

# **AAS Report**

**Proposed Old Kilcullen Heritage Trail** 



# **Document Details**

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#### 1 Introduction

Flynn Furney Environmental Consultants have been appointed to provide the information necessary to allow the competent authority to conduct an Article 6(3) Screening for Appropriate Assessment for the proposed Old Kilcullen Heritage Trail at Old Kilcullen, Co. Kildare. A full description of the proposed works is given in Section 2 below.



Figure 1: Location of proposed development

Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). This Appropriate Assessment Screening Report has been prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning



Authorities (DoEHLG, 2010).

# 1.1 Relevant Legislation and Overall Screening Methodology

The methodology for this screening statement is set out in a document prepared for the Environment DG of the European Commission entitled 'Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC' (European Commission, 2019, amended 2021). This report and any contributory fieldwork were carried out in accordance with guidelines given by the Department of Environment, Heritage and Local Government (2009, amended 2010).

The process is given in Articles 6(3) and 6(4) of the Habitats Directive and is commonly referred to as 'Appropriate Assessments' (which in fact refers to Stage 2 in the sequence under the Habitats Directive Article 6 assessment). Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the (Natura 2000) site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

Article 6(4) of the same directive states:

"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory



measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest."

It is the responsibility of the proponent of the plan or project to provide the relevant information (ecological surveys, research, analysis etc.) for submission to the 'competent national authority'. Having satisfied itself that the information is complete and objective, the competent authority will use this information to screen the project, i.e. to determine if an AA is required and to carry out the AA, if one is deemed necessary. The competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned. The appropriate assessment process has four stages. Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 site, there is no requirement to proceed further. The four stages are:

- 1. Screening to determine if an appropriate assessment is required.
- 2. Appropriate assessment
- 3. Consideration of alternative solutions
- 4. Imperative Reasons of Overriding Public Interest/Derogation

Table 1: The stages of AA

#### Stage 1: Screening for AA

The aim of screening is to assess firstly if the plan or project is directly connected with or necessary to the management of Natura 2000 Site(s); or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a Natura 2000 Site. This is done by examining the proposed plan or project and the conservation



objectives of any Natura 2000 Sites that might potentially be affected. If screening determines that there is potential for significant effects or there is uncertainty regarding the significance of effects, then it will be recommended that the plan or project is brought forward to the next stage of the AA process.

#### **Stage 2: Appropriate Assessment**

The aim of stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant Natura 2000 Sites. As part of the assessment, a key consideration is 'in combination' effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Stage 3.

#### **Stage 3: Assessment of Alternative Solutions**

If it is not possible during Stage 2 of the AA process to conclude that there will be no adverse effects on site integrity, Stage 3 of the process must be undertaken which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have adverse impacts on the integrity of a Natura 2000 Site. It should also be noted that EU guidance on this stage of the process states that, 'other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria' (EC, 2002). In other words, if alternative solutions exist that do not have adverse impacts on Natura 2000 Sites; they should be adopted regardless of economic considerations. This stage of the AA process should result in the identification of the least damaging options for the plan or project.

#### Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation

This stage of the AA process is undertaken when it has been determined that a plan or project will have adverse effects on the integrity of a Natura 2000 Site, but that no alternatives exist. At this stage of the



AA process, it is the characteristics of the plan or project itself that will determine whether or not the competent authority can allow it to progress. This is the determination of 'overriding public interest'. It is important to note that in the case of Natura 2000 Sites that include in their qualifying features 'priority' habitats or species, as defined in Annex I and II of the Directive, the demonstration of 'overriding public interest' is not sufficient and it must be demonstrated that the plan or project is necessary for 'human health or safety considerations'. Where plans or projects meet these criteria, they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures.

# 1.2 Appropriate Assessment Screening Report

This report provides stage one: screening for appropriate assessment. It aims to establish whether a plan or project is likely to have any significant effects on any Natura 2000 sites. The study is based on a preliminary impact assessment using both publicly available data and data collected during site visits and ecological surveys. This is followed by a determination of whether there is a risk that the effects identified could significantly impact any Natura 2000 sites, and if so, an AA is required. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by the European Court of Justice case law. Therefore, where significant effects are likely, possible or uncertain at the screening stage, AA will be required.

#### 1.3 Reference Documents

The following relevant documents were considered in preparation of this report.

Table 2: Reference Documents



Name / Number	Description
Appropriate Assessment of Plans and	National guidance on Appropriate Assessment for planning
Projects in Ireland - Guidance for	authorities. Department of Environment, Heritage and Local
Planning Authorities	Government, (2010 revision)
	Circulars issued by the Department of Environment, Heritage
Appropriate Assessment under Article	and Local Government with guidance relating to Appropriate
6 of the Habitats Directive: Guidance	Assessment.
for Planning Authorities	Circular NPWS 1/10 & PSSP 2/10 (2010)
Assessment of Plans and Projects	The guidance within this document provides a non-mandatory
Significantly Affecting Natura 2000	methodology for carrying out assessments required under
sites: Methodological Guidance on the	Articles 6(3) and (4) of the Habitats Directive
Provisions of Article 6(3) and (4) of the	European Commission Environment Directorate-General, (2001
Habitats Directive 92/43/EEC	and updates April 2015 and September 2021).
	Dublication to the Member States with an interpretation of
Managing Natura 2000 Sites: The	Publication to the Member States with an interpretation of
Provisions of Article 6 of the Habitats	certain concepts in Article 6 of the Habitats Directive.
Directive 92/43/EEC	EC Environment Directorate-General (2018)
Communication from the Commission	Publication relating to the use of the precautionary principle.
on the precautionary principle.	European Commission (2000)

# 1.4 Relevant Case Law

The European Court of Justice has a considerable body of case law relating to the application of Articles



6(3) and 6(4) of the Directive; Table 3 below provides some of the rulings relevant to the current assessment.

