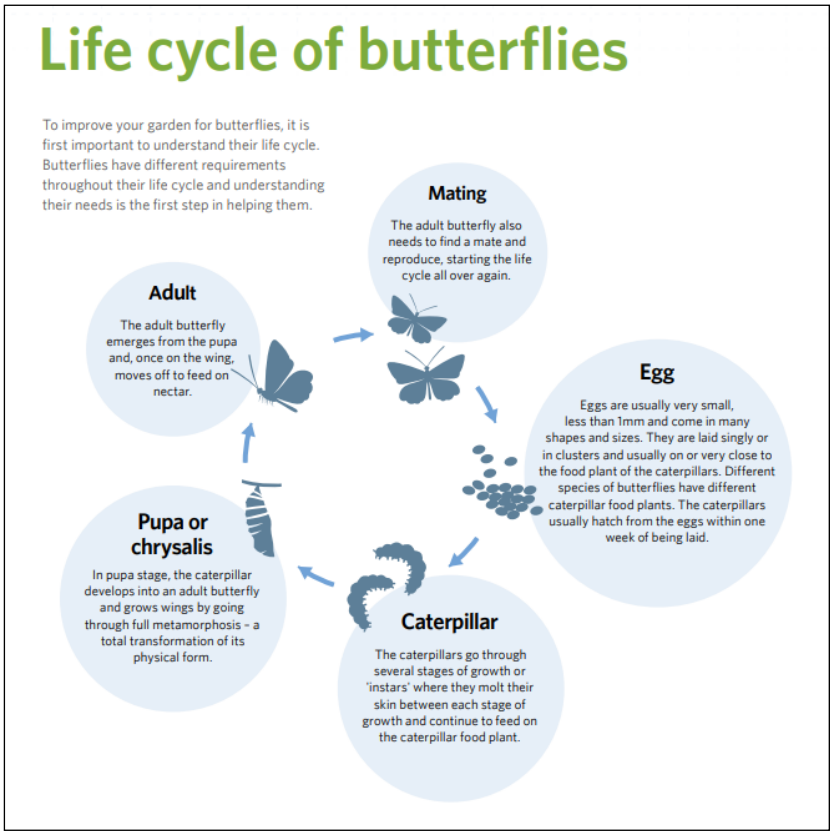


Figure 29. The life cycle of butterflies.

5.6 Food Plants and Habitat for Butterflies and Invertebrates

Several plant species used by butterflies, moths and other insects for their food plant already exist within Ennsikerry Village and could be confused for 'weeds'.

On the island of Ireland, 18% of butterflies and 8% of macro-moths are threatened with extinction. By planting suitable food plants and native species that support them we can help reverse this decline.

A list of the food plants used by the various species of butterfly is outlined below on **Figure 30**.

Have you any of these in your back garden – could you help butterflies to breed?

Butterfly	Caterpillar foodplant
Brimstone	Buckthorn (*Rhamnus cathartica*) and Alder Buckthorn (*Frangula alnus*)
Clouded Yellow*	Clovers (*Trifolium* spp.)
Comma	Nettle (*Urtica dioica*)
Common Blue	Bird's-foot-trefoil (*Lotus corniculatus*)
Green-veined White	Garlic Mustard (*Alliaria petiolate*), Cuckooflower (*Cardamine pratensis*), Water- cress (*Rorippa-nasturtium aquatica*) and other members of the Brassicaceae family
Holly Blue	Holly (*Ilex aquifolium*) and Ivy (*Hedera helix*)
Large White	Brassicaceae family
Meadow Brown	Grasses: Fescues (*Festuca* spp.), Meadow-grasses (*Poa* spp.) and Bents (*Agrostis*)
Orange-tip	Cuckooflower (*Cardamine pratensis*) and Garlic Mustard (*Alliaria petiolate*)
Painted Lady*	Thistles (Cirsium spp. and Carduus spp.)
Peacock	Nettle (*Urtica dioica*)
Red Admiral*	Nettle (*Urtica dioica*)
Ringlet	Grasses: Cock's-foot (*Dactylis glomerata*), False Brome (*Brachypodium sylvaticum*), Tufted Hair-grass (*Deschampsia cespitosa*) and Common Couch (*Elymus repens*)
Silver-washed Fritillary	Common Dog-violet (*Viola riviniana*)
Small Copper	Common Sorrel (*Rumex acetosa*) and Sheep's Sorrel (*R. acetosella*)
Small Heath	Fine grasses, especially fescues (*Festuca* spp.), Meadow-grasses (*Poa* spp.)
Small Tortoiseshell	Nettle (*Urtica dioica*)
Small White	Brassicaceae family and nasturtiums (*Tropaeolum*)
Speckled Wood	Feed a on a variety of grasses but most commonly on: False Brome (*Brachypodium sylvaticum*), Cock's-foot (*Dactylis glomerata*) and Yorkshire Fog (*Holcus lanatus*)
Wood White	Meadow Vetchling (*Lathyrus pratensis*), Bitter-vetch (*Lathyrus linifolius*), Tufted Vetch (*Vicia cracca*) and Common Bird's-foot-trefoil (*Lotus corniculatus*)

Figure 30. The food plants butterflies need for their caterpillars to complete their lifecycles on.

5.7 Roosting Habitats for Butterflies

Butterflies roost on the underside of leaves, in long grass, rock crevices or similar sheltered places. Butterflies roost with their wings closed, often their wings camouflage with their background to protect them from predators while they sleep. If we mow and tidy away everywhere around our homes and in our landscape there is nowhere for them to roost.

5.8 Overwintering Habitats for Butterflies

Butterflies can enter diapause (overwinter) in all four stages, but the majority will overwinter in their caterpillar stage. Before diapause, butterflies produce a form of internal antifreeze to protect them from the cold weather. Because diapause is triggered by shorter day lengths and lower temperatures, they generally overwinter outside. The habitats that butterflies need for overwintering, as shown on **Figure 31** below, in one of their immature stages are:

- Leaf litter
- Thick/uncut vegetation
- Log piles

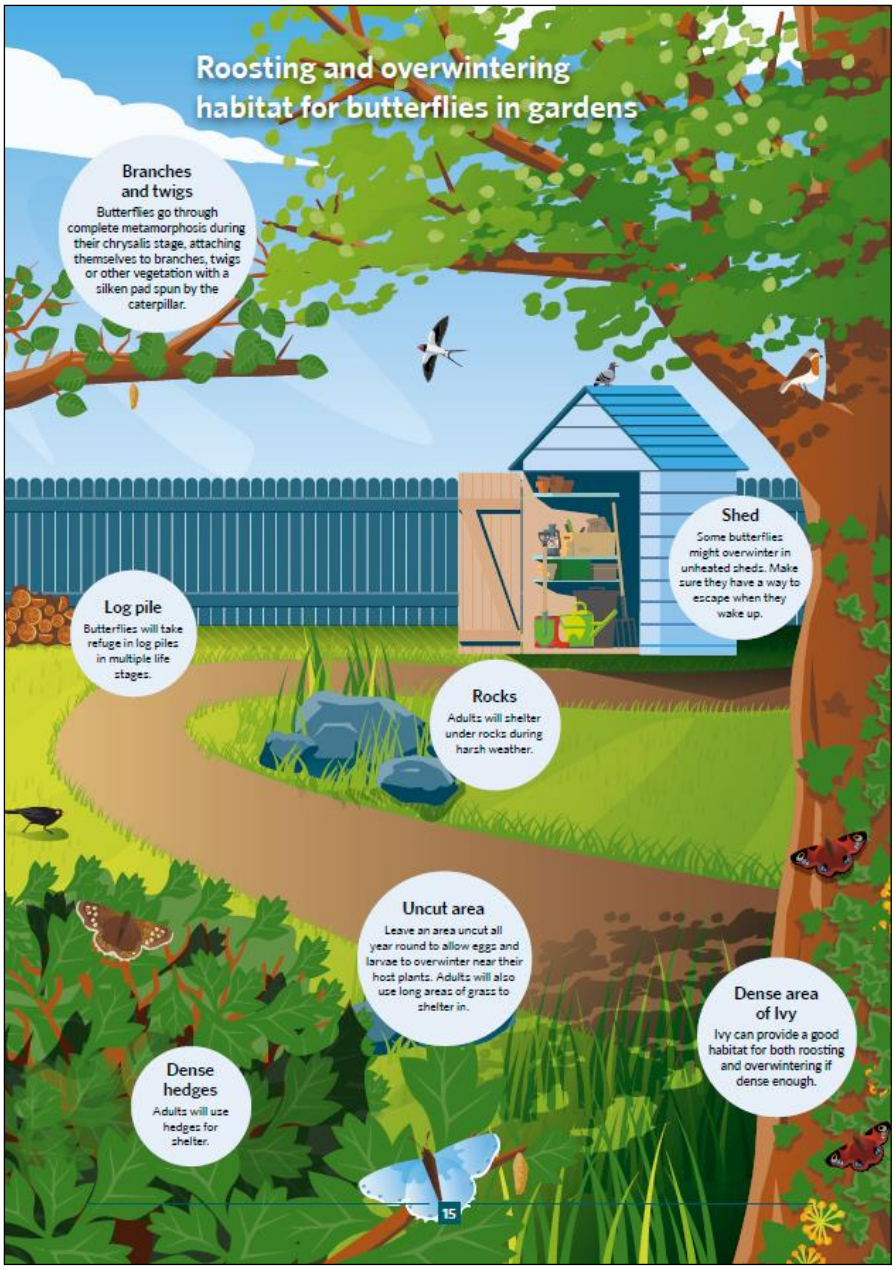


Figure 31. Roosting and overwintering habitat for butterflies.

5.9 Ornamental Pollinator Planting

There are a wide variety of species currently planted by people in their gardens and in Enniskerry Village by Tidy Towns for ornamental purposes.

Why not ask premises with planters and hanging baskets if they would consider planting pollinator-friendly plants next year, even if they are just planted them among more 'fancy' plants. Further information is available on https://pollinators.ie/councils/pollinator-friendly-planting-schemes/

Other ornamental species that people could consider in their gardens that provide forge for pollinators include:

Shady areas - *Anemone*, *Aquilegia*, *Dicentera*, *Digitalis*, *Erythronium*, *Geranium*, *Hellebore*, *Pulmonaria*, *Trillium*.

Dry areas - *Bergenia*, *Echinops*, *Echinacea*, *Kniphofia*, *Sedum*, *Stachys*, *Verbena*.

Damp areas - *Helenium*, *Astrantia*, *Astilbe*, *Euphorbia*, *Heuchera*, *Hosta*, *Achillea*, *Ligularia*, *Rudbeckia*.

5.10 Management of Stone Walls

The old walls in and around the village (those built with stone and lime mortar) as opposed to those that are pointed in concrete or made out of blocks and rendered provide a rich habitat for a variety of species including nesting birds and invertebrates. They should not be overly cleaned of their vegetation (unless tackling an invasive species).

Areas of concrete/block walls which are ugly to look at and offer no biodiversity value could be planted up with native climbers such as:

- Dog Rose (*Rosa canina*)
- Ivy (*Hedera helix*)
- Honeysuckle (*Lonicera periclymenum*)

5.11 Pesticides

Pesticides (herbicides, insecticides and fungicides) and chemicals such as fertilisers are used by many gardeners and landowners. They can cause huge damage to butterflies, other insects, and the plants they feed on. Please set out to make Enniskerry Village a pesticide free zone.

5.12 Composting

Compost heaps can not only sustainably reduce green waste from the garden but can also provide homes for many insects including:

- Springtails
- Woodlice
- Earthworms
- Millipedes
- Centipedes
- Beetles

Maybe you could develop a compost heap in your garden?

4.13 Woodland Planting

Trees are often planted by community groups/residential committees but are then managed with mown grassland (or even worse circles of dead vegetation sprayed with herbicide). Why not consider instead developing natural looking mini-woodland by establishing native species under the trees such as:

- Foxglove – introduced by seed collected at the end of the summer from nearby woodland tracks
- Primrose
- Common Dog Violet
- Red Campion
- Wood Anemone
- Lesser celandine
- Native bluebells (from seed – please do not dig them up from the wild)

- Ferns

5.14 Citizen Science

Members of the community could help monitor and identify species within the village and in their gardens and record their findings with the National Biodiversity Data Centre. There are a number of schemes that could be implemented in the village. These include:

- The Garden Butterfly Monitoring Scheme
- Complete a Flower Insect Timed Count
- Map your actions for pollinators
- The Irish Garden Bird Survey

The Garden Butterfly Monitoring Scheme

The Garden Butterfly Monitoring Scheme helps to keep track of which butterflies regularly use gardens, and how numbers vary across the country year on year. Participants make regular 15-minute counts of the 20 most common butterflies found in Ireland. No expert knowledge is required, and it's perfect for beginners.

This recording scheme is a great way of finding out which butterflies are visiting your garden, and how you can support them.

The National Biodiversity Data Centre have developed a free online course for the Garden Butterfly Monitoring Scheme. By going through this eCourse you will learn:

1. How to identify the 20 most common garden butterfly species
2. How to take part in the Garden Butterfly Monitoring Scheme
3. How to register your garden on the National Sampling Framework
4. How to submit your data

If you would like to get involved, please email the NBDC at butterflies@biodiversityireland.ie

Complete a Flower Insect Timed Count

- Flower Insect Timed (FIT) Counts are an initiative of the All Ireland Pollinator Plan.
- FIT Counts are open to everyone
- You can do a 10-minute FIT Count at any time between the 1st April and the 30th September
- Your location can be anywhere e.g., garden, farm, park, school, business site
- You don't need to identify the insects to species level, but only to tally within broad groups e.g., bumblebee, butterflies & moths, wasp, beetle
- Watch the short video for more details and see the step-by-step guide and resources sections at https://biodiversityireland.ie/surveys/fit-counts/
- From 2022, a new FIT Count app allows you to take a FIT Count and upload the results in one go.

Map your actions for Pollinators

It is great to see that Enniskerry Village has mapped a few areas being managed for pollinators as shown on **Figure 32** below. Could you add your garden, could the local sports clubs do a bit? What about the church grounds? See the maps and add new areas on https://pollinators.biodiversityireland.ie/

Figure 32. Mapped locations of actions for pollinators in Enniskerry.

The Irish Garden Bird Survey

Why not take part in the BirdWatch Ireland annual Irish Garden Bird Survey, which takes place over the winter months. The Irish Garden Bird Survey is BirdWatch Ireland's most popular citizen science survey, with around two thousand gardens taking part each year. Between December and February each year, members of the public keep note of the highest number of each bird species visiting their garden every week. Information on the size of the garden being surveyed, the kinds of food, if any, being offered to the birds, and so on is also collated. Taking part is fun, easy and an ideal way to get to know your garden birds better. As the Irish countryside changes, gardens are becoming increasingly important havens for many species. The Irish Garden Bird Survey can give us a good idea of how the garden birds themselves are doing, but also an indication of how the biodiversity actions at Enniskerry are delivering for wildlife.