Table 3: Relevant case-law from the European Court of Justice

Case	Ruling
People Over	The ruling of the CJEU in this case requires that any conclusion of 'no Likely
Wind and	Significant Effect' on a Natura 2000 Site must be made prior to any
Sweetman v	consideration of measures to avoid or reduce harm to the Natura 2000 Site.
Coillte Teoranta	The determination of Likely Significant Effects should not, in the opinion of
(C-323/17)	the CJEU, constitute an attempt at detailed technical analyses. This should
	be conducted as part of the AA.
Waddenzee (C-	The ruling in this case clarified that AA must be conducted using best
127/02)	scientific knowledge, and that there must be no reasonable scientific doubt
, ,	in the conclusions drawn.
	The Waddenzee ruling also provided clarity on the definition of 'significant
	effect', which would be any effect from a plan or project which is likely to
	undermine the conservation objectives of any Natura 2000 Site.
Holohan and	The conclusions of the Court in this case were that consideration must be
Others v An	given during AA to:
Bord Pleanála	effects on qualifying habitats and/or species of a SAC or SPA, even when
(C-461/17)	occurring outside of the boundary of a Natura 2000 Site, if these are relevant
	to the site meeting its conservation objectives; and,
	effects on non-qualifying habitats and/or species on which the qualifying
	habitats and/or species depend, and which could result in adverse effects
	on the integrity of the Natura 2000 Site.
T.C Briels and	The ruling of the ECJ in this case determined that compensatory measures



Others v	cannot be used to support a conclusion of no adverse effect on site integrity.
Minister van	
Infrastructuur	
en Milieu (C-	
521/12)	
Eco Advocacy	The ruling (preliminary) of the ECJ in this case related to a number of
CLG v An Bord	questions, regarding the requirement of the state to transparently state its
Pleanála (C-	reasoning when screening a project out at Stage 1, and importantly also
721/21)	the ability to consider mitigation that was built-in to the design of a
	project, i.e., 'best practice' to be considered at Stage 1 screening of a
	project.

# 1.5 Statement of Authority

Flynn Furney Environmental Consultants have more than 20 years of experience in ecological surveying and management. The company has detailed knowledge on the principles and implementation of both Irish and European environmental legislation. FFEC has worked closely with statutory bodies including the National Parks and Wildlife Service and Waterways Ireland on habitat management and protection projects. Other expertise includes Ecological Impact Assessment, Habitat and Floral Surveys, Bird Surveying, Bat Surveying, Fish and Waterways surveys.

The surveying and reporting were carried out by Christopher Doyle, PGDip. and Lauren Woods, BSc and reviewed by Ashley Maggy, MSc. And C. Doyle.



# 2 Description of Proposed Development

# 2.1 Proposed Development

The Old Kilcullen area is rich in natural and archaeological heritage. The area is adjacent to the hill of Dun Ailinne, which is a candidate UNESCO World Heritage Site. The project area contains two National Monuments, being the Old Kilcullen Round Tower and a barrow north of the Round Tower. The rural area also has a public house, two construction businesses, as well as low-density residential properties consisting of detached bungalows. The land is generally in agricultural use, with some commonage land to the north of the area.

The road network in the area consists of narrow local roads with typical widths of 4 m. The edges of the carriageway consist of grass margins. These margins are well-maintained adjacent to residential properties but have grown wild in most other areas. The roads are bounded by mature hedgerows in various conditions along the routes. Traffic levels through the area are generally low, and mostly residents and workers. There are no significant trip attractors in the immediate area, beyond the round tower, which is a very small site. The barrow is almost unnoticeable from the road.

The land around the site is primarily agricultural with several low-density detached bungalows and an occasional two-story house. Commercial development is limited to a rural public house, a quarry/waste facility and a crane hire compound.

The project will be divided into two phases. Phase one includes creating trails from Halverstown Crossroads to the 1798 Monument. Phase Two involves creating trails from Halverstown crossroads to Hacklow crossroads. Both will include traffic calming measures such as quiet lanes, gateway zones, false cattle grid, signage and road markings such as verge lines.

**Phase One** will also include car parking provisions (11 car parking spaces at the northern end of the walking route). The spaces are to be provided parallel to the carriageway and will be separated by the managed margin walking route to ensure safe vehicle access and egress away from the carriageway. The



spaces and managed margins will be reinforced with geosynthetic grass reinforcing grids on a sub-base layer on a geotextile membrane. The car parking area will require ongoing maintenance consisting of grass cutting. An informal car parking area is located adjacent to the Old Kilcullen Round Tower. It is not proposed to include this area as a car park serving the walking route as it is located close to an existing junction and sight visibility is restricted at this location. Control of unauthorised car parking at the Halverstown junction with the R448 and at the Barrow will be provided in the form of 0.75 m high 0.25 m x 0.25 m timber bollards at 3 m intervals. The bollards will be fitted with reflector strips. The bollards will be removable where access is required.

Three bicycle parking racks (for six bicycles) will be provided on a bitumen macadam surface with a coloured resin surface to differentiate the parking area from the surrounding area. The cycle rack will be simple tubular stainless-steel racks set in concrete foundations. The parking bay will be laid out so that the bicycles are parked parallel with the carriageway line of travel.

**Phase Two** of the project is located between Halverstown Cross and Hacklow Cross. This phase envisages the development of a vulnerable road user (VRU) track for approximately 530 m and for local road improvements on the L6083 for a length of approximately 840 m. The proposed VRU track will facilitate walkers, cyclists and equestrian users. The track will be surfaced with unbound quarry dust and shall be designed to comply with TII DN-GEO-03047 which states:

"Although a closed pavement construction is preferred by cyclists in terms of comfort and safety, there are occasions where a surface is required to give a sense of the environment. In rural cycleway and greenway situations, where the cycleways attractiveness is just as important as comfort, dust path construction or other loose material construction maybe the preferred option in order to blend with the environment and to avoid unnecessary impacts in forests, along protected heritage trails, tow paths and along riverbanks. The application of loose surfaces can enhance the cycleways' appeal to its users due to its more natural aesthetics."

Over-the-edge drainage is the preferred arrangement for a rural road with a cycleway adjoining and is the method used for the VRU track. Where over-the-edge drainage is used, it is important to ensure that the



surface water runoff flows off the cycleway towards the drainage ditch and does not pond. Suitable crossfall of between 1% and 3% shall be provided on the trail-way pavement. The verge either side of the route will be constructed with a crossfall of no more than 10%. The outside pavement edge detail of the trail route should be higher than the proposed ground level by the depth of the pavement wearing course to stop back-flow of the surface water runoff from a flat grassed verge. The balance of the Phase Two route will require repair of potholes and surface dressing.

The existing route is a cul-de-sac and provides local residential access and agricultural access only. There are no opportunities for vehicle turning at the end of the roadway. Signage will be required to identify the road as a cul-de-sac without turning opportunities. Managed margins shall be provided along the local road element of the Phase Two trail where possible. Gateway zone signage and traffic calming measures, such as false cattle grids, will be provided along the L6083 as appropriate and will generally mirror the provisions along the Phase One element of the project.



# 3 Methodology

#### 3.1 Desk Study

A desktop study was carried out as part of this screening process in April 2025. This included a review of available literature on the site and its immediate environs. Sources of information included the National Parks and Wildlife Service databases on protected sites and species data, and from the Environmental Protection Agency on watercourses.

## 3.2 Data Used to Carry Out the Assessment

The following sources of data were employed:

- Environmental Protection Agency (EPA) Appropriate Assessment Tool
- EPA Maps (to identify watercourses, hydrology and Natura 2000 site boundaries)
- NPWS protected species database and online mapping
- National Biodiversity Data Centre
- Inland Fisheries Ireland
- An Bord Pleanála's online database

#### 3.3 SPR Model

This assessment was carried out with regard to the source-pathway-receptor (SPR) approach, a standard tool in environmental assessment. The SPR concept in ecological impact assessment relates to the idea that for the risk of an impact to occur, a source is needed (a development site); an environmental receptor is present (a lake); and finally, there must be a pathway between the source and the receptor (a watercourse linking the development site to the lake). Even though there might be a risk of an impact occurring, that does not necessarily mean that it will occur, and even if it does occur, it may not be significant. Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the



risk and the characteristics of the receptor.

In this instance, the most relevant receptors are any relevant Natura 2000 sites with connectivity to the proposed works. These were considered during the desktop study stage of this screening assessment in order to assess the potential for significant effects upon their Qualifying Interests (QIs), Sites of Community Importance (SCIs) and Conservation Objectives (COs). This stage of the process is used to determine whether any of the Natura sites may be 'screened out'. That is, they can be regarded as not being relevant to the process, having no potential to be significantly affected or impacted upon.

#### 3.4 Field Survey

The field survey was carried out on the 6<sup>th</sup> of March 2025. Baseline ecological conditions were assessed. Habitats were classified according to Fossitt (2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Scannell and Synnott, 1987; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species were noted according to the guidelines given by the JNCC (2010) with reference to Smith et al. (2011) & Scannell and Synnott (1987).

#### 4 Results

#### 4.1 Desk Study

#### 4.1.1 Surface Water

The closest WFD river waterbody to the site is the Liffey\_060 WFD waterbody (European code: IE\_EA\_09L010700), locally known as the Kilcullen stream (750 m to the east of the site). This WFD river waterbody achieved an overall 'Moderate' status based on the 'Surface Waterbody WFD Status 2016-2021'. The proposed trail is not hydrologically connected to this waterbody. Another WFD waterbody exists around 1 km to the north of the site. This is the Liffey\_070 WFD waterbody (European Code: IE\_EA\_09L010850), locally known as the Kilcullen River. This WFD river waterbody achieved an overall 'High' status based on the 'Surface Waterbody WFD Status 2016-2021'. The proposed trail is not hydrologically connected to this water body. The trail falls within the Liffey and Dublin Bay (Catchment ID:



09), specifically the Liffey\_SC\_040 (Subcatchment\_ID: 90\_11), and the Barrow WFD catchment (Catchment\_ID: 14), specifically the Barrow\_SC\_060 (Subcatchment\_ID: 14\_18).



Figure 2: Surface water features surrounding the site of the proposed trail

#### 4.1.2 Ground Water

The site of the proposed development falls within three WFD ground waterbodies, including the Kilcullen WFD ground waterbody (European Code: IE\_EA\_G\_003), the New Ross WFD ground waterbody (European Code: IE\_SE\_G\_152), and the Usk Gravels WFD ground waterbody (European Code: IE\_SE\_G\_167).



# **4.1.3** Species Records

# RecordsfromtheNationalBiodiversityDataCentre(NBDC)forthesiteoftheproposedtrailandthe surrounding area are presented in Appendix 1: Biodiversity records accessed

#### Appendix 1.

#### 4.1.4 Invasive Species Records

Several First Schedule and non-First Schedule invasive species that have been recorded on the NBDC database within 1 km (OSI grid squares N80I and N80H), which encompasses the proposed development, were assessed. However, none were recorded within the footprints of the proposed works, and none of the species below were recorded during the field survey.

Table 4: Records of invasive species within 1 km of the proposed development (NBDC, 2024)

Invasive Species	Invasiveness	First Schedule	Recorded on Site
Eastern Grey Squirrel (Sciurus carolinensis)	High	Yes	No

# 4.2 Field Study Results

The following section describes the habitats found within the proposed project site. Photos of the habitats present are available in **Appendix 2**.