5.15 Measures for Roosting Bats

A number of bat boxes could be erected within the general environs of the village. These can be either wooden boxes or woodcrete '*Schwegler*' bat boxes (which are composed of a mixture of concrete and wood shavings) and are available online from http://www.jacobijayne.co.uk/nest-boxes-by-species/bats/.

Maybe these could be built by a local men's shed or school woodworking class and erected within the village or in peoples back gardens.

5.16 Conservation of Water

The water running off the roof of your house, school, office, garage, garden shed, etc. could be collected in rainwater butts or diverted to feed a pond or to create a rainwater garden or bog garden.

5.17 Measures for Nesting Birds

The breeding success of many of our suburban birds can be improved by the provision of artificial breeding boxes made from timber. These could be built by a local men's shed or school woodworking class and erected within gardens or around the village. Leave areas where brambles have become established to develop further into a natural area of bramble scrub with a sign to show that this area is being left for nesting birds. The insects will appreciate it too.

5.18 Invasive Species

This study and the LAWPRO funded study completed on the Glencullen River highlighted the threat that invasive species pose to our native habitats and biodiversity in general.

Try to make sure that you aren't part of the problem – don't dump your garden waste into the countryside and try and control or stop the spread of invasive species where you live.

A dedicated plan to tackle invasive species, particularly those within the SAC, which are damaging the protected habitats there, needs to be actioned by the relative parties – Wicklow County Council, National Parks and Wildlife Service and the local community.

Education is key and connecting with householders and gardeners in the community through the Enniskerry Gardening Club and the local nurseries who supply plants (such as AVOCA in Powerscourt, Grange Growers and The Scalp Nursery) and organisations such as the Royal Horticultural Society of Ireland (RHSI) to inform and ensure that we stop spreading non-native species into wild places.

Plate 33. Winter heliotrope impacting on tufa springs of conservation importance within the Bog Meadow.

Plate 34. Old Man's Beard within the woodland in the SAC in Monastery Glen.

5.19 Bat Survey

St. Patrick's should be the subject of a detailed bat survey to determine if the bats are still roosting there and what space within the church they are using. Have you bats in your attic? Please report any bat roosts to National Parks and Wildlife Service and Bat Conservation Ireland. Could a bat talk and walk become an annual event in the village?

5.20 Development Pressures

Development pressures have really increased in Enniskerry Village in the last number of years.

Once land is zoned it is very difficult to truly conserve biodiversity in these lands. Submissions to the local authority at planning stage for developments requesting that native species are used in the landscaping planting proposals and that lighting is wildlife friendly can help to ameliorate some of these impacts.

All new developments incorporate sustainable urban design systems in new developments to deal with surface water runoff and reduce the risk of flooding as lands previously permeable to rainfall become covered with buildings. A variety of measures are available to designers and these can be beneficial for biodiversity if designed with wildlife in mind. For example swales can become small wetland habitats with enormous benefits for biodiversity.

5.21 Measures for Hedgehogs

The retention of the area of old cuttings, leaves and branches provides cover and shelter for hedgehogs and other species in the garden. Could you make a small area for them to hibernate safely in? Maybe they are under your shed?

Can hedgehogs move through your garden or the gardens in your housing estate?

Could you make a small opening in your fence for them, which would them to move safely through back gardens in your community?

5.22 Signage

Many of these actions are already taking place in the village, and those that are proposed, could benefit from signage so people understand why they are being done and what species will benefit.

5.23 Ash Dieback Disease

Ash dieback is a serious disease of Ash trees caused by the invasive fungal pathogen *Hymenoscyphus fraxineus* (previously known as *Chalara fraxinea*), which originated in Asia and was brought to Europe in the 1990's. The pathogen has now spread across most of the natural range of Ash in Europe causing high mortality rates of Ash trees. Ash dieback was first detected in 2012 in Ireland on plants imported from continental Europe. The disease is now prevalent across Ireland and will likely cause the death of over 90% of Ash trees here in the next decade. The disease can affect Ash trees of any age and in any setting. The disease can be fatal, particularly among younger trees.

A number of Ash trees in the environs of the village show signs of ash die back. Where safe to do a proportion of this Ash could be allowed to transition naturally to

standing deadwood which has a high biodiversity value. It is recommended that summer survey of healthy Ash trees not displaying Ash dieback symptoms is carried out in the environs of the village. These trees should be recorded and mapped and protected from any knee jerk tree felling as they could have a natural resilience to the disease.

5.24 Educational Resources

The National Biodiversity Data Centre have produced a series of very useful and attractive swatches which help in identifying various species groups such as ladybirds, shield bugs, dragonflies, butterflies, moths, etc. Having these resources to hand help in identifying species and understanding more about the world we share with them.

5.25 Keeping the Wild 'Wild'

Please refrain from introducing non-native and ornamental species into the countryside and along roadside verges and edges particularly in a rural village such as Enniskerry.

5.26 Engaging Children with Nature

Recently there has been a trend for the development of 'Fairy Walks and trails' in many woodlands and natural areas. These invariably involve painted doors, plastic items, glitter and other unnatural materials. Please do not promote or encourage fairy doors or trails in your local wild area. Why not teach children to engage directly with the natural world around them by observing and learning about where they are and how to protect it instead.

5.27 Leave No Trace

Our visits and actions when we visit wild places can have a variety of impacts. These include:

1. Wildlife Impacts

Disturbance, altered behaviour

2. Vegetation Impacts

Vegetation loss, the introduction of invasive species.

3. Water Resource Impacts

Siltation, sedimentation, pollution.

4. Cultural Resource Impacts

Congestion, theft or damage to cultural feature.

5. Soil Impacts

Soil compaction

6. Social Impacts

Crowding, conflicts between groups.

Visitors to Knocksink Wood should be encouraged to follow the 7 Leave no trace Principles. The 7 Principles are:

1. Plan Ahead and Prepare
2. Be Considerate of Others
3. Respect Farm Animals and Wildlife
4. Travel and Camp on Durable Ground
5. Leave What You Find
6. Dispose of Waste Properly
7. Minimise the Effects of Fire

Practising a Leave No trace ethic is very simple: Make it hard for others to see or hear you and LEAVE NO TRACE of your visit.

5.28 Lighting

Consider the impacts of lighting on wildlife in your community. We should be conserving energy and only illuminating what is really necessary for health and safety purposes.

5.29 Educational Walks and Talks

It is recommended that a series of educational biodiversity based walks and talks continue in Enniskerry Village. Education is key to improving our understanding of the natural world. These could be seasonally themed or have a particular focus such as fungi, bats, moths, breeding birds, spring flowers, autumn leaves, winter bark, etc.

5.30 Community Events

The Enniskerry Tidy Towns Group is very active and it would great to see some of that energy focused on helping to do our bit for the biodiversity and climate change crisis.

Get involved – don't just leave it all up to the great team who got the funding and commissioned this report.

5.31 Develop a Sense of Wonder

The more you spend time in the natural world the more engaged you become with it. Spending time in nature be it walking, sitting and sketching, gardening, watching the activity at a bird feeder from your sofa or looking at the night sky will improve your mental health and offer you a perspective on our time on the planet – use it wisely.

5.32 Be an Ambassador for Knocksink Nature Reserve

Knocksink Nature reserve is on your doorstep. Be an ambassador for this area and help protect it by keeping your dog on a lead in the woods to reduce erosion, trampling of vegetation off formal paths and disturbance of wildlife. This is particularly true during the nesting season and giving the birds the protection they need.

5.33 Action for Swifts

A very inspiring story from elsewhere in the county is that of the Swift Nest Box Project, which took place in the Bell Tower of St Joseph's Convent in Baltinglass. Here Brian O'Reilly of the Baltinglass branch of BirdWatch Ireland. Swift boxes were installed within the Bell Tower there and perhaps a similar deign could be made for the Old Clock Tower in the village were swifts traditionally bred.

The Heritage Office in Wicklow County Council have swift boxes available for groups to avail of.

Swifts will nest even on a two storey house if given a suitable location and some encouragement. Could you provide a home for them?

Swift Conservation Ireland provides really great advice on how to offer swifts a home as follows:

'Artificial nest boxes can be used very successfully for Swifts if they are placed in the correct location.

LOCATION OF BOXES
They should be at least 4 metres above ground level and placed such that they do not receive full sun in summer. There must be a clear flyway in front.

BUILT-IN OR EXTERNAL?
While it is preferable to incorporate nesting places into a building structure, external nest boxes placed near to nest sites that have been lost can be particularly effective to mitigate the loss.

HOW MANY BOXES? Swifts are colonial nesters so you need more than one nest box at your chosen location, however, that being said they need to have the own nest space. Nest boxes come as either a single boxes or with multiple cavities (that have a dividing wall between each nest area).

SIZE OF ENTRANCE HOLE
The entrance hole size is critical and should ideally be 28mm x 60mm but no bigger than 30mm x 65mm. If the hole is bigger than this then starlings can enter the box and they out compete the swift and will take over a nest box. Other birds, such as sparrows, will be able to get in to the 30mm x 65mm hole but this is not a problem because the swift is able to evict them'.

To increase the chance of swifts finding your box you can play a call to attract them as outlined by Swift Conservation Ireland:

'PLAYING ATTRACTION CALLS
Speed of occupancy of a nest box can be considerably accelerated by playing swift attraction calls. The attraction calls make the swift think that other swifts are nesting in this location and so indicate that this is an attractive place to breed. So any swift looking for a nest site will explore this area for a vacant place.

Whichever sound system you are using should be placed as near as possible to the nest boxes e.g. on a window sill or attached to the box. The calls should be played for as long as possible during the day from mid-April to end August. Playing the calls 24 hours a day is best but if not then as long as possible from 8.00 am to 11am and 8.00 pm to 11pm.

Patience is essential, it could take a year or three for swifts to find the boxes even when playing the calls. You will need to play calls from mid-April until end August each year until the swifts have started to breed in one or more of the boxes'.

Further advice on using a swift caller can be obtained from Swift Conservation Ireland: swiftconservationireland@gmail.com

If you know of a nesting site for swifts in the village please log it here https://records.biodiversityireland.ie/record/common-swift#7/53.455/-8.016

You could make a swift box at home using the design template below on **Figure 33**.

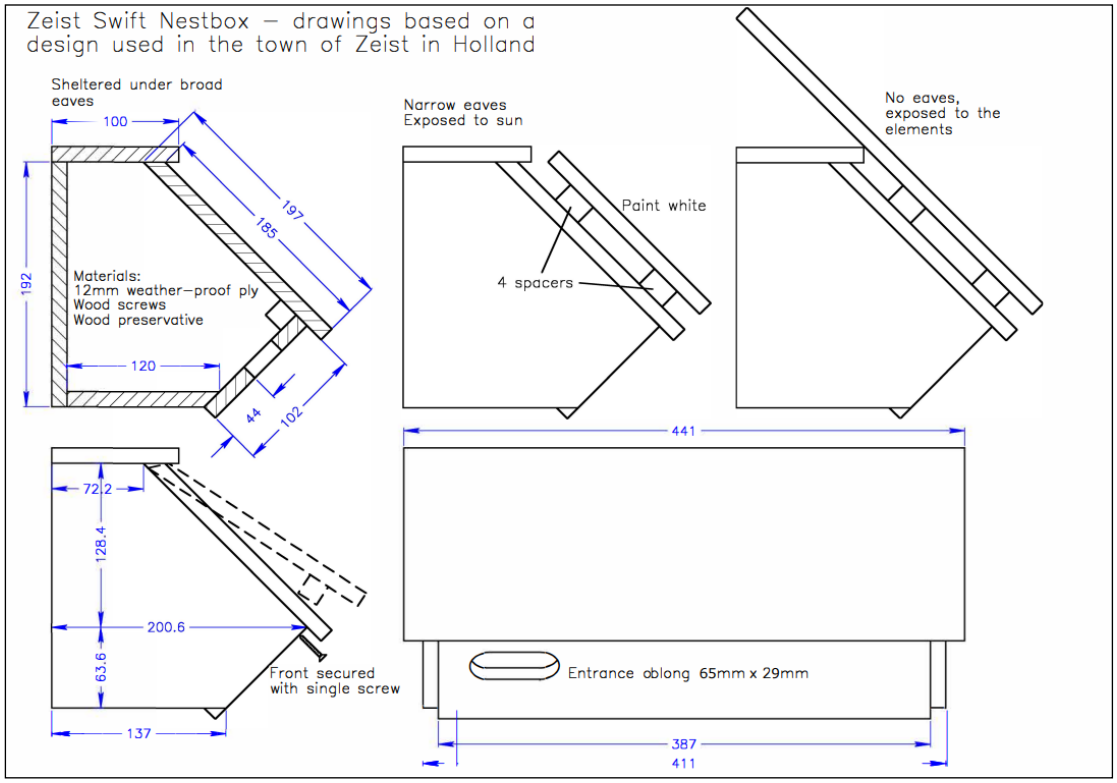


Figure 33. Swift box design.

5.34 Action for Barn Owls

Barn owls are beginning to recover as a breeding species in County Wicklow. Erecting a barn owl box could help improve the breeding success of this iconic species in the rural environs of Enniskerry. The Wicklow Barn Owl Project can assist with supplying a suitable box that can be erected in either an outdoor or indoor (in an open hay barn shed) site. Would a local landowner/famer be interested in erecting a barn owl box?

5.35 Native Hedgerow Establishment

If you are considering planting a hedge on your property could you use native species such as Hawthorn, Blackthorn, Holly, Spindle and Guelder rose? Typical hedging species such as Laurel, Beech, Hornbeam, or even worse Leylandii offer little for our native species.

5.36 Actions for the Glencullen River

A number of management recommendations to deal with invasive species were identified for the Glencullen River to restore and enhance the ecological quality of the watercourse in the LAWPRO funded study completed in 2023. These should be actioned.

5.37 Household Check – Are You Part of the Problem?

Everyone in the community can make a difference by checking their own home to see if it too could be contributing to poor water quality in the Glencullen River. This is known as a misconnection survey.

A property is typically serviced by two types of drains namely **foul** and **surface water**.

The **foul** drain conveys wastewater from foul appliances such as washing machines, dishwashers and toilets to the wastewater treatment plant.

The **surface water** drain conveys "clean" rainwater from your roof and hard standing to local rivers and streams.

When correctly plumbed the foul water does not enter a local drain or watercourse and goes to the waste water treatment plant, which once it has capacity and is properly operated ensures that the waste is treated before discharge as shown on **Figure 34**.

A misconnection occurs when a foul drain is incorrectly plumbed to the surface water network, causing pollution of nearby surface waters.

During construction or following renovations or repairs a misconnection can occur where a foul drain is incorrectly plumbed into a surface water drain as shown on **Figure 35** below. It can also commonly occur if an existing foul appliance is moved to a new location i.e. moving a washing machine from a kitchen to an outbuilding.

Similarly if surface waters are plumbed to the foul network it can result in the wastewater treatment system being overloaded and discharging in storm events.

A good place to start is to inspect your rainwater downpipes. If there is any additional pipework connected to the downpipe, this could indicate a misconnection.

Shampoos, soaps, chemicals & detergents can have a detrimental effect on the flora & fauna in our rivers.

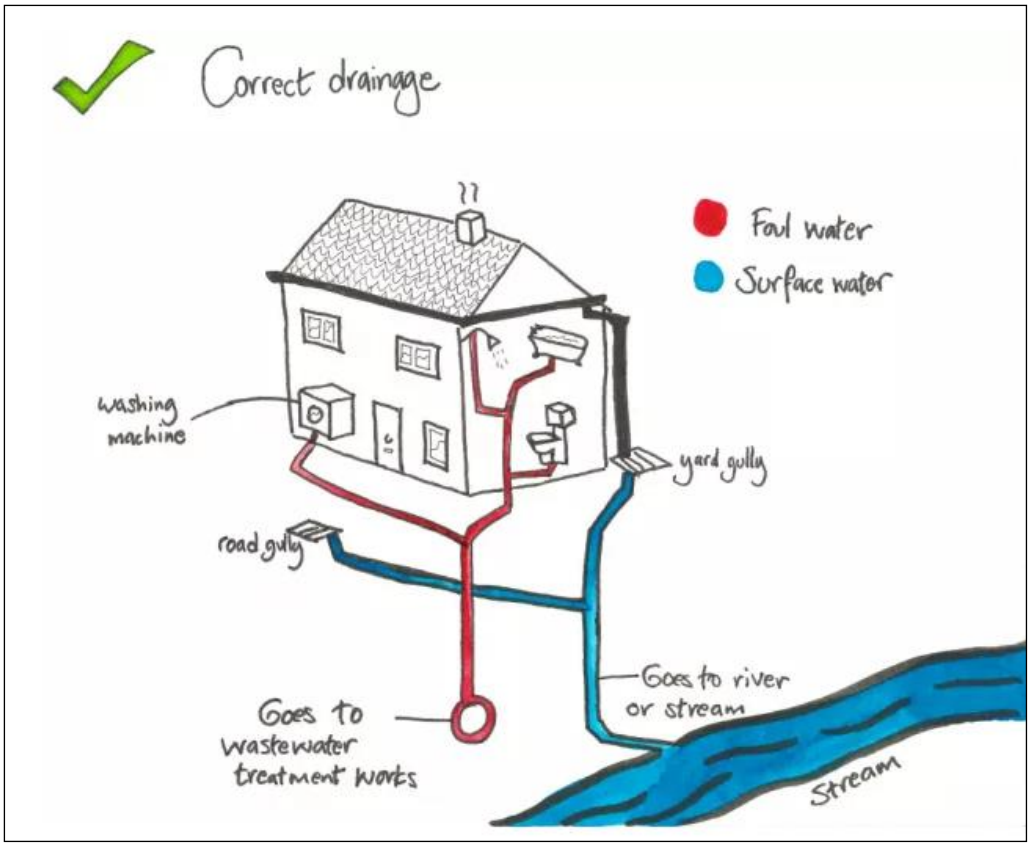


Figure 34. Correctly plumbed house where only clean surface water enters the river.

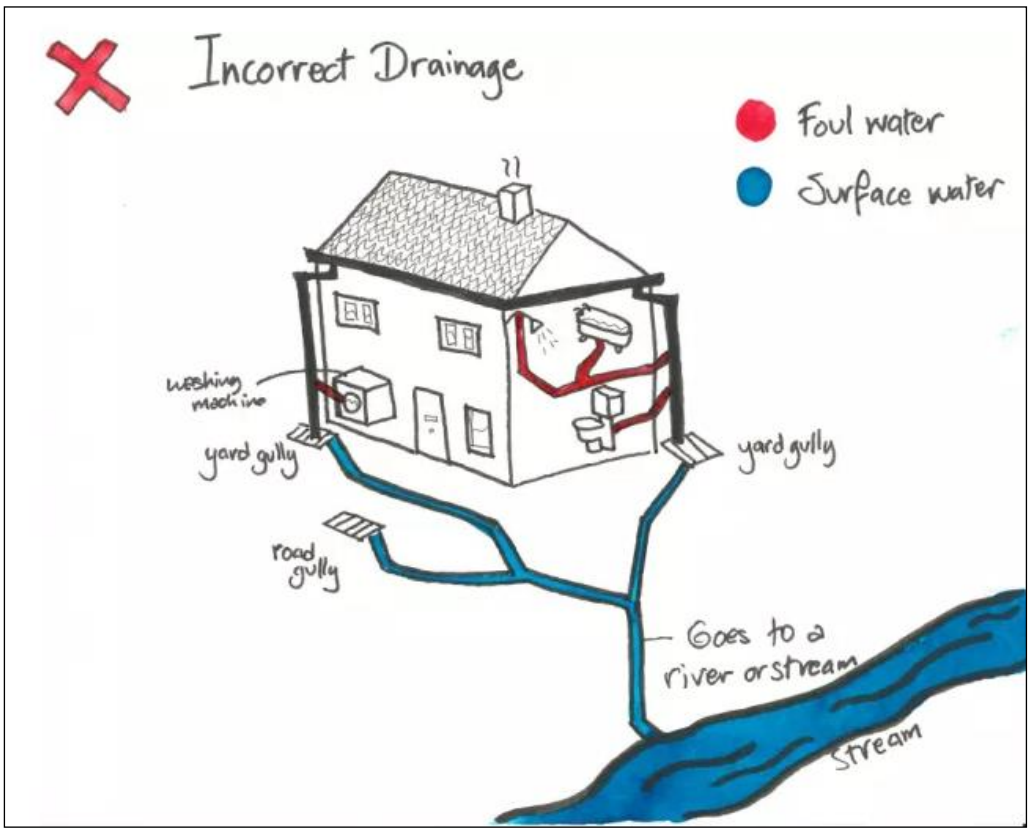


Figure 35. Incorrect drainage showing possible misconnections from washing machines, baths and toilets which can enter surface water systems.

Take a look at the pipework at your home or business and see if anything is going where it shouldn't and get it fixed!

Figure 36. Correctly plumbed premises.

5.38 People Pressures and Knocksink wood

The numbers of people accessing and using natural areas in the environs of Enniskerry has increased significantly in recent years, both as a result of increasing human populations in north eastern Wicklow, social media promotion and the global Covid pandemic when people explored and discovered wild places on their doorsteps. These recreational pressures highlight the challenges the relevant authorities face in managing existing activities that are causing the deterioration of habitats and disturbance to wildlife.

5.39 Support Nature Conservation Charities

Join and support the nature conservation charities who do tremendous work in our society for nature conservation and sustainability. You can also take part in many recording events, monitoring studies, fund raising actions or other activities with them. Be a voice for nature in your community.

5.40 Be An Active Citizen at Planning Stage

Make your voice for nature be heard at planning stage and to your local elected councillors and TDs when it comes to the County Development Plan and Local Area Plans.

5. APPENDICES

6.1 Appendix 1 – Site Synopsis for Knocksink Wood SAC

Site Name: Knocksink Wood SAC

Site Code: 000725

Knocksink Wood is situated in the valley of the Glencullen River, just north-west of Enniskerry in Co. Wicklow. The fast flowing Glencullen River winds its way over granite boulders along the valley floor. The steep sides of the valley are mostly covered with calcareous drift, and support extensive areas of woodland.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

- [7220] Petrifying Springs*
- [91A0] Old Oak Woodlands
- [91E0] Alluvial Forests*

The south-western end of Knocksink Wood comprises oak woodland which is dominated by Sessile Oak (*Quercus petraea*) with a sparse shrub layer of Holly (*Ilex aquifolium*) and Hazel (*Corylus avellana*). In many areas the ground layer consists of a carpet of Great Wood-rush (*Luzula sylvatica*). Other areas are characterised by mixed woodland, with Sessile Oak, Ash (*Fraxinus excelsior*), Beech (*Fagus sylvatica*), Sycamore (*Acer pseudoplatanus*) and occasional conifers. The ground flora includes Ivy (*Hedera helix*) and Bramble (*Rubus fruticosus* agg.), and often luxuriant ferns, including Hart's-tongue (*Phyllitis scolopendrium*), Soft Shield-fern (*Polystichium setiferum*), and mosses. Lichens occur abundantly on some trees.

A notable feature of the wooded slopes are the frequent and extensive springs and seepage areas, and there is tufa formation in several places. Bryophytes are abundant in some areas, and species include *Cratoneuron filicinum*, *Palustriella commutata*, *P. falcata* and *Leiocolea turbinata*. Associated vascular plant species include Golden-saxifrage (*Chrysosplenium oppositifolium*), Water-cress (*Nasturtium officinale*) and Great Horsetail (*Equisetum telmateia*).

Associated with the springs and the river are stands of wet alluvial forest. These areas are dominated by Ash and Alder (*Alnus glutinosa*), and are assigned to the group Carici remotae-Fraxinetum. Other species which occur include willows (*Salix* spp.), Downy Birch (*Betula pubescens*) and Hazel.

Islands in the river and open gravelly areas provide further habitat diversity in this site.

A number of scarce or rare plants occur within the site including Blue Fleabane (*Erigeron acer*), Ivy-leaved Bellflower (*Wahlenbergia hederacea*) and Yellow Archangel (*Lamiastrum galeobdolon*).

This site contains a substantial area of potentially ancient woodland. It has one of the most diverse woodland invertebrate faunas in Ireland, including some wet woodland organisms which are threatened at an international level. Vertebrates noted in the vicinity, either by tracks, sett or sight, include Red Squirrel, Badger,

Rabbit and Deer. The woodland supports large populations of birds, including many common passerines (Robin, Blackbird, Song Thrush, Wren, Chaffinch) and crows, such as Rook, Hooded Crow, Magpie, Jackdaw and Raven. Buzzard have been recorded in the area and Dipper are occasionally seen on the river.

The importance of this site lies in the diversity of woodland habitats which occur. Three habitats listed in Annex I of the E.U. Habitats Directive, two of which have priority status (petrifying springs and alluvial woodland), occur at this site. The presence of rare or threatened plants and invertebrates adds to the interest. Much of this site has been designated a Statutory Nature.

Version date: 23.08.2019

6.2 Appendix 2 – Site Synopsis for Ballyman Glen SAC

SITE SYNOPSIS

Site Name: Ballyman Glen

SAC Site Code: 000713

Ballyman Glen is situated approximately 3 km north of Enniskerry and straddles the County boundary between Dublin and Wicklow. It is orientated in an east-west direction with a stream running through the centre. The glen is bounded mostly by steeply sloping pasture with Gorse (Ulex europaeus) and areas of wood and scrub.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

- [7220] Petrifying Springs*
- [7230] Alkaline Fens

Ballyman Glen contains a small strip of alkaline fen which is associated with petrifying spring/seepage areas that have given rise to thick deposits of marl. The vegetation of the main part of the fen is dominated by Greater Tussock-sedge (*Carex paniculata*), Tall Fescue (*Festuca arundinacea*), butterworts (*Pinguicula vulgaris* and *P. lusitanica*), Black Bog-rush (*Schoenus nigricans*) and Broad-leaved Cottongrass (*Eriophorum latifolium*). The site is particularly notable for its orchids, with species including Early Marsh-orchid (*Dactylorhiza incarnata*), Narrow-leaved Marsh-orchid (*D. traunsteineri*) and Marsh Helleborine (*Epipactis palustris*) occurring. In addition, twenty species of sedge have been recorded in the area, including the scarce Long stalked Yellow-sedge (*Carex lepidocarpa*). The fen area is being invaded by Downy Birch (*Betula pubescens*).

Associated with the fen, and also with the woodland elsewhere in the site, are petrifying springs. These lime-encrusted seepage areas are rich in bryophytes including such diagnostic species as *Cratoneuron commutatum* and *C. filicinum*.

Wet woodland and scrub occur along the margins of the stream for most of the length of the glen, extending outwards in areas to create inaccessible and species-rich patches of woodland. The canopy is dominated by Alder (*Alnus glutinosa*), willow (*Salix* spp.) and Ash (*Fraxinus excelsior*). The woodland has a dense shrub layer which includes Hawthorn (*Crataegus monogyna*) and Spindle (*Euonymus europaeus*), and a diverse ground flora with Marsh Hawk's-beard (*Crepis paludosa*), Sanicle (*Sanicula europaea*), Herb-Robert (*Geranium robertianum*), Bugle (*Ajuga reptans*), horsetails (*Equisetum* spp.), Meadowsweet (*Filipendula ulmaria*) and some sedges (*Carex* spp.). Areas of marsh are found in the wetter areas by the stream, particularly at the western end of the site.

There is an area of broadleaved woodland on the steeper southern slopes of the glen. Common species occurring here are Ash and Sycamore (*Acer pseudoplatanus*), with Bramble (*Rubus fruticosus* agg.) colonizing the more open areas. An area of land that slopes towards the fen has been used as a landfill site for domestic refuse. The site is

also used for a clay pigeon shoot and shattered clay pigeons are scattered throughout the area.

The fen vegetation at this site is well developed, with an unusually large number of sedge species present. The presence of alkaline fen and of petrifying spring/seepage areas is also particularly notable, as these habitats are listed, the latter with priority status, on Annex I of the E.U. Habitats Directive. Fens are rare in Wicklow and Dublin, and this is one of only two sites in Wicklow for the Narrow-leaved Marsh orchid.

23.09.2013

6.3 Appendix 3 – Geological Heritage Sites

WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Glencullen River**
Other names used for site	*Abhainn Ghleann Cuilinn*, Glendoo, Knocksink Wood
IGH THEME	**IGH14 Fluvial and Lacustrine Geomorphology**
TOWNLAND(S)	**Knocksink, Monastery, Killegar, Ballybrew, Parknasilloge**
NEAREST TOWN/VILLAGE	**Enniskerry**
SIX INCH MAP NUMBER	**7**
ITM CO-ORDINATES	**721699E 718000N (Knocksink Woods Car Park)**
1:50,000 O.S. SHEET NUMBER	**56 GSI BEDROCK 1:100,000 SHEET NO. 16**

Outline Site Description
A narrow, steep-sided wooded valley in the northeast Wicklow Mountains through which the fast flowing Glencullen River flows south-eastwards towards Enniskerry.

Geological System/Age and Primary Rock Type
The northwest-southeast oriented glacial meltwater valley is cut through bedrock (Devonian granite in the northwest section; Ordovician schist in the southeast section) and glacial drift. The valley was formed by glacial meltwaters flowing south-eastwards during the deglaciation at the end of the last Ice Age.

Main Geological or Geomorphological Interest
Glencullen is the most northerly of the eastern Wicklow Mountains' glens. The valley runs for a distance of 9.5km in a northwesterly direction from Enniskerry, crossing the county boundary to Tibradden, Co. Dublin (valley called Glendoo). The valley floor is partially filled with glacial till and glaciofluvial gravels. Slope instability and mass movement (mass wasting) is confined to the glacial drift materials and several different styles of slope failure occur along the valley, which themselves are controlled by drift topography and the bedrock surface underlying the drift. The greater extent of the valley sides is vegetated (gorse, bramble, broadleaf deciduous woods). Nearer the riverbank, the terrain vegetated with wet woodland, heath and a number of tufa (springs and seepage areas) can be seen, such as the path-side seepage area near Knocksink Wood car park.