#### 4.2.1 Habitats Description

The project area features a 4–5 m wide road corridor bordered by diverse hedgerows (WL1) composed of Hazel (*Corylus avellana*), Ivy (*Hedera helix*), Gorse (*Ulex europaeus*), Holly (*Ilex aquifolium*), Ash (*Fraxinus excelsior*), Willow (*Salix* species), Elder (*Sambucus nigra*), and Blackberry (*Rubus fruticosus*). Beyond the hedgerows lies improved agricultural grassland (GA1) with occasional gated access points. Roadside



verges support standard herb species such as Vetch (*Vicia* species), Red Clover (*Trifolium pratense*), White Clover (*Trifolium repens*), Wild Carrot (*Daucus carota*), Broadleaf Dock (*Rumex obtusifolius*), Cleavers (*Galium aparine*), Creeping Buttercup (*Ranunculus repens*), and Meadow Buttercup (*Ranunculus acris*). In wetter areas (GS4) near drains or small standing pools, Common Rush (*Juncus effusus*) becomes more prevalent. Most grassy areas conform to GA1 or GA2 classifications, with GA2 managed as lawns within house perimeters and appearing rank in unmanaged spots.

Around the barrow, hedgerows transition into a treeline (WL2) with Scots Pine (*Pinus sylvestris*), Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*), Beech (*Fagus sylvatica*), Poplar (*Populus* species), and Cherry Laurel (*Prunus laurocerasus*). In some areas, the verge widens to several meters and resembles amenity grassland (GA2) with patches of Blackberry scrub (WS1). The barrow itself is an open area of rank GA2 with pockets of immature woodland (WS2) and WS1. Around the round tower and cemetery, there is little vegetation of note, with verges and hedgerows largely disappearing, giving way to residential gardens and parking space for Brennan's pub. The cemetery appears lightly managed with semi-long GA2 grass, while the greater area is GA1, grazed by sheep.

From the brow of a hill, the road descends southward, with a tall Sycamore (*Acer pseudoplatanus*) treeline lining both sides of the road just beyond the bar. South of the bar, the hedgerows reappear, composed of species similar to those earlier, with some Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*) now interspersed. The forb community remains unremarkable. Hedgerows continue along both sides of the road until reaching residential ribbon housing on the east side, with a large field on the west side bordered by an over-managed, box-cut hedgerow. Some Snowberry (*Symphoricarpos albus*) is present in the hedges in front of one house, likely planted by the owner or a previous occupant. The hedgerow and treeline resume approximately 100 m north of the main road junction.

#### 4.2.2 Habitats Directive - QI Habitats

Annex I habitats, identified as of utmost conservation importance under the Habitats Directive, receive legal protection within the Irish framework through the transposition of the Directive into national law, primarily under the European Communities (Natural Habitats) Regulations (S.I. 94 of 1997), which



mandates the designation and conservation of Special Areas of Conservation to safeguard these critical habitats. Table **5** assesses whether any habitat found during ground surveys has links with any of these habitat types.

Table 5: Summary of the habitats recorded within the proposed project site

Habitat Recorded	Fossitt Code	Links with Annex I Habitats
Buildings and Artificial Surfaces	BL3	No
Hedgerows	WL1	No
Improved Agricultural Grassland	GA1	No
Grassy Verges	GS2	No
Wet Grassland	GS4	No
Treelines	WL2	No
Scrub	WS1	No
Immature Woodland	WS2	No

# 4.2.3 Significance of Habitats

The majority of the habitat types found surrounding the site are those associated with semi-urban. There are no habitats listed on Annex I of Directive 92/43/EEC (Habitats Directive) within the survey area. No species of rare, threatened or protected species of plants as per the Red Data List (Wyse Jackson et al., 2016) and no species listed on the Flora (Protection) Order 2022 were present.



#### 4.2.4 Habitats Directive - QI Species

#### 4.2.4.1 *Mammals*

Most terrestrial mammals have some level of legal protection in Ireland, with 13 listed on the EU Habitats Directive, 22 on national legislation in the Republic of Ireland, and 18 on national legislation in Northern Ireland. 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. No Natura 2000 sites were found to have connectivity to the proposed development site and no evidence of EU Annex mammal species was observed during the field survey.

#### 4.2.4.2 Fish

The proposed development route does not interact with, or have any connectivity to, any waterbodies.

#### 4.2.4.3 Invertebrates

No QI invertebrate species were found during the desk study when assessing potential for impacts, as no Natura 2000 sites were found to have connectivity to the proposed development site.

#### 4.2.5 Birds Directive - QI Species

A dedicated bird survey was not carried out; however, during the survey, all of birds seen and heard were typical of species within a semi-urban setting. No birds protected under the EU Birds Directive (2009/147/EC), or the Habitats Directive (Council Directive 92/43/EEC) were recorded within the footprint of the proposed development. Species recorded included Rook (*Corvus frugilegus*), Wood Pigeon (*Columba palumbus*), Blue Tit (*Cyanistes caeruleus*) and Wren (*Troglodytes troglodytes*), all of which have 'Green' conservation status in Ireland. No EU Annex bird species were observed.

#### 4.2.6 Invasive Species

Invasive species can have significant and detrimental impacts on Natura 2000 sites, which are designated to protect habitats and species of European importance. The introduction and spread of invasive species can disrupt ecosystems, threaten native biodiversity, and compromise the achievement of conservation objectives.



The following invasive plant species were observed on site.

Table 6: Location of invasive species on-site

Invasive Species Recorded On-Site	Invasiveness (NBDC, 2025)	Location	Risk of spread to Natura 2000 sites
Cherry Laurel (Prunus laurocerasus)	High impact	In hedgerows along the route	Negligible. Proposed development will not be moving or removing these species as they exist within private land.
Snowberry (Symphoricarpos alba)	Medium impact		

# 5 Identification of the Natura 2000 Sites within the Likely Zone of Influence

The following methodology was used to establish which Natura 2000 Sites are within the Likely Zone of Influence (ZoI) of the proposed development:

- The most recent Geographic Information System (GIS) spatial datasets for designated Natura 2000
   Sites and water catchments were acquired from the National Parks and Wildlife Service (NPWS)
   website (www.npws.ie) and the Environmental Protection Agency (EPA) website (www.epa.ie).
   These datasets were employed to discern Natura 2000 Sites susceptible to potential impacts from
   the Proposed Development.
- An investigation into the work site characteristics and the risks to the environment with consideration for the potential zone of influence, was carried out to determine all probable pathways and risks to site conservation.
- A source-pathway-receptor model was utilised to identify Natura 2000 Sites within a 15 km radius
  of the development site, providing contextual information on these sites based on site-specific
  conservation objectives. The assessment also considered Natura 2000 Sites beyond the 15 km



radius, employing a source-pathway-receptor approach to identify potential impacts. Hydrological catchment mapping facilitated the evaluation of potential hydrological connectivity between the Proposed Development site and Natura 2000 Sites.

 For Special Protection Areas (SPAs), lacking specific European or Irish guidance, the 'Assessing Connectivity with Special Protection Areas (SPA)' guidance from Scottish Natural Heritage (SNH) (2016) was consulted.

All pertinent Natura 2000 Sites are considered, identifying those within the likely zone of influence. This screening assessment evaluates direct and indirect impacts of the Proposed Development, considering size and scale, land-take, distance, resource requirements, emissions, excavation, transportation, and construction/operation duration. Site synopses and conservation objectives from the NPWS website were reviewed as of the report's preparation.

#### 5.1 Works, Site Characteristics and Risks to the Environment

The principal risks posed by the project relate to surface water discharge from the site during the proposed works that may impact the water quality of the receiving environment, leading to likely significant effects (LSE) on any QIs or Site(s) of Community Importance (SCI) species.

Table 7: Potential Impacts, Effects and their zone of influence

Potential Impact and Effect	Description	Zone of Influence
Construction/Installation of	The permanent loss of the	Lands within the proposed
Infrastructure and potential QI	habitats is present in the	footprint of works and access
habitat loss.	footprint of the proposed works.	routes.
Changes in water quality and	Reduction in the quality of	Changes in surface water quality
quantity/distribution resulting	retained habitat or loss of habitat	within the local water courses or
in habitat loss or degradation.	from surrounding areas as a	surface water bodies including
	result of surface water or	the rivers in close proximity

	groundwater pollution.	associated with the proposed development.
Noise, dust, vibration and or human presence resulting in disturbance.	Direct impact on species reducing their ability to forage or breed.	Within or adjacent to the works area for birds.
Invasive Species	The spread of invasive species within Natura 2000 Sites as a result of this project.	Assessed based on the presence of invasive species stands within or surrounding the works area.



## 5.2 Natura 2000 Sites within the Zone of Influence (ZoI)

There are no Natura 2000 Sites located within the Zone of Influence (ZoI) of the proposed Old Kilcullen Heritage Trail. The nearest Natura 2000 Site is Pollardstown Fen SAC, situated approximately 7.8 km to the northwest. There is no evident ecological connection between the proposed trail and this SAC, as there are no linking watercourses or hedgerows, and no QI habitats or species were identified within the footprint of the proposed works. All remaining Natura 2000 Sites are at a greater distance and have no identifiable connectivity with the proposed development. Given the nature and scale of the development, there is no known vector, pathway, or conduit for impacts between the proposed development and the remaining Natura 2000 sites.

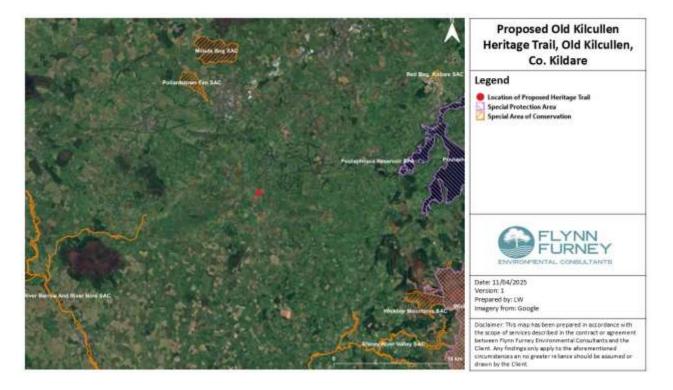


Figure 4: Natura 2000 Sites in close proximity to the proposed development



# 5.3 Natura 2000 Sites with the Potential to be Significantly Affected by the Proposed Development

Initial screening has identified no Natura 2000 Sites requiring further consideration in this assessment. Therefore, the proposed development is considered extremely unlikely (NRA, 2009) to have any significant direct or indirect impacts on any Natura 2000 sites and they are not considered further in this screening assessment.

# 6 Findings Of Article 6(3) Screening Assessment

## 6.1 Is the Project Necessary to the Management of Natura 2000 Sites

The proposed project is not necessary or connected with the management of any Natura 2000 Sites.

## 6.2 Possible Direct, Indirect or Secondary Impacts

All impacts (both direct and indirect) have been assessed within this report. A conclusion has been drawn by the author that no significant impacts are predicted as a result of the proposed development.

# 6.3 Cumulative and In-Combination Impacts

A search of the Kildare County Council planning registers was carried out in April 2025. Nearby projects were considered for any in combination or cumulative impacts.