Slope instabilities have resulted from the excavation by the post-glacial (in the last c. 12,000 years) Glencullen River of a new valley in the drift, and slope failures occur on the steep slopes of this 'new' valley. The different types of failure vary from shallow to deep landslips, to steep bluff (cliff) failures where bluffs are undercut by the river (Knocksink Wood area), to earthflows (Ballybrew area).

Bedrock is sporadic and best seen in the stream channel where the river has eroded through drift down to bedrock. The valley formed along a geological fault, in a similar way to the Glencree and Dodder valleys 4km to the south, which also have NW-SW orientations.

Site Importance - County Geological Site
This important County Geological Site is located within the Knocksink Wood SAC and proposed NHA (000725). This site includes petrifying springs with tufa formation (Cratoneurion) [7220], an Annex 1 Priority Habitat protected under the EU Habitats Directive.

Management/promotion issues
Knocksink Wood is a popular amenity area, and has great potential as a glacial landform field teaching site. A public information sign (beside the existing NPWS sign at Knocksink Wood car park) would be useful in communicating the heritage aspects of this landscape feature. Slope collapse and river erosion of the valley-sides is an ongoing, if irregular, natural process, so future development of e.g. paths should take this into consideration.

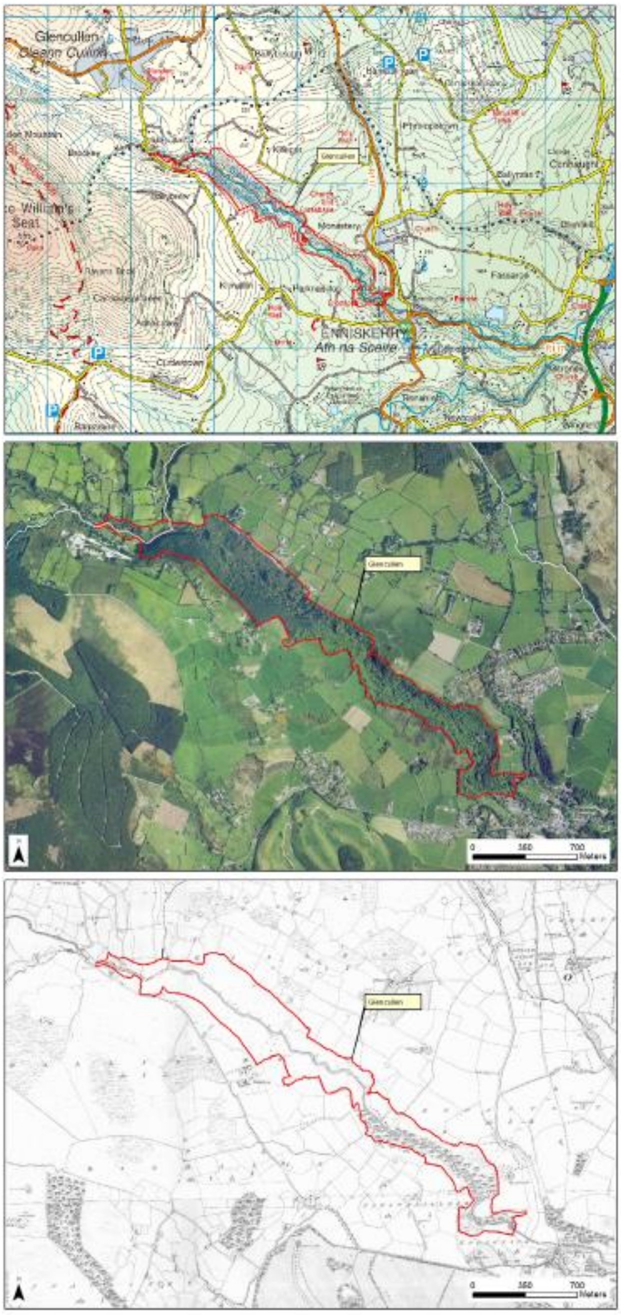
Cobble/boulder bar on northeast bank looking upstream (between the two wooden bridges in Knocksink Wood).

Slope failure (mass movement) on NE bank of river (north of second bridge in Knocksink Wood). Low river flow conditions.

Stone reinforcements on NE riverbank river (between two wooden bridges in Knocksink Wood).

Seepage beside path near first (south) wooden bridge in Knocksink Wood.

First (south) wooden bridge over Glencullen river, Knocksink Wood.


Glencullen
Gleann Cuilinn
ENNISKERRY
Áth na Sceire
0 350 700 Meters
0 350 700 Meters

WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Enniskerry Delta**
Other names used for site	Fassaroe Delta
IGH THEME	**IGH7 Quaternary**
TOWNLAND(S)	**Fassaroe**
NEAREST TOWN/VILLAGE	**Enniskerry**
SIX INCH MAP NUMBER	**3, 4, 7, 8**
ITM CO-ORDINATES	**723500E 717600N (centre of feature)**
1:50,000 O.S. SHEET NUMBER	**56 GSI BEDROCK 1:100,000 SHEET NO. 16**

Outline Site Description
The Enniskerry Delta includes a large accumulation of sands and gravels which has been quarried extensively historically, just outside Enniskerry town.

Geological System/Age and Primary Rock Type
The 'delta' is comprised of deep glaciofluvial and glaciolacustrine sediments and bedrock is at great depths throughout the area of the feature. This bedrock is of Ordovician age, and consists of greywackes, schists and slates. The 'delta' is Quaternary in age, having been deposited at the edge of the northward-retreating ice sheet during deglaciation after the last Ice Age.

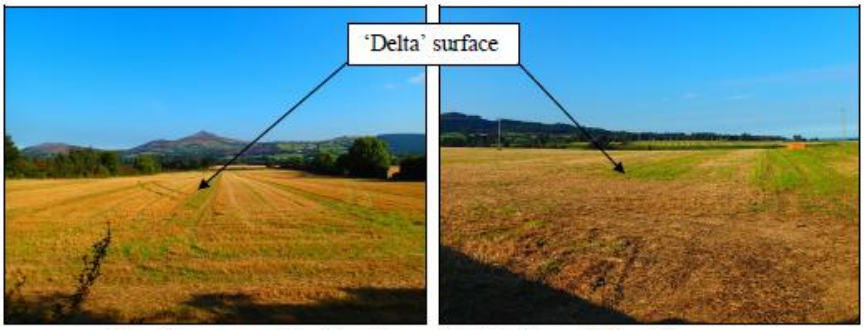
Main Geological or Geomorphological Interest
The delta is a striking feature, a large sand and gravel accumulation deposited into Glacial Lake Enniskerry by meltwaters flowing from ice of the large glacier which occupied the Irish Sea and encroached inland into Wicklow, as it stood between Carrickgollogan and Bray Head. The delta was built out from this ridge into the lake, the surface of which was at about 100m above present sea level. The delta surface at this level can be viewed from the road from Old Connaught to Enniskerry, where one gets an impression of this large, level surface dissected by the small stream that flows from the mouth of The Scalp.

The delta is just under 3 kilometres long and up to 2.5 kilometres wide, covering an area of approximately 6 square kilometres. The 'sands and gravels' are comprised largely of limestone from the Irish Midlands (no limestone bedrock occurs in Wicklow). The sediments are arranged in the typical delta sequence: topset gravels composed of up to 2m depth of horizontally bedded gravels on top; foreset gravels which are steeply dipping and well bedded deposited at the front of the delta; and bottomset, finer sediments of sands and silts, usually underlying the foresets and representing sediment that was originally deposited beyond the steep delta front on the lake floor. There are many old gravel pits in the area around Fassaroe itself, but exposure is poor today.

The delta also affords a very fine view of the Scalp to the northwest, through which much of the sediment making up the delta feature passed. To the south, the low point on the skyline between the two Sugar Loaves indicates the position of the Glen of the Downs.

Site Importance – County Geological Site
The feature is a high, striking example of a dry sand and gravel ridge, and stands proud of the surrounding landscape. This is an excellent example of a deglacial, ice marginal, meltwater-deposited feature.

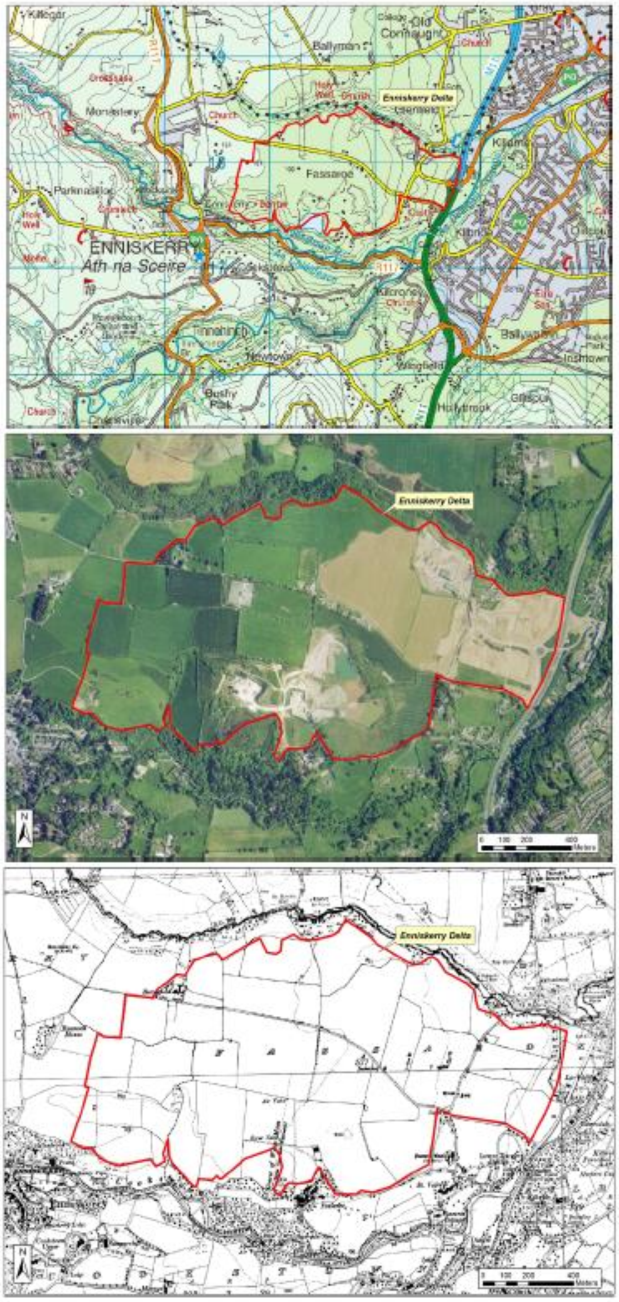
Management/promotion issues
Much of the delta has been removed by quarrying, and access to pits is by permission of the owners or operators and subject to safety protocols. Viewing from the Old Connaught to Enniskerry road, as detailed above, is the best means of viewing the delta surface.



Two views across the flat surface of the Enniskerry Delta at Fassaroe.

View southwest towards Powerscourt Estate, across the delta feature.

Small channel at the edge of the southern edge of the delta near Fassaroe House.


Enniskerry Delta
ENNISKERRY
Ath na Sceire
Fassaroe
Old Connaught
Ballyman
Enniskerry Delta
Enniskerry Delta

WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**River Dargle Valley**
Other names used for site	Dargle Gorge, Lover's Leap
IGH THEME	**IGH7 Quaternary, IGH14 Fluvial\Lacustrine Geomorphology**
TOWNLAND(S)	**Tinnehinch, Cookstown, Kilcroney, Newtown**
NEAREST TOWN/VILLAGE	**Enniskerry**
SIX INCH MAP NUMBER	**7**
ITM CO-ORDINATES	**723380E 716400N (centre of feature)**
1:50,000 O.S. SHEET NUMBER	**56 GSI BEDROCK 1:100,000 SHEET NO. 16**

Outline Site Description
A stretch of the River Dargle meandering from a wide and flat valley into cascades in a deep, steep-sided rocky gorge.

Geological System/Age and Primary Rock Type
The River Dargle gorge is a Quaternary feature, formed during deglaciation towards the end of the last glaciation (after 22,000 years ago). The river course flows over glaciofluvial drift, underlain by Ordovician slates (from Tinnehinch Bridge to gorge) into a rocky gorge cut into Cambrian quartzite and greywacke bedrock (from the gorge to Dargle Bridge near the N11).

Main Geological or Geomorphological Interest
The River Dargle gorge is one of several spectacular subglacial meltwater channels cut into solid bedrock in north Wicklow (see also Glen of the Downs, the Scalp, Glencullen River). This deeply incised landscape feature was formed when high pressure waters, flowing at the base of the overlying ice sheet, cut into and eroded solid bedrock. The gorge is up to 60m deep below Lovers Leap.

The Dargle River rises in granite uplands between War Hill (686m) and Tonduff North (642m) and flows 3km eastwards to Powerscourt Waterfall (120m high), where it descends to the floor of a wide and flat valley (between Maulin and Great Sugar Loaf). The river course meanders northeastwards, meeting the waters of the Glencree River at Onagh Bridge.

Much of the Dargle valley, like that of the Cookstown River to the north, is drift-filled. After it passes 1km east of Tinnehinch Bridge, the river cuts into a ridge of quartzite and becomes constricted into a wooded rocky gorge. At the floor of the gorge, the riverbed steepens, cascading over greywacke and quartzite bedrock, and continues on to Dargle Bridge where it is joined by the waters of the Cookstown (Glencullen) River, and henceforth to the sea at Bray.

Site Importance - County Geological Site
This is an important County Geological site partly because of its dramatic gorge landform, and also because it is one of several meltwater channels in Wicklow that are essential to understanding deglaciation processes, and the recent formation of the Wicklow landscape.