Several planning permissions had been granted in the surrounding area of the proposed Old Kilcullen Heritage Trail, primarily for residential developments. These included permissions for new single-storey dwellings, domestic garages, extensions to existing houses, upgrades to



entrances, and installation of on-site effluent treatment systems (e.g., planning refs 16/1121, 20/56, 21/394, 18/420, 20/693, 17/1233, and 21/1827). In addition to these smaller-scale developments, a larger quarrying and soil recovery operation had been permitted to the south of the proposed trail at Kilsaran, Kilcullen. Planning ref 18/453 permitted the establishment of an inert soil waste recovery facility involving the importation of approximately 1.2 million tonnes of inert material over eight years, with shared use of existing site infrastructure such as the weighbridge, site office, welfare facilities, and a waste inspection area. A further application submitted to An Bord Pleanála (Ref. ABP-2460265) sought to increase the permitted intake to 2.06 million tonnes and extend the operational life of the facility to December 2029. This application also included the continued use of existing infrastructure, ongoing environmental monitoring, and final site restoration to native woodland and grassland habitats. Both quarryrelated developments required waste licences from the Environmental Protection Agency and were supported by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS). However, cumulative and in-combination effects are not predicted in relation to the proposed Old Kilcullen Heritage Trail, as the project is not likely to have any significant impact on Natura 2000 sites and therefore could not contribute to cumulative or in-combination impacts.

#### 6.4 Conclusion

This report presents the information for the relevant authority, Kildare County Council, to carry out a screening for AA. A recommendation that a <u>Stage 2 is not required</u> is made, based on the findings of this assessment. It is for the relevant authority to reach one of the following conclusions:

- I. A Stage 2 AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European Natura 2000 Sites.
- II. A Stage 2 AA of the proposed development is not required if it can be excluded, on the



basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European Natura 2000 Sites.

It is the conclusion of this report that the proposed heritage trail will not have any likely significant effects on European Natura 2000 Sites and progression to a Stage 2 Appropriate Assessment is not required. Accordingly, having carried out the Stage 1 Appropriate Assessment Screening, the competent authority may determine that a Stage 2 Appropriate Assessment of the proposed site investigation works is not required as it can be excluded, on the basis of objective scientific information following screening under Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, that the proposed works, individually or in combination with other plans or projects, will not have a significant effect on any Natura 2000 Site.



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# **Appendix 1: Biodiversity records accessed**

#### Appendix 1: NBDC records within 1km of the site

Species Name	Record count	Date of last record	Title of dataset	Designation
Common Frog (Rana temporaria)	1	31/12/1979	Irish National Frog Database	Protected Species: EU Habitats Directive    Protected Species: EU Habitats Directive >> Annex V    Protected Species: Wildlife Acts
Barn Owl (Tyto alba)	2	24/03/2020	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
Barn Swallow (Hirundo rustica)	5	27/10/2019	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
Black-billed Magpie (Pica pica)	10	31/12/2011	Bird Atlas 2007 - 2011	
Blackcap (Sylvia atricapilla)	6	31/12/2011	Bird Atlas 2007 - 2011	
Black-headed Gull (Larus ridibundus)	4	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
Blue Tit (Cyanistes caeruleus)	16	15/04/2020	Birds of Ireland	
Carrion Crow (Corvus corone)	2	31/12/2011	Bird Atlas 2007 - 2011	
Chaffinch (Fringilla coelebs)	14	02/12/2017	Birds of Ireland	
Coal Tit (Periparus ater)	9	31/12/2011	Bird Atlas 2007 - 2011	



Common Blackbird (Turdus merula)	14	02/12/2017	Birds of Ireland	
Common Bullfinch (Pyrrhula pyrrhula)	8	29/05/2015	Birds of Ireland	
Common Buzzard (Buteo buteo)	13	02/11/2020	Birds of Ireland	
Common Chiffchaff (Phylloscopus collybita)	4	31/12/2011	Bird Atlas 2007 - 2011	
Common Coot (Fulica atra)	2	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	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 II Bird Species     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Conservation Concern -> Birds of Conservation Concern - Amber List
Common Cuckoo (Cuculus canorus)	1	31/07/1972	The First Atlas of Breeding Birds in Britain and Ireland: 1968-1972.	
Common Grasshopper Warbler (Locustella naevia)	1	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts    Threatened Species: Birds of Conservation Concern    Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Common Kestrel (Falco tinnunculus)	9	07/06/2017	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
Common Kingfisher (Alcedo atthis)	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    Threatened Species: Birds of Conservation Concern    Threatened Species: Birds of Conservation Concern >> Birds of

				Conservation Concern - Amber List
Common Linnet (Carduelis cannabina)	7	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
Common Moorhen (Gallinula chloropus)	5	31/12/2011	Bird Atlas 2007 - 2011	
Common Pheasant (Phasianus	9	05/05/2018	Birds of Ireland	Protected Species: Wildlife Acts    Protected
colchicus)				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
Common Raven (Corvus corax)	1	31/12/2011	Bird Atlas 2007 - 2011	
Common Snipe (Gallinago gallinago)	5	10/10/2021	Birds of Ireland	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 III Bird Species
				Threatened Species: Birds of Conservation
				Concern    Threatened Species: Birds of
				Conservation Concern >> Birds of
				Conservation Concern - Amber List
Common Starling (Sturnus vulgaris)	13	02/12/2017	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
Common Swift (Apus apus)	4	28/05/2024	Swifts of Ireland	Protected Species: Wildlife Acts    Threatened
				Species: Birds of Conservation Concern
				Threatened Species: Birds of Conservation
				Concern >> Birds of Conservation Concern -

				Amber List
Common Whitethroat (Sylvia communis)	1	31/12/2011	Bird Atlas 2007 - 2011	
Common Wood Pigeon (Columba palumbus)	13	05/05/2018	Birds of Ireland	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
Corn Crake (Crex crex)	1	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts     Protected Species: EU Birds Directive     Protected Species: EU Birds Directive >> Annex   Bird Species     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Eurasian Collared Dove (Streptopelia decaocto)	4	31/12/2011	Bird Atlas 2007 - 2011	
Eurasian Curlew (Numenius arquata)	2	29/02/1984	The First Atlas of Wintering Birds in Britain and Ireland: 1981/82-1983/84.	Protected Species: Wildlife Acts     Protected Species: EU Birds Directive     Protected Species: EU Birds Directive >> Annex II, Section II Bird Species     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Eurasian Jackdaw (Corvus monedula)	12	31/12/2011	Bird Atlas 2007 - 2011	
Eurasian Jay (Garrulus glandarius)	3	31/12/2011	Bird Atlas 2007 - 2011	
Eurasian Siskin (Carduelis spinus)	2	31/12/2011	Bird Atlas 2007 - 2011	
Eurasian Sparrowhawk (Accipiter nisus)	5	31/12/2011	Bird Atlas 2007 - 2011	
Eurasian Teal (Anas crecca)	2	29/02/1984	The First Atlas of Wintering Birds in Britain and Ireland: 1981/82-1983/84.	Protected Species: Wildlife Acts    Protected Species: EU Birds Directive    Protected Species: EU Birds Directive >> Annex II, Section



Eurasian Tree Sparrow (Passer montanus)	3	31/12/2011	Bird Atlas 2007 - 2011	I Bird Species     Protected Species: EU Birds Directive >> Annex III, Section II Bird Species     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List Protected Species: Wildlife Acts     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern -
Eurasian Treecreeper (Certhia familiaris)	5	31/12/2011	Bird Atlas 2007 - 2011	Amber List
Eurasian Wigeon (Anas penelope)	1	29/02/1984	The First Atlas of Wintering Birds in Britain and Ireland: 1981/82-1983/84.	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 II Bird Species    Threatened Species: Birds of Conservation Concern    Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Eurasian Woodcock (Scolopax rusticola)	1	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 III Bird Species    Threatened Species: Birds of Conservation Concern    Threatened Species: Birds of Conservation Conservation Concern >> Birds of Conservation Concern -> Amber List
European Golden Plover (Pluvialis	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts    Protected

apricaria)				Species: EU Birds Directive    Protected
				Species: EU Birds Directive >> Annex I Bird
				Species     Protected Species: EU Birds
				Directive >> Annex II, Section II Bird Species
				Protected Species: EU Birds Directive >>
				Annex III, Section III Bird Species
				Threatened Species: Birds of Conservation
				Concern    Threatened Species: Birds of
				Conservation Concern >> Birds of
				Conservation Concern - Red List
European Goldfinch (Carduelis	10	31/12/2011	Bird Atlas 2007 - 2011	
carduelis)				
European Greenfinch (Carduelis	12	31/12/2011	Bird Atlas 2007 - 2011	
chloris)				
European Robin (Erithacus rubecula)	12	31/12/2011	Bird Atlas 2007 - 2011	
Fieldfare (Turdus pilaris)	4	31/12/2011	Bird Atlas 2007 - 2011	
Goldcrest (Regulus regulus)	10	02/03/2021	Birds of Ireland	
Great Spotted Woodpecker	2	31/12/2011	Bird Atlas 2007 - 2011	
(Dendrocopos major)				
Great Tit (Parus major)	13	05/05/2018	Birds of Ireland	
Green Sandpiper (Tringa ochropus)	1	31/12/2011	Bird Atlas 2007 - 2011	
Grey Heron (Ardea cinerea)	7	31/12/2011	Bird Atlas 2007 - 2011	
Grey Wagtail (Motacilla cinerea)	8	31/12/2011	Bird Atlas 2007 - 2011	
Hedge Accentor (Prunella modularis)	10	31/12/2011	Bird Atlas 2007 - 2011	
Hen Harrier (Circus cyaneus)	1	29/02/1984	The First Atlas of Wintering Birds in	Protected Species: Wildlife Acts    Protected
			Britain and Ireland: 1981/82-1983/84.	Species: EU Birds Directive    Protected
				Species: EU Birds Directive >> Annex I Bird
				Species    Threatened Species: Birds of
				Conservation Concern    Threatened Species:
				Birds of Conservation Concern >> Birds of
				Conservation Concern - Amber List

Herring Gull (Larus argentatus)	1	29/02/1984	The First Atlas of Wintering Birds in	Protected Species: Wildlife Acts    Threatened
			Britain and Ireland: 1981/82-1983/84.	Species: Birds of Conservation Concern
				Threatened Species: Birds of Conservation
				Concern >> Birds of Conservation Concern -
				Red List
Hooded Crow (Corvus cornix)	14	02/12/2017	Birds of Ireland	
House Martin (Delichon urbicum)	4	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
House Sparrow (Passer domesticus)	8	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
Jack Snipe (Lymnocryptes minimus)	1	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 III Bird Species
Lesser Black-backed Gull (Larus	3	10/10/2021	Birds of Ireland	Protected Species: Wildlife Acts    Threatened
fuscus)				Species: Birds of Conservation Concern
				Threatened Species: Birds of Conservation
				Concern >> Birds of Conservation Concern -
				Amber List
Lesser Redpoll (Carduelis cabaret)	6	31/12/2011	Bird Atlas 2007 - 2011	
Little Grebe (Tachybaptus ruficollis)	4	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



Long-tailed Tit (Aegithalos caudatus)	5	31/12/2011	Bird Atlas 2007 - 2011	
Mallard (Anas platyrhynchos)	7	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
Meadow Pipit (Anthus pratensis)	7	31/12/2011	Bird Atlas 2007 - 2011	
Mistle Thrush (Turdus viscivorus)	11	31/12/2011	Bird Atlas 2007 - 2011	
Mute Swan (Cygnus olor)	6	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
Northern Lapwing (Vanellus vanellus)	5	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts    Protected
				Species: EU Birds Directive    Protected
				Species: EU Birds Directive >> Annex II, Section
				II Bird Species    Threatened Species: Birds of
				Conservation Concern    Threatened Species:
				Birds of Conservation Concern >> Birds of
				Conservation Concern - Red List
Northern Shoveler (Anas clypeata)	1	29/02/1984	The First Atlas of Wintering Birds in	Protected Species: Wildlife Acts    Protected
			Britain and Ireland: 1981/82-1983/84.	Species: EU Birds Directive    Protected
				Species: EU Birds Directive >> Annex II, Section
				I Bird Species    Protected Species: EU Birds
				Directive >> Annex III, Section III Bird Species
				Threatened Species: Birds of Conservation
				Concern    Threatened Species: Birds of
				Conservation Concern >> Birds of
				Conservation Concern - Red List
Peregrine Falcon (Falco peregrinus)	6	25/06/2020	Birds of Ireland	Protected Species: Wildlife Acts    Protected
				Species: EU Birds Directive    Protected
				Species: EU Birds Directive >> Annex I Bird