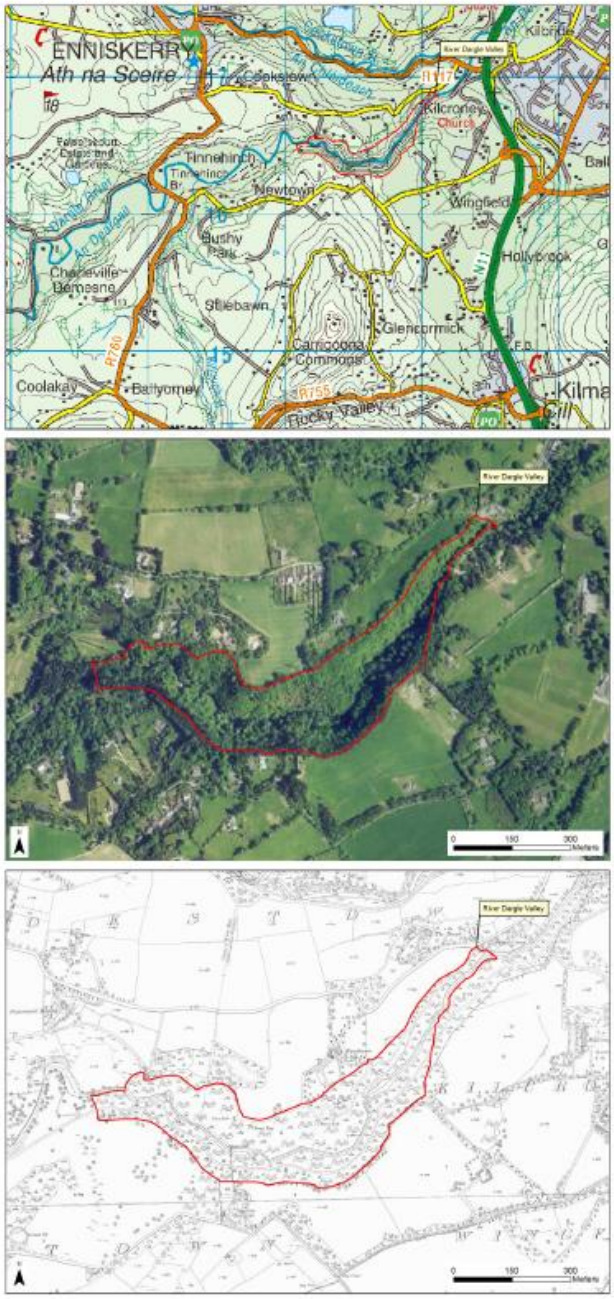
Management/promotion issues
The River Dargle gorge is less widely known or seen than the meltwater channels of the Scalp and the Glen of the Downs on the N11. The northern ridge overlooking the gorge (e.g. at Lover's Leap) is accessed via a wooded path. It is a steep scramble to the riverbank, and obvious caution should be exercised. Public signboards are not recommended in this relatively unspoilt and secluded site, however its value in terms of geological education and as a local natural amenity is ideally suitable for promotion in any relevant literature.

Cascades over Cambrian greywackes below The View\Lover's Leap looking upstream (west).

View downstream from north bank below The Lodge (ruin) towards The View\Lover's Leap.

Wasting on south bank viewed from north bank below Lover's Leap.

Cascades on gorge floor viewed from The View and Lover's Leap looking upstream.


ENNISKERRY
Ath na Sceire
Kilcroney Church
Newtown
Wingfield
Hollybrook
Bushy Park
Charleville Demesne
Stilebawn
Glencormick
Carrigoona Commons
Coolakay
Ballyorney
Kilma
Lucky Valley
River Dargle Valley

WICKLOW – COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**The Scalp**
Other names used for site	*An Scailp*, which means 'the chasm' or 'the cleft'
IGH THEME	**IGH7 Quaternary**
TOWNLAND(S)	**Barnaslingan (Dun Laoghaire-Rathdown)** **Killegar (Wicklow)**
NEAREST TOWN/VILLAGE	**Kiltiernan (Dun Laoghaire-Rathdown)** **Enniskerry (Wicklow)**
SIX INCH MAP NUMBER	3
ITM CO-ORDINATES	**712552E 720214N (centre of channel)**
1:50,000 O.S. SHEET NUMBER	**50, 56 GSI BEDROCK 1:100,000 SHEET NO. 16**

Outline Site Description
The Scalp comprises a deep channel that was formed by meltwater erosion on the northeastern flank of the Wicklow Mountains. The channel is oriented generally north–south, and extends for a distance of approx. 700m.

Geological System/Age and Primary Rock Type,
The feature is formed in an area of bedrock outcrop and subcrop, and bedrock crops out along the majority of the channel sides, giving the feature its 'scalped' or 'carved out' appearance. The feature was etched out by meltwater during deglaciation at the end of the last Ice Age, about 12,000 years ago.

The bedrock in the locality is dominated by granite, but the southernmost portion of the channel is etched into mica-schist.

Main Geological or Geomorphological Interest
The Scalp channel is up to 70m deep and has a U-shaped profile, typical of meltwater channels. The base of the channel is dry, although a drainage ditch has been dug along most of its length to channel excess surface water during heavy rainfall.

The Scalp is considered to have formed completely in the late-glacial Period. Initially the Scalp was a subglacial channel, formed under the ice, but later carried surface glacial outwash into Glacial Lake Enniskerry from an ice margin just to the north. The channel carried huge amounts of subglacial meltwater draining the ice sheet which covered the Irish Midlands close to its zone of convergence with Irish Sea Basin ice. This very high energy meltwater flow resulted in the Scalp's unusual depth and size.

Much of the sides of the channels are very steep, and littered with (often huge) boulders, some in quite precarious positions above the R117 road, which passes through the feature. This makes the site a popular rock climbing destination. This also means many of the huge boulders have interesting names, such as 'Quartz Crag', 'Eugene's Pinnacle' and 'Rothery's Rocks'.

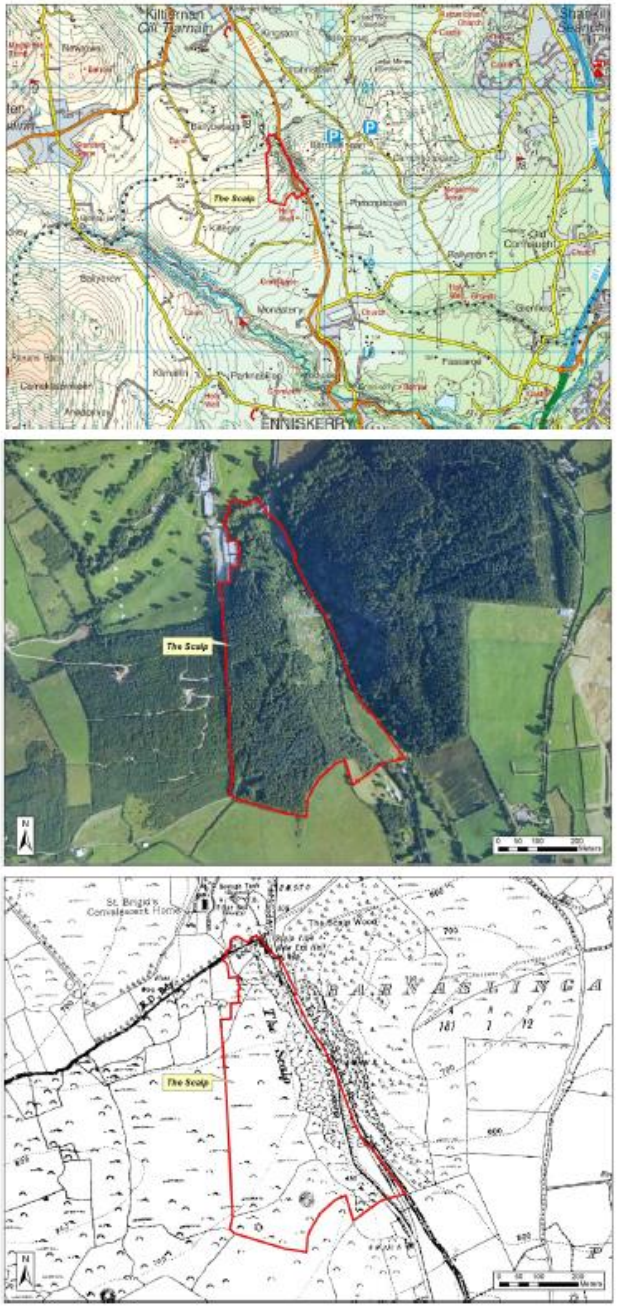
Site Importance – County Geological Site; may be recommended for Geological NHA
This is a site with good teaching potential on glacial meltwater erosion, as the feature is accessible, quite spectacular, and easily viewed from roads.

Management/promotion issues
The roadside location of the channel means it is easily accessible, although the flanks are located presumably in private ownership or in commonage. However, there is no parking nearby and it is difficult to stop safely on the road. A good impression of the feature can be had by driving through it on the R117 road, but the view from the Old Connaught to Enniskerry road, to the south, is better.

The Scalp, viewed from the south.

Left: Large boulders along the eastern flank of the Scalp. Right: One of the huge boulders along the R117 road.

The Scalp, viewed from the north.


The Scalp
ENNISKERRY
The Scalp
The Scalp
St. Brigid's Convalescent Home
The Ridge Wood
The Scalp
BARNASLINGA

6.4 Appendix 4 - Records held by the National Biodiversity Data Centre

Table 1. Records held by the National Biodiversity Data Centre from Enniskerry Village.

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
amphibian	Common Frog (Rana temporaria)	3	10/02/2005	Irish National Frog Database	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
bird	Fieldfare (Turdus pilaris)	1	17/11/2017	Birds of Ireland	
bird	House Martin (Delichon urbicum)	1	05/08/2010	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
fern	Hart's-tongue (Phyllitis scolopendrium)	1	31/05/2007	Species Data from the National Vegetation Database	
Flatworm (Turbellaria)	Arthurdendyus triangulatus	1	31/12/0012	New Zealand Flatworm (Arthurdendyus triangulates) Database	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species
flowering plant	Ash (Fraxinus excelsior)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Bramble (Rubus fruticosus agg.)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Bush Vetch (Vicia sepium)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Cow Parsley (Anthriscus sylvestris)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	False-brome (Brachypodium sylvaticum)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Great Wood-rush (Luzula sylvatica)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Hazel (Corylus avellana)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Holly (Ilex aquifolium)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Ivy (Hedera helix)	1	31/05/2007	Species Data from the National Vegetation Database	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
flowering plant	Japanese Knotweed (Fallopia japonica)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
flowering plant	Opposite-leaved Golden-saxifrage (Chrysosplenium oppositifolium)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Red Dead-nettle (Lamium purpureum)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Sanicle (Sanicula europaea)	2	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Soapwort (Saponaria officinalis)	1	27/08/2016	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Spindle (Euonymus europaeus)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Sycamore (Acer pseudoplatanus)	1	31/05/2007	Species Data from the National Vegetation Database	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species
flowering plant	Woodruff (Galium odoratum)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Wood-sedge (Carex sylvatica)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Yellow Archangel (Lamiastrum galeobdolon)	1	31/05/2007	Species Data from the National Vegetation Database	Threatened Species: Least concern
flowering plant	Yellow Pimpernel (Lysimachia nemorum)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
horsetail	Rough Horsetail (Equisetum hyemale)	1	31/05/2007	Species Data from the National Vegetation Database	
insect - beetle (Coleoptera)	7-spot Ladybird (Coccinella septempunctata)	1	26/03/2015	Ladybirds of Ireland	
insect - beetle (Coleoptera)	Gyrophaena strictula	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - butterfly	Holly Blue (Celastrina argiolus)	1	05/05/2002	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Orange-tip (Anthocharis cardamines)	1	13/05/2014	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Peacock (Inachis io)	1	02/04/2021	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Speckled Wood (Pararge aegeria)	2	02/04/2021	Atlas of Butterflies in Ireland 2021	
insect - hymenopteran	Andrena (Andrena) praecox	1	25/03/2022	Bees of Ireland	Threatened Species: Vulnerable

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - hymenopteran	Andrena (Hoplandrena) scotica	2	27/04/2022	Bees of Ireland	
insect - hymenopteran	Andrena (Leucandrena) barbilabris	2	25/04/2022	Bees of Ireland	Threatened Species: Near threatened
insect - hymenopteran	Bombus (Bombus) lucorum	1	21/06/2005	Bees of Ireland	
insect - hymenopteran	Bombus (Bombus) magnus	1	21/06/2005	Bees of Ireland	Threatened Species: Data deficient
insect - hymenopteran	Bombus (Bombus) terrestris	2	16/03/2018	Bees of Ireland	
insect - hymenopteran	Common Wasp (Vespula (Paravespula) vulgaris)	2	09/08/2020	Wasps of Ireland	
insect - hymenopteran	Early Mining Bee (Andrena (Trachandrena) haemorrhoa)	5	25/04/2022	Bees of Ireland	
insect - hymenopteran	Priocnemis (Umbripennis) perturbator	1	06/04/1995	Wasps of Ireland	
insect - moth	Incurvaria masculella	1	01/05/2019	Moths Ireland	
insect - stonefly (Plecoptera)	Leuctra fusca	1	12/10/1985	Stoneflies (Plecoptera) of Ireland	
insect - true bug (Hemiptera)	Green Shieldbug (Palomena prasina)	1	01/05/2019	True Bugs (Heteroptera) of Ireland	
terrestrial mammal	Brown Long-eared Bat (Plecotus auritus)	2	16/05/2002	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
terrestrial mammal	Eastern Grey Squirrel (Sciurus carolinensis)	1	31/12/2007	The Irish Squirrel Survey 2007	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> EU Regulation No. 1143/2014 || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
terrestrial mammal	Eurasian Red Squirrel (Sciurus vulgaris)	3	06/07/2022	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
terrestrial mammal	Pine Marten (Martes martes)	1	23/07/2015	Atlas of Mammals in Ireland 2010-2015	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
terrestrial mammal	Soprano Pipistrelle (Pipistrellus pygmaeus)	1	16/07/2010	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
terrestrial mammal	West European Hedgehog (Erinaceus europaeus)	2	25/08/2022	Hedgehogs of Ireland	Protected Species: Wildlife Acts

Table 2. Records held by the National Biodiversity Data Centre from 2km square grid O21I.

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
amphibian	Common Frog (Rana temporaria)	12	15/05/2020	Amphibians and reptiles of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
bird	Barn Owl (Tyto alba)	1	11/08/2021	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
bird	Barn Swallow (Hirundo rustica)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	Black-billed Magpie (Pica pica)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Blackcap (Sylvia atricapilla)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Black-headed Gull (Larus ridibundus)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
bird	Blue Tit (Cyanistes caeruleus)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Chaffinch (Fringilla coelebs)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Coal Tit (Periparus ater)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Common Blackbird (Turdus merula)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Common Bullfinch (Pyrrhula pyrrhula)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Common Buzzard (Buteo buteo)	1	31/12/2011	Bird Atlas 2007 - 2011	
bird	Common Chiffchaff (Phylloscopus collybita)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Common Linnet (Carduelis cannabina)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
bird	Common Pheasant (Phasianus colchicus)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
bird	Common Starling (Sturnus vulgaris)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	Common Swift (Apus apus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	Common Whitethroat (Sylvia communis)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Common Wood Pigeon (Columba palumbus)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
bird	Eurasian Jackdaw (Corvus monedula)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Eurasian Jay (Garrulus glandarius)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Eurasian Siskin (Carduelis spinus)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Eurasian Sparrowhawk (Accipiter nisus)	1	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
bird	Eurasian Treecreeper (Certhia familiaris)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	European Goldfinch (Carduelis carduelis)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	European Greenfinch (Carduelis chloris)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	European Robin (Erithacus rubecula)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Fieldfare (Turdus pilaris)	2	17/11/2017	Birds of Ireland	
bird	Goldcrest (Regulus regulus)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Great Spotted Woodpecker (Dendrocopos major)	1	22/04/2019	Birds of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
bird	Great Tit (Parus major)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Grey Heron (Ardea cinerea)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Grey Wagtail (Motacilla cinerea)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Hedge Accentor (Prunella modularis)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Hooded Crow (Corvus cornix)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	House Martin (Delichon urbicum)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	House Sparrow (Passer domesticus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	Indian Peafowl (Pavo cristatus)	1	31/12/2011	Bird Atlas 2007 - 2011	
bird	Lesser Redpoll (Carduelis cabaret)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Long-tailed Tit (Aegithalos caudatus)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Meadow Pipit (Anthus pratensis)	1	31/12/2011	Bird Atlas 2007 - 2011	
bird	Mistle Thrush (Turdus viscivorus)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Montagu's Harrier (Circus pygargus)	1	01/09/1874	Rare birds of Ireland	
bird	Peregrine Falcon (Falco peregrinus)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species
bird	Redwing (Turdus iliacus)	1	31/12/2011	Bird Atlas 2007 - 2011	
bird	Rock Pigeon (Columba livia)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
bird	Rook (Corvus frugilegus)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Sand Martin (Riparia riparia)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	Song Thrush (Turdus philomelos)	3	31/12/2011	Bird Atlas 2007 - 2011	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
bird	Stock Pigeon (Columba oenas)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
bird	White Wagtail (Motacilla alba)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	White-throated Dipper (Cinclus cinclus)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Willow Warbler (Phylloscopus trochilus)	2	31/12/2011	Bird Atlas 2007 - 2011	
bird	Winter Wren (Troglodytes troglodytes)	3	31/12/2011	Bird Atlas 2007 - 2011	
bird	Yellowhammer (Emberiza citrinella)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
centipede	Lithobius (Lithobius) melanops	1	01/05/1976	Centipedes of Ireland	
fern	Bracken (Pteridium aquilinum)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
fern	Hart's-tongue (Phyllitis scolopendrium)	4	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
fern	Soft Shield-fern (Polystichum setiferum)	3	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Flatworm (Turbellaria)	Arthurdendyus triangulatus	1	31/12/0012	New Zealand Flatworm (Arthurdendyus triangulates) Database	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species
flowering plant	Ash (Fraxinus excelsior)	4	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Atlantic Ivy (Hedera hibernica)	1	31/12/1986	BSBI tetrad data for Ireland	
flowering plant	Beech (Fagus sylvatica)	4	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Black Medick (Medicago lupulina)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Blackthorn (Prunus spinosa)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Bramble (Rubus fruticosus agg.)	4	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Broad-leaved Dock (Rumex obtusifolius)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
flowering plant	Bulbous Buttercup (Ranunculus bulbosus)	1	31/12/1929	BSBI tetrad data for Ireland	
flowering plant	Bush Vetch (Vicia sepium)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Butterfly-bush (Buddleja davidii)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species
flowering plant	Cherry Laurel (Prunus laurocerasus)	3	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species
flowering plant	Cleavers (Galium aparine)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Common Nettle (Urtica dioica)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Common Ragwort (Senecio jacobaea)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Cow Parsley (Anthriscus sylvestris)	1	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Creeping Thistle (Cirsium arvense)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Dog-rose (Rosa canina)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Downy Birch (Betula pubescens)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Druce's Crane's-bill (Geranium endressii x versicolor = G. x oxonianum)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Early Dog-violet (Viola reichenbachiana)	2	20/03/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Elder (Sambucus nigra)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	False-brome (Brachypodium sylvaticum)	2	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Gorse (Ulex europaeus)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Grand-toothed Hawkweed (Hieracium grandidens)	1	31/12/1969	BSBI tetrad data for Ireland	
flowering plant	Great Wood-rush (Luzula sylvatica)	3	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
flowering plant	Greater Plantain (Plantago major)	3	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Guelder-rose (Viburnum opulus)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Hawthorn (Crataegus monogyna)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Hazel (Corylus avellana)	4	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Hedge Bindweed (Calystegia sepium)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Hemp-agrimony (Eupatorium cannabinum)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Hieracium aggregate	1	31/12/1969	BSBI tetrad data for Ireland	
flowering plant	Himalayan Honeysuckle (Leycesteria formosa)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species
flowering plant	Hogweed (Heracleum sphondylium)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Holly (Ilex aquifolium)	3	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Honeysuckle (Lonicera periclymenum)	1	30/05/2007	Species Data from the National Vegetation Database	
flowering plant	Ivy (Hedera helix)	5	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Japanese Knotweed (Fallopia japonica)	2	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
flowering plant	Lamiastrum galeobdolon subsp. montanum	2	20/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Large-flowered Evening-primrose (Oenothera glazioviana)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Lesser Celandine (Ranunculus ficaria)	2	20/03/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Lords-and-Ladies (Arum maculatum)	2	31/07/2022	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Mexican Fleabane (Erigeron karvinskianus)	2	31/12/2010	BSBI tetrad data for Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
flowering plant	Navelwort (Umbilicus rupestris)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Opposite-leaved Golden-saxifrage (Chrysosplenium oppositifolium)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Pedunculate Oak (Quercus robur)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Primrose (Primula vulgaris)	2	20/03/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Pyramidal Orchid (Anacamptis pyramidalis)	1	13/06/2022	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Ramsons (Allium ursinum)	1	20/04/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Red Clover (Trifolium pratense)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Red Dead-nettle (Lamium purpureum)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Remote Sedge (Carex remota)	1	30/05/2007	Species Data from the National Vegetation Database	
flowering plant	Rhododendron ponticum	1	20/03/2020	National Invasive Species Database	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
flowering plant	Ribwort Plantain (Plantago lanceolata)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Rosebay Willowherb (Chamerion angustifolium)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Sanicle (Sanicula europaea)	2	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Sessile Oak (Quercus petraea)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Silver Birch (Betula pendula)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Snowberry (Symphoricarpos albus)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Soapwort (Saponaria officinalis)	1	27/08/2016	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Spindle (Euonymus europaeus)	1	31/05/2007	Species Data from the National Vegetation Database	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
flowering plant	Sweet Chestnut (Castanea sativa)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Sweet Violet (Viola odorata)	1	12/03/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Sycamore (Acer pseudoplatanus)	3	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species
flowering plant	Taraxacum aggregate	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Toothwort (Lathraea squamaria)	1	12/04/2017	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Tutsan (Hypericum androsaemum)	2	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Water Mint (Mentha aquatica)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Welsh Poppy (Meconopsis cambrica)	1	15/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	White Clover (Trifolium repens)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Wild Angelica (Angelica sylvestris)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Wild Cherry (Prunus avium)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Winter Heliotrope (Petasites fragrans)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Wood Anemone (Anemone nemorosa)	1	20/03/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Wood Sage (Teucrium scorodonia)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
flowering plant	Woodruff (Galium odoratum)	2	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Wood-sedge (Carex sylvatica)	2	31/05/2007	Species Data from the National Vegetation Database	
flowering plant	Yellow Archangel (Lamiastrum galeobdolon)	2	31/05/2007	Species Data from the National Vegetation Database	Threatened Species: Least concern
flowering plant	Yellow Pimpernel (Lysimachia nemorum)	1	17/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
fungus	Apiospora montagnei	2	27/09/1989	Fungal Records for Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
fungus	Blackening Waxcap (Hygrocybe conica)	2	27/09/1989	Fungal Records for Ireland	
fungus	Blusher (Amanita rubescens var. rubescens)	2	27/09/1989	Fungal Records for Ireland	
fungus	Blushing Wood Mushroom (Agaricus silvaticus)	2	27/09/1989	Fungal Records for Ireland	
fungus	Coleosporium tussilaginis	2	27/09/1989	Fungal Records for Ireland	
fungus	Common Puffball (Lycoperdon perlatum)	3	30/10/1990	Fungal Records for Ireland	
fungus	Deathcap (Amanita phalloides)	2	27/09/1989	Fungal Records for Ireland	
fungus	Deceiver (Laccaria laccata)	2	27/09/1989	Fungal Records for Ireland	
fungus	Deer Shield (Pluteus cervinus)	2	27/09/1989	Fungal Records for Ireland	
fungus	Diaporthe nobilis	2	27/09/1989	Fungal Records for Ireland	
fungus	Erysiphe aquilegiae var. aquilegiae	2	27/09/1989	Fungal Records for Ireland	
fungus	Erysiphe heraclei	2	27/09/1989	Fungal Records for Ireland	
fungus	Erysiphe syringae	2	27/09/1989	Fungal Records for Ireland	
fungus	Fairy Ring Champignon (Marasmius oreades)	2	27/09/1989	Fungal Records for Ireland	
fungus	False Chanterelle (Hygrophoropsis aurantiaca)	2	27/09/1989	Fungal Records for Ireland	
fungus	Gymnopilus hybridus	2	27/09/1989	Fungal Records for Ireland	
fungus	Helminthosporium foveolatum	2	27/09/1989	Fungal Records for Ireland	
fungus	Honey Fungus (Armillaria mellea)	1	30/10/1990	Fungal Records for Ireland	
fungus	Lilac Fibrecap (Inocybe geophylla var. lilacina)	2	27/09/1989	Fungal Records for Ireland	
fungus	Meadow Puffball (Vascellum pratense)	2	27/09/1989	Fungal Records for Ireland	
fungus	Melampsora hypericorum	2	27/09/1989	Fungal Records for Ireland	
fungus	Oak Mildew (Erysiphe alphitoides)	2	27/09/1989	Fungal Records for Ireland	
fungus	Orange Peel Fungus (Aleuria aurantia)	2	27/09/1989	Fungal Records for Ireland	
fungus	Puccinia saniculae	2	27/09/1989	Fungal Records for Ireland	
fungus	Red Cracking Bolete (Boletus chrysenteron)	2	27/09/1989	Fungal Records for Ireland	
fungus	Sawadaea bicornis	2	27/09/1989	Fungal Records for Ireland	
fungus	Slender Parasol (Macrolepiota mastoidea)	1	30/10/1990	Fungal Records for Ireland	
fungus	Stinking Dapperling (Lepiota cristata)	2	27/09/1989	Fungal Records for Ireland	
fungus	Sulphur Tuft (Hypholoma fasciculare var. fasciculare)	3	30/10/1990	Fungal Records for Ireland	
fungus	Sycamore Tarspot (Rhytisma acerinum)	2	27/09/1989	Fungal Records for Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
fungus	Trochila laurocerasi	2	27/09/1989	Fungal Records for Ireland	
fungus	Trooping Funnel (Clitocybe geotropa)	1	30/10/1990	Fungal Records for Ireland	
fungus	White Fibrecap (Inocybe geophylla var. geophylla)	2	27/09/1989	Fungal Records for Ireland	
fungus	Whitelaced Shank (Megacollybia platyphylla)	2	27/09/1989	Fungal Records for Ireland	
fungus	Wiesneriomyces laurinus	2	27/09/1989	Fungal Records for Ireland	
horsetail	Great Horsetail (Equisetum telmateia)	1	12/10/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
horsetail	Rough Horsetail (Equisetum hyemale)	1	31/05/2007	Species Data from the National Vegetation Database	
insect - beetle (Coleoptera)	7-spot Ladybird (Coccinella septempunctata)	2	14/06/2014	Ladybirds of Ireland	
insect - beetle (Coleoptera)	Agabus (Gaurodytes) bipustulatus	1	13/06/1924	Water Beetles of Ireland	
insect - beetle (Coleoptera)	Atheta picipes	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Atrecus affinis	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Bolitochara obliqua	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Dryophilus pusillus	1	30/09/1936	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Enochrus fuscipennis	1	10/05/1936	Water Beetles of Ireland	
insect - beetle (Coleoptera)	Eyed Ladybird (Anatis ocellata)	1	12/07/2015	Ladybirds of Ireland	
insect - beetle (Coleoptera)	Grynobius planus	1	31/08/1931	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Gyrophaena gentilis	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Gyrophaena strictula	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Hydraena gracilis	2	24/06/1935	Water Beetles of Ireland	
insect - beetle (Coleoptera)	Hydrobius fuscipes	1	13/06/1924	Water Beetles of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - beetle (Coleoptera)	Hydroporus nigrita	1	15/06/1924	Water Beetles of Ireland	
insect - beetle (Coleoptera)	Hydroporus pubescens	1	16/06/1924	Water Beetles of Ireland	
insect - beetle (Coleoptera)	Ischnoglossa prolixa	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Leiopus nebulosus	1	02/08/1978	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Leptusa fumida	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Melanotus castanipes	1	02/02/1985	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Oreodytes davisii	1	31/12/1900	Water Beetles of Ireland	Threatened Species: Near threatened
insect - beetle (Coleoptera)	Prionocyphon serricornis	1	03/08/1927	Water Beetles of Ireland	Threatened Species: Data deficient
insect - beetle (Coleoptera)	Quedius (Quedionuchus) plagiatus	1	30/09/1990	Saproxylic Beetles of Ireland	
insect - beetle (Coleoptera)	Sphaeriestes reyi	1	30/09/1931	Saproxylic Beetles of Ireland	
insect - butterfly	Comma (Polygonia c-album)	1	17/09/2019	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Common Blue (Polyommatus icarus)	2	01/05/2020	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Holly Blue (Celastrina argiolus)	1	05/05/2002	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Large White (Pieris brassicae)	1	25/08/2021	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Meadow Brown (Maniola jurtina)	2	01/05/2020	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Orange-tip (Anthocharis cardamines)	3	13/05/2014	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Painted Lady (Vanessa cardui)	4	25/08/2021	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Peacock (Inachis io)	3	25/08/2021	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Purple Hairstreak (Neozephyrus quercus)	3	06/08/2020	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Red Admiral (Vanessa atalanta)	3	25/08/2021	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Ringlet (Aphantopus hyperantus)	3	06/08/2020	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Small Tortoiseshell (Aglais urticae)	4	25/08/2021	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Small White (Pieris rapae)	1	06/08/2020	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Speckled Wood (Pararge aegeria)	11	21/08/2018	Atlas of Butterflies in Ireland 2021	
insect - butterfly	Wall (Lasiommata megera)	2	12/10/1985	Atlas of Butterflies in Ireland 2021	Threatened Species: Endangered
insect - caddis fly (Trichoptera)	Agapetus delicatulus	1	31/12/2015	Caddisflies (Trichoptera) of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - caddis fly (Trichoptera)	Agapetus ochripes	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Athripsodes albifrons	1	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Cyrnus trimaculatus	1	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Diplectrona felix	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Glossosoma boltoni	1	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Hydropsyche siltalai	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Lepidostoma hirtum	1	31/12/1939	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Limnephilus auricula	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Limnephilus sparsus	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Limnephilus vittatus	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Odontocerum albicorne	2	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Oecetis testacea	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Philopotamus montanus	2	31/12/1910	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Polycentropus flavomaculatus	1	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Polycentropus kingi	2	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Psychomyia pusilla	4	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Rhyacophila dorsalis	3	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Sericostoma personatum	3	31/12/2015	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Silo pallipes	4	31/12/2015	Caddisflies (Trichoptera) of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - caddis fly (Trichoptera)	Wormaldia mediana	3	31/12/1950	Caddisflies (Trichoptera) of Ireland	
insect - caddis fly (Trichoptera)	Wormaldia occipitalis	1	20/06/2020	Caddisflies (Trichoptera) of Ireland	
insect - dragonfly (Odonata)	Blue-tailed Damselfly (Ischnura elegans)	1	14/06/2014	Dragonfly Records	
insect - dragonfly (Odonata)	Common Blue Damselfly (Enallagma cyathigerum)	1	14/06/2014	Dragonfly Records	
insect - dragonfly (Odonata)	Common Hawker (Aeshna juncea)	2	08/07/2007	Dragonfly Ireland	
insect - hymenopteran	Andrena (Andrena) apicata	2	23/03/2022	Bees of Ireland	Threatened Species: Data deficient
insect - hymenopteran	Andrena (Andrena) clarkella	1	23/03/2022	Bees of Ireland	