				Species
Pied Wagtail (Motacilla alba subsp. yarrellii)	2	10/10/2021	Birds of Ireland	
Redwing (Turdus iliacus)	5	02/12/2017	Birds of Ireland	
Reed Bunting (Emberiza schoeniclus)	5	31/12/2011	Bird Atlas 2007 - 2011	
Ringed Plover (Charadrius hiaticula)	1	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Rock Pigeon <i>(Columba livia)</i>	5	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
Rook (Corvus frugilegus)	15	30/09/2018	Birds of Ireland	
Sand Martin <i>(Riparia riparia)</i>	4	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
Sedge Warbler (Acrocephalus schoenobaenus)	2	31/12/2011	Bird Atlas 2007 - 2011	
Sky Lark (Alauda arvensis)	7	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
Song Thrush (Turdus philomelos)	12	02/12/2017	Birds of Ireland	
Spotted Flycatcher (Muscicapa striata)	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
Stock Pigeon (Columba oenas)	6	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
Tufted Duck <i>(Aythya fuligula)</i>	1	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	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 II Bird Species    Threatened Species: Birds of Conservation Concern    Threatened Species: Birds of Conservation Conservation Concern >> Birds of Conservation Concern - Amber List
Whinchat (Saxicola rubetra)	1	31/07/1972	The First Atlas of Breeding Birds in Britain and Ireland: 1968-1972.	Protected Species: Wildlife Acts     Threatened Species: Birds of Conservation Concern     Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
White Wagtail (Motacilla alba)	12	31/12/2011	Bird Atlas 2007 - 2011	
White-throated Dipper (Cinclus cinclus)	7	31/12/2011	Bird Atlas 2007 - 2011	
Whooper Swan (Cygnus cygnus)	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    Threatened Species: Birds of Conservation Concern    Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Willow Warbler (Phylloscopus trochilus)	8	05/05/2018	Birds of Ireland	



Winter Wren (Troglodytes troglodytes)	13	02/12/2017	Birds of Ireland	
Yellowhammer (Emberiza citrinella)	14	15/04/2020	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
Geophilus flavus	1	01/09/1984	Centipedes of Ireland	
Lithobius (Lithobius) forficatus	1	01/01/1913	Centipedes of Ireland	
Strigamia crassipes	1	01/01/1894	Centipedes of Ireland	
Scots Pine (Pinus sylvestris)	1	31/12/1999	BSBI tetrad data for Ireland	
Bracken (Pteridium aquilinum)	1	19/07/2010	Species Data from the National Vegetation Database	
Broad Buckler-fern ( <i>Dryopteris</i> dilatata)	1	31/12/1999	BSBI tetrad data for Ireland	
Hart's-tongue (Phyllitis scolopendrium)	1	31/12/1999	BSBI tetrad data for Ireland	
Maidenhair Spleenwort (Asplenium trichomanes)	1	31/12/1999	BSBI tetrad data for Ireland	
Male-fern (Dryopteris filix-mas)	1	31/12/1999	BSBI tetrad data for Ireland	
Polypodium vulgare Sensu lato	1	31/12/1999	BSBI tetrad data for Ireland	
Rustyback (Ceterach officinarum)	1	31/12/1999	BSBI tetrad data for Ireland	
Soft Shield-fern (Polystichum setiferum)	1	31/12/1999	BSBI tetrad data for Ireland	
Wall-rue (Asplenium ruta-muraria)	1	31/12/1999	BSBI tetrad data for Ireland	
Alder (Alnus glutinosa)	1	31/12/1999	BSBI tetrad data for Ireland	
American Willowherb (Epilobium ciliatum)	1	31/12/1999	BSBI tetrad data for Ireland	
Amphibious Bistort (Persicaria amphibia)	1	31/12/1999	BSBI tetrad data for Ireland	
Annual Meadow-grass (Poa annua)	3	01/07/2021	Vascular plants: Online Atlas of	

		Vessules Blants 2012 Onwards	_
4	24 /42 /4000		
2	19/07/2010	•	
1	31/12/1999	BSBI tetrad data for Ireland	
1		BSBI tetrad data for Ireland	
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			Invasive Species
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		Vegetation Database	
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4	01/07/2021	Vascular plants: Online Atlas of
		Vascular Plants 2012 Onwards
1	31/12/1999	BSBI tetrad data for Ireland
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		Vascular Plants 2012 Onwards
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		Vegetation Database
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Common Dog-violet (Viola riviniana)	2	19/04/2018	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Common Duckweed (Lemna minor)	1	31/12/1999	BSBI tetrad data for Ireland
Common Field-speedwell (Veronica persica)	1	31/12/1999	BSBI tetrad data for Ireland
Common Figwort (Scrophularia nodosa)	1	31/12/1999	BSBI tetrad data for Ireland
Common Fumitory (Fumaria officinalis)	1	31/12/1999	BSBI tetrad data for Ireland
Common Knapweed (Centaurea nigra)	2	19/07/2010	Species Data from the National Vegetation Database
Common Marsh-bedstraw (Galium palustre subsp. palustre)	1	31/12/1999	BSBI tetrad data for Ireland
Common Milkwort (Polygala vulgaris)	1	31/12/1999	BSBI tetrad data for Ireland
Common Mouse-ear (Cerastium	2	19/07/2010	Species Data from the National
fontanum)			Vegetation Database
Common Nettle (Urtica dioica)	1	31/12/1999	BSBI tetrad data for Ireland
Common