insect - hymenopteran	Andrena (Andrena) fucata	2	11/05/2008	Bees of Ireland	Threatened Species: Near threatened
insect - hymenopteran	Andrena (Andrena) praecox	2	25/03/2022	Bees of Ireland	Threatened Species: Vulnerable
insect - hymenopteran	Andrena (Cnemidandrena) denticulata	1	22/07/1925	Bees of Ireland	Threatened Species: Vulnerable
insect - hymenopteran	Andrena (Hoplandrena) scotica	6	27/04/2022	Bees of Ireland	
insect - hymenopteran	Andrena (Leucandrena) barbilabris	3	25/04/2022	Bees of Ireland	Threatened Species: Near threatened
insect - hymenopteran	Andrena (Melandrena) nigroaenea	1	04/05/1995	Bees of Ireland	Threatened Species: Vulnerable
insect - hymenopteran	Andrena (Micrandrena) minutula	2	04/05/1924	Bees of Ireland	
insect - hymenopteran	Andrena (Micrandrena) subopaca	1	17/06/1931	Bees of Ireland	
insect - hymenopteran	Andrena (Oreomelissa) coitana	1	20/08/1924	Bees of Ireland	Threatened Species: Vulnerable
insect - hymenopteran	Black-headed Velvet Ant (Myrmosa atra)	3	24/07/1998	Wasps of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - hymenopteran	Bombus (Bombus) lucorum	3	18/06/2016	Bees of Ireland	
insect - hymenopteran	Bombus (Bombus) magnus	1	21/06/2005	Bees of Ireland	Threatened Species: Data deficient
insect - hymenopteran	Bombus (Bombus) terrestris	4	21/03/2017	Bees of Ireland	
insect - hymenopteran	Bombus lucorum agg.	2	18/06/2016	Bees of Ireland	
insect - hymenopteran	Common Carder Bee (Bombus (Thoracombus) pascuorum)	2	18/06/2016	Bees of Ireland	
insect - hymenopteran	Common Wasp (Vespula (Paravespula) vulgaris)	3	19/07/2019	Wasps of Ireland	
insect - hymenopteran	Cuckoo Wasp (Vespula (Vespula) austriaca)	1	31/12/1901	Wasps of Ireland	
insect - hymenopteran	Early Bumble Bee (Bombus (Pyrobombus) pratorum)	2	18/06/2016	Bees of Ireland	
insect - hymenopteran	Early Mining Bee (Andrena (Trachandrena) haemorrhoa)	7	25/04/2022	Bees of Ireland	
insect - hymenopteran	Field Cuckoo Bee (Bombus (Psithyrus) campestris)	1	31/12/1905	Bees of Ireland	Threatened Species: Vulnerable
insect - hymenopteran	Gwynne's Mining Bee (Andrena (Euandrena) bicolor)	2	26/07/1996	Bees of Ireland	
insect - hymenopteran	Honey Bee (Apis mellifera)	1	31/08/2022	Bees of Ireland	
insect - hymenopteran	Large Red Tailed Bumble Bee (Bombus (Melanobombus) lapidarius)	2	18/06/2016	Bees of Ireland	Threatened Species: Near threatened
insect - hymenopteran	Lasioglossum (Evylaeus) albipes	2	28/03/1926	Bees of Ireland	
insect - hymenopteran	Marsham's Nomad Bee (Nomada marshamella)	3	11/05/2008	Bees of Ireland	
insect - hymenopteran	Mellinus arvensis	1	20/08/1924	Wasps of Ireland	
insect - hymenopteran	Nomada leucophthalma	3	26/04/1996	Bees of Ireland	
insect - hymenopteran	Nomada panzeri	1	17/06/1931	Bees of Ireland	Threatened Species: Near threatened
insect - hymenopteran	Nomada ruficornis	3	08/05/1931	Bees of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - hymenopteran	Norwegian Wasp (Dolichovespula (Pseudovespula) norwegica)	1	20/08/1924	Wasps of Ireland	
insect - hymenopteran	Priocnemis (Umbripennis) perturbator	1	06/04/1995	Wasps of Ireland	
insect - hymenopteran	Shaggy Mining Bee (Lasioglossum (Evylaeus) villosulum)	1	09/09/1927	Bees of Ireland	
insect - hymenopteran	Small Garden Bumble Bee (Bombus (Megabombus) hortorum)	3	18/06/2016	Bees of Ireland	
insect - hymenopteran	Sphecodes ephippius	1	04/05/1995	Bees of Ireland	
insect - hymenopteran	Sphecodes geoffrellus	1	09/06/1994	Bees of Ireland	
insect - hymenopteran	Sphecodes monilicornis	1	24/06/1926	Bees of Ireland	
insect - hymenopteran	Tree Wasp (Dolichovespula (Pseudovespula) sylvestris)	1	20/08/1924	Wasps of Ireland	
insect - lacewing (Neuroptera)	Cunctochrysa albolineata	2	02/08/1979	Lacewings (Neuroptera) of Ireland	
insect - lacewing (Neuroptera)	Hemerobius marginatus	1	16/08/1976	Lacewings (Neuroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Baetis rhodani	4	31/12/1992	Mayflies (Ephemeroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Baetis scambus	1	31/12/1976	Mayflies (Ephemeroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Caenis horaria	1	31/12/1976	Mayflies (Ephemeroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Ecdyonurus dispar	1	31/12/1976	Mayflies (Ephemeroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Electrogena lateralis	1	31/12/1976	Mayflies (Ephemeroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Rhithrogena semicolorata	3	31/12/1992	Mayflies (Ephemeroptera) of Ireland	
insect - mayfly (Ephemeroptera)	Serratella ignita	3	31/12/1992	Mayflies (Ephemeroptera) of Ireland	
insect - moth	Acompsia cinerella	2	25/07/1940	Moths Ireland	
insect - moth	Adela croesella	1	03/07/1876	Moths Ireland	
insect - moth	Adela reaumurella	1	24/05/1983	Moths Ireland	
insect - moth	Agonopterix nervosa	1	02/09/1994	Moths Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - moth	Alder Lift (Heliozela resplendella)	1	16/09/1989	Moths Ireland	
insect - moth	Ancylis badiana	2	07/06/1940	Moths Ireland	
insect - moth	Anthophila fabriciana	3	16/09/1989	Moths Ireland	
insect - moth	Apple and Plum Case-bearer (Coleophora spinella)	1	02/07/1993	Moths Ireland	
insect - moth	Apple Fruit Moth (Argyresthia conjugella)	1	02/07/1993	Moths Ireland	
insect - moth	Apple Leaf Miner (Lyonetia clerkella)	3	02/07/1993	Moths Ireland	
insect - moth	Argyresthia albistria	1	10/08/1986	Moths Ireland	
insect - moth	Argyresthia bonnetella	2	20/06/1940	Moths Ireland	
insect - moth	Argyresthia brockeella	2	11/07/1984	Moths Ireland	
insect - moth	Argyresthia pygmaeella	3	20/06/1940	Moths Ireland	
insect - moth	Argyresthia retinella	1	26/06/1984	Moths Ireland	
insect - moth	Argyresthia spinosella	2	20/06/1940	Moths Ireland	
insect - moth	Ash Bud Moth (Prays fraxinella)	7	02/07/1993	Moths Ireland	
insect - moth	Bactra lancealana	1	03/07/1876	Moths Ireland	
insect - moth	Barred Red (Hylaea fasciaria)	1	02/07/1993	Moths Ireland	
insect - moth	Barred Yellow (Cidaria fulvata)	1	02/07/1993	Moths Ireland	
insect - moth	Batrachedra praeangusta	1	10/08/1986	Moths Ireland	
insect - moth	Beautiful Golden Y (Autographa pulchrina)	1	02/07/1993	Moths Ireland	
insect - moth	Bee Moth (Aphomia sociella)	1	02/07/1993	Moths Ireland	
insect - moth	Bilberry Pug (Pasiphila debiliata)	1	26/06/1984	Moths Ireland	
insect - moth	Biselachista trapeziella	1	26/06/1984	Moths Ireland	
insect - moth	Blastodacna hellerella	1	03/07/1876	Moths Ireland	
insect - moth	Borkhausenia fuscescens	3	02/07/1993	Moths Ireland	
insect - moth	Bright-line Brown-eye (Lacanobia oleracea)	1	02/07/1993	Moths Ireland	
insect - moth	Brimstone Moth (Opisthograptis luteolata)	1	02/07/1993	Moths Ireland	
insect - moth	Broken-barred Carpet (Electrophaes corylata)	1	02/07/1993	Moths Ireland	
insect - moth	Brown China-mark (Elophila nymphaeata)	1	02/07/1993	Moths Ireland	
insect - moth	Brown House-moth (Hofmannophila pseudospretella)	2	02/07/1993	Moths Ireland	
insect - moth	Bryotropha terrella	4	02/07/1993	Moths Ireland	
insect - moth	Buff Ermine (Spilosoma luteum)	1	02/07/1993	Moths Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - moth	Caloptilia alchimiella	1	03/07/1876	Moths Ireland	
insect - moth	Caloptilia leucapennella	1	04/10/1980	Moths Ireland	
insect - moth	Caloptilia syringella	3	13/05/2018	Moths Ireland	
insect - moth	Capua vulgana	1	22/05/1982	Moths Ireland	
insect - moth	Celypha lacunana	3	14/06/2014	Moths Ireland	
insect - moth	Cherry Bark Tortrix (Enarmonia formosana)	1	11/07/1984	Moths Ireland	
insect - moth	Clepsis consimilana	3	02/07/1993	Moths Ireland	
insect - moth	Cloaked Carpet (Euphyia biangulata)	1	02/07/1993	Moths Ireland	
insect - moth	Clouded Border (Lomaspilis marginata)	1	02/07/1993	Moths Ireland	
insect - moth	Clouded-bordered Brindle (Apamea crenata)	1	02/07/1993	Moths Ireland	
insect - moth	Cocksfoot Moth (Glyphipterix simpliciella)	3	24/05/1983	Moths Ireland	
insect - moth	Coleophora alticolella	1	03/07/1876	Moths Ireland	
insect - moth	Coleophora flavipennella	2	11/07/1984	Moths Ireland	
insect - moth	Coleophora gryphipennella	2	17/10/1992	Moths Ireland	
insect - moth	Coleophora peribenanderi	1	02/07/1993	Moths Ireland	
insect - moth	Coleophora serratella	3	22/08/1993	Moths Ireland	
insect - moth	Coleophora sylvaticella	1	24/05/1983	Moths Ireland	
insect - moth	Common Marbled Carpet (Chloroclysta truncata)	1	22/05/1982	Moths Ireland	
insect - moth	Common Pug (Eupithecia vulgata)	1	02/07/1993	Moths Ireland	
insect - moth	Common Wainscot (Mythimna pallens)	1	02/07/1993	Moths Ireland	
insect - moth	Common White Wave (Cabera pusaria)	1	02/07/1993	Moths Ireland	
insect - moth	Cork Moth (Nemapogon cloacella)	1	26/06/1984	Moths Ireland	
insect - moth	Crambus perlella	1	03/07/1876	Moths Ireland	
insect - moth	Cream Wave (Scopula floslactata)	2	26/06/1984	Moths Ireland	
insect - moth	Cydia splendana	1	03/07/1876	Moths Ireland	
insect - moth	Cydia ulicetana	3	22/08/1993	Moths Ireland	
insect - moth	Dark Fruit-tree Tortrix (Pandemis heparana)	1	02/07/1993	Moths Ireland	
insect - moth	Dichrorampha montanana	1	03/07/1876	Moths Ireland	
insect - moth	Dusky Brocade (Apamea remissa)	1	02/07/1993	Moths Ireland	
insect - moth	Dusky Pearl (Udea prunalis)	1	03/07/1876	Moths Ireland	
insect - moth	Ectoedemia albifasciella	5	17/10/1992	Moths Ireland	
insect - moth	Ectoedemia intimella	1	11/07/1984	Moths Ireland	
insect - moth	Ectoedemia subbimaculella	1	26/06/1984	Moths Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - moth	Elachista albifrontella	1	03/07/1876	Moths Ireland	
insect - moth	Elachista luticomella	1	03/07/1876	Moths Ireland	
insect - moth	Elachista megerlella	1	03/07/1876	Moths Ireland	
insect - moth	Elachista regificella	1	01/04/1995	Moths Ireland	
insect - moth	Elachista subocellea	1	03/07/1876	Moths Ireland	
insect - moth	Epermenia chaerophyllella	1	24/05/1983	Moths Ireland	
insect - moth	Epiblema scutulana	4	19/06/1940	Moths Ireland	
insect - moth	Epinotia bilunana	1	26/06/1984	Moths Ireland	
insect - moth	Epinotia nisella	1	10/08/1986	Moths Ireland	
insect - moth	Epinotia ramella	1	10/08/1986	Moths Ireland	
insect - moth	Eriocrania salopiella	1	02/07/1993	Moths Ireland	
insect - moth	Esperia sulphurella	5	24/05/1983	Moths Ireland	
insect - moth	Eudonia delunella	1	02/07/1993	Moths Ireland	
insect - moth	Flame (Axylia putris)	1	02/07/1993	Moths Ireland	
insect - moth	Foxglove Pug (Eupithecia pulchellata)	1	02/07/1993	Moths Ireland	
insect - moth	Garden Grass-veneer (Chrysoteuchia culmella)	3	02/07/1993	Moths Ireland	
insect - moth	Golden Argent (Argyresthia goedartella)	1	11/07/1984	Moths Ireland	
insect - moth	Green Carpet (Colostygia pectinataria)	1	02/07/1993	Moths Ireland	
insect - moth	Grey Arches (Polia nebulosa)	1	02/07/1993	Moths Ireland	
insect - moth	Grey Pine Carpet (Thera obeliscata)	1	02/07/1993	Moths Ireland	
insect - moth	Heart & Dart (Agrotis exclamationis)	1	02/07/1993	Moths Ireland	
insect - moth	Heliozela sericiella	2	24/05/1983	Moths Ireland	
insect - moth	Holly Tortrix (Rhopobota naevana)	1	10/08/1986	Moths Ireland	
insect - moth	Hypatima rhomboidella	2	31/08/1935	Moths Ireland	
insect - moth	Incurvaria pectinea	1	20/05/1983	Moths Ireland	
insect - moth	July Highflyer (Hydriomena furcata)	2	02/07/1993	Moths Ireland	
insect - moth	Laburnum Leaf Miner (Leucoptera laburnella)	6	16/09/1989	Moths Ireland	
insect - moth	Least Black Arches (Nola confusalis)	1	24/05/1983	Moths Ireland	
insect - moth	Leucoptera spartifoliella	1	11/07/1984	Moths Ireland	
insect - moth	Light Emerald (Campaea margaritata)	1	02/07/1993	Moths Ireland	
insect - moth	Little Grey (Dipleurina lacustrata)	1	02/07/1993	Moths Ireland	
insect - moth	Lobesia reliquana	1	26/06/1984	Moths Ireland	
insect - moth	Long-horned Flat-body (Carcina quercana)	3	22/08/1993	Moths Ireland	
insect - moth	Marbled Orchard Tortrix (Hedya nubiferana)	2	02/07/1993	Moths Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - moth	Micropterix aruncella	7	20/06/1940	Moths Ireland	
insect - moth	Micropterix calthella	5	22/05/1982	Moths Ireland	
insect - moth	Middle-barred Minor (Oligia fasciuncula)	1	02/07/1993	Moths Ireland	
insect - moth	Mompha raschkiella	1	12/09/1984	Moths Ireland	
insect - moth	Monochroa tenebrella	1	03/07/1876	Moths Ireland	
insect - moth	Mottled Beauty (Alcis repandata)	2	02/07/1993	Moths Ireland	
insect - moth	Mottled Rustic (Caradrina morpheus)	1	02/07/1993	Moths Ireland	
insect - moth	Nematopogon metaxella	1	26/06/1984	Moths Ireland	
insect - moth	Nematopogon swammerdamella	2	24/05/1983	Moths Ireland	
insect - moth	Nemophora degeerella	1	18/06/2016	Moths Ireland	
insect - moth	Nut Bud Moth (Epinotia tenerana)	1	03/07/1876	Moths Ireland	
insect - moth	Nut Leaf Blister Moth (Phyllonorycter coryli)	8	02/09/1994	Moths Ireland	
insect - moth	Oak-bark Argent (Argyresthia glaucinella)	1	26/06/1984	Moths Ireland	
insect - moth	Orthotaenia undulana	1	02/07/1993	Moths Ireland	
insect - moth	Pale-shouldered Brocade (Lacanobia thalassina)	1	02/07/1993	Moths Ireland	
insect - moth	Pammene gallicana	1	03/07/1876	Moths Ireland	
insect - moth	Parornix anglicella	3	17/10/1992	Moths Ireland	
insect - moth	Parornix devoniella	3	02/09/1994	Moths Ireland	
insect - moth	Parsnip Moth (Depressaria pastinacella)	1	11/07/1984	Moths Ireland	
insect - moth	Peach Blossom (Thyatira batis)	1	02/07/1993	Moths Ireland	
insect - moth	Pebble Prominent (Notodonta ziczac)	1	02/07/1993	Moths Ireland	
insect - moth	Peppered Moth (Biston betularia)	1	02/07/1993	Moths Ireland	
insect - moth	Phyllonorycter emberizaepenella	1	17/10/1992	Moths Ireland	
insect - moth	Phyllonorycter harrisella	1	17/10/1992	Moths Ireland	
insect - moth	Phyllonorycter heegeriella	3	22/08/1993	Moths Ireland	
insect - moth	Phyllonorycter hilarella	1	23/09/1990	Moths Ireland	
insect - moth	Phyllonorycter maestingella	3	21/02/1987	Moths Ireland	
insect - moth	Phyllonorycter messaniella	10	22/08/1993	Moths Ireland	
insect - moth	Phyllonorycter nicellii	6	02/09/1994	Moths Ireland	
insect - moth	Phyllonorycter nigrescentella	3	17/10/1992	Moths Ireland	
insect - moth	Phyllonorycter quercifoliella	9	17/10/1992	Moths Ireland	
insect - moth	Phyllonorycter rajella	3	17/10/1992	Moths Ireland	
insect - moth	Phyllonorycter roboris	8	26/08/1995	Moths Ireland	
insect - moth	Phyllonorycter scopariella	3	15/07/1937	Moths Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - moth	Phyllonorycter trifasciella	2	16/09/1989	Moths Ireland	
insect - moth	Phyllonorycter ulmifoliella	3	22/08/1993	Moths Ireland	
insect - moth	Pleurota bicostella	1	03/07/1876	Moths Ireland	
insect - moth	Poplar Hawk-moth (Laothoe populi)	1	02/07/1993	Moths Ireland	
insect - moth	Pseudargyrotoza conwagana	2	11/07/1984	Moths Ireland	
insect - moth	Psychoides filicivora	1	22/05/1982	Moths Ireland	
insect - moth	Ptycholoma lecheana	2	20/06/1940	Moths Ireland	
insect - moth	Purple Clay (Diarsia brunnea)	1	02/07/1993	Moths Ireland	
insect - moth	Red-barred Tortrix (Ditula angustiorana)	3	20/06/1940	Moths Ireland	
insect - moth	Rhopobota myrtillana	1	03/07/1876	Moths Ireland	
insect - moth	Rose Leaf Miner (Stigmella anomalella)	1	04/10/1980	Moths Ireland	
insect - moth	Shaded Broad-bar (Scotopteryx chenopodiata)	1	22/08/1993	Moths Ireland	
insect - moth	Shoulder-striped Wainscot (Mythimna comma)	1	02/07/1993	Moths Ireland	
insect - moth	Silver-ground Carpet (Xanthorhoe montanata)	1	02/07/1993	Moths Ireland	
insect - moth	Six-spot Burnet (Zygaena filipendulae)	1	06/07/2014	Moths Ireland	
insect - moth	Small Fan-foot (Herminia grisealis)	1	02/07/1993	Moths Ireland	
insect - moth	Small Fan-footed Wave (Idaea biselata)	1	10/08/1986	Moths Ireland	
insect - moth	Small Magpie (Eurrhypara hortulata)	1	03/07/1876	Moths Ireland	
insect - moth	Small White Wave (Asthena albulata)	4	22/08/1993	Moths Ireland	
insect - moth	Snout (Hypena proboscidalis)	2	02/07/1993	Moths Ireland	
insect - moth	Spindle Ermine (Yponomeuta cagnagella)	11	31/12/1908	Microlepidoptera collections (National Museum of Ireland)	
insect - moth	Spuleria flavicaput	1	24/05/1939	Microlepidoptera collections (National Museum of Ireland)	
insect - moth	Stenoptilia pterodactyla	1	03/07/1876	Moths Ireland	
insect - moth	Stigmella basiguttella	1	04/10/1980	Moths Ireland	
insect - moth	Stigmella confusella	1	04/10/1980	Moths Ireland	
insect - moth	Stigmella floslactella	2	17/10/1992	Moths Ireland	
insect - moth	Stigmella hemargyrella	1	04/10/1980	Moths Ireland	
insect - moth	Stigmella hybnerella	1	04/10/1980	Moths Ireland	
insect - moth	Stigmella lapponica	2	23/09/1990	Moths Ireland	
insect - moth	Stigmella microtheriella	2	17/10/1992	Moths Ireland	
insect - moth	Stigmella oxyacanthella	1	04/10/1980	Moths Ireland	
insect - moth	Stigmella perpygmaeella	1	04/10/1980	Moths Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - moth	Stigmella plagicolella	1	11/10/1986	Moths Ireland	
insect - moth	Stigmella ruficapitella	2	17/10/1992	Moths Ireland	
insect - moth	Stigmella salicis	1	11/10/1986	Moths Ireland	
insect - moth	Syndemis musculana	2	24/05/1983	Moths Ireland	
insect - moth	Tawny Marbled Minor (Oligia latruncula)	1	02/07/1993	Moths Ireland	
insect - moth	Teleiodes vulgella	2	18/06/1940	Moths Ireland	
insect - moth	Tischeria ekebladella	3	23/09/1990	Moths Ireland	
insect - moth	True Lover's Knot (Lycophotia porphyrea)	1	02/07/1993	Moths Ireland	
insect - moth	Twenty-plume Moth (Alucita hexadactyla)	1	24/05/1983	Moths Ireland	
insect - moth	Udea lutealis	1	22/08/1993	Moths Ireland	
insect - moth	Udea olivalis	2	02/07/1993	Moths Ireland	
insect - moth	Uncertain (Hoplodrina alsines)	1	02/07/1993	Moths Ireland	
insect - moth	White Ermine (Spilosoma lubricipeda)	1	02/07/1993	Moths Ireland	
insect - moth	Willow Tortrix (Epinotia cruciana)	4	20/06/1940	Moths Ireland	
insect - moth	Ypsolopha ustella	4	04/10/1980	Moths Ireland	
insect - moth	Zelleria hepariella	3	25/07/1940	Moths Ireland	
insect - orthopteran	Common Green Grasshopper (Omocestus viridulus)	1	31/08/1979	Grasshoppers, Crickets and Allied Insects (Orthoptera) of Ireland	
insect - stonefly (Plecoptera)	Leuctra fusca	1	12/10/1985	Stoneflies (Plecoptera) of Ireland	
insect - true bug (Hemiptera)	Acompocoris pygmaeus	1	15/09/1931	True Bugs (Heteroptera) of Ireland	
insect - true fly (Diptera)	Brachyopa insensilis	1	24/05/1986	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Brachyopa scutellaris	1	24/05/1978	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Brillia flavifrons	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Cheilosia grossa	1	30/03/1974	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Chrysotoxum arcuatum	1	12/08/1983	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Conops quadrifasciatus	1	15/09/1973	Conopidae of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - true fly (Diptera)	Cricotopus bicinctus	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Cricotopus trifascia	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Diamesa tonsa	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Dicranomyia autumnalis	1	30/06/1940	Craneflies of Ireland	
insect - true fly (Diptera)	Dicranota pavida	1	31/08/1988	Craneflies of Ireland	
insect - true fly (Diptera)	Diogma glabrata	1	30/06/1940	Craneflies of Ireland	
insect - true fly (Diptera)	Eristalis tenax	1	23/03/1973	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Eupeodes luniger	1	23/03/1973	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Gonomyia dentata	1	30/06/1940	Craneflies of Ireland	
insect - true fly (Diptera)	Heringia heringi	1	24/05/1978	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Melangyna lasiophthalma	1	30/03/1974	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Metalimnobia bifasciata	1	17/09/1893	Craneflies of Ireland	
insect - true fly (Diptera)	Nephrotoma crocata	1	19/06/1983	Craneflies of Ireland	
insect - true fly (Diptera)	Paradelphomyia fuscula	1	31/07/1940	Craneflies of Ireland	
insect - true fly (Diptera)	Parasyrphus malinellus	1	15/05/1998	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Parasyrphus punctulatus	1	15/05/1998	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Pedicia littoralis	1	01/08/1988	Craneflies of Ireland	
insect - true fly (Diptera)	Pipiza luteitarsis	1	24/05/1978	Hoverflies (Syrphidae) of Ireland	
insect - true fly (Diptera)	Platycheirus albimanus	1	23/03/1973	Hoverflies (Syrphidae) of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
insect - true fly (Diptera)	Potthastia gaedii	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Potthastia longimana	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Sarcophaga aratrix	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga carnaria	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga crassimargo	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga haemorrhoa	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga incisilobata	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga melanura	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga nigriventris	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga subvicina	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga teretirostris	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Sarcophaga vicina	3	31/08/1991	Flesh Flies (Sarcophagidae) of Ireland	
insect - true fly (Diptera)	Synorthocladius semivirens	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Tvetenia calvescens	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
insect - true fly (Diptera)	Tvetenia discoloripes	1	31/12/1970	The Chironomidae (Diptera) of Ireland	
liverwort	Endive Pellia (Pellia endiviifolia)	2	16/09/2011	Bryophytes of Ireland	Threatened Species: Least concern
millipede	Blunt-tailed Snake Millipede (Cylindroiulus punctatus)	1	31/05/1975	Millipedes of Ireland	
millipede	Brachyiulus pusillus	1	30/04/1977	Millipedes of Ireland	
millipede	Common Flat-backed Millipede (Polydesmus angustus)	1	30/04/1977	Millipedes of Ireland	
millipede	Pill Millipede (Glomeris marginata)	1	31/05/1975	Millipedes of Ireland	
millipede	Snake Millipede (Proteroiulus fuscus)	1	31/05/1975	Millipedes of Ireland	

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
millipede	Striped Millipede (Ommatoiulus sabulosus)	1	31/05/1975	Millipedes of Ireland	
millipede	White-legged Snake Millipede (Tachypodoiulus niger)	1	31/05/1975	Millipedes of Ireland	
moss	Beck Pocket-moss (Fissidens rufulus)	1	31/12/1975	Bryophytes of Ireland	Protected Species: Flora Protection Order || Protected Species: Flora Protection Order >> Flora Protection Order 2015 Schedule B (Mosses) || Threatened Species: Endangered
moss	Bird's-claw Beard-moss (Barbula unguiculata)	1	09/07/2007	Bryophytes of Ireland	Threatened Species: Least concern
moss	Fern-leaved Hook-moss (Cratoneuron filicinum)	2	16/09/2011	Bryophytes of Ireland	Threatened Species: Least concern
moss	Olive Beard-moss (Didymodon tophaceus)	1	04/12/2009	Bryophytes of Ireland	Threatened Species: Least concern
moss	Palustriella commutata var. commutata	1	04/12/2009	Bryophytes of Ireland	
moss	River Feather-moss (Brachythecium rivulare)	1	16/09/2011	Bryophytes of Ireland	Threatened Species: Least concern
slime mould	Comatricha laxa	1	05/11/2003	General Biodiversity Records from Ireland	
slime mould	Physarum ovisporum	1	03/10/1926	Fungal Records for Ireland	
slime mould	Trichia botrytis var. botrytis	1	09/12/1923	Fungal Records for Ireland	
slime mould	Trichia persimilis	1	09/12/1923	Fungal Records for Ireland	
terrestrial mammal	Brown Long-eared Bat (Plecotus auritus)	3	31/05/2007	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
terrestrial mammal	Daubenton's Bat (Myotis daubentonii)	51	26/08/2014	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
terrestrial mammal	Eastern Grey Squirrel (Sciurus carolinensis)	9	14/02/2017	Mammals of Ireland 2016-2025	Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> EU Regulation No. 1143/2014 || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
terrestrial mammal	Eurasian Badger (Meles meles)	2	31/12/2007	Badger Setts of Ireland Database	Protected Species: Wildlife Acts
terrestrial mammal	Eurasian Red Squirrel (Sciurus vulgaris)	6	06/07/2022	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts

Species group	Species name	Record count	Date of last record	Title of dataset	Designation
terrestrial mammal	European Otter (Lutra lutra)	1	07/05/1980	Otter Survey of Ireland 1982	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
terrestrial mammal	Irish Stoat (Mustela erminea subsp. hibernica)	1	28/05/2012	Atlas of Mammals in Ireland 2010-2015	
terrestrial mammal	Lesser Noctule (Nyctalus leisleri)	3	27/08/2009	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
terrestrial mammal	Pine Marten (Martes martes)	1	23/07/2015	Atlas of Mammals in Ireland 2010-2015	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
terrestrial mammal	Pipistrelle (Pipistrellus pipistrellus sensu lato)	2	31/05/2007	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
terrestrial mammal	Red Fox (Vulpes vulpes)	1	23/06/2018	Mammals of Ireland 2016-2025	
terrestrial mammal	Soprano Pipistrelle (Pipistrellus pygmaeus)	4	16/07/2010	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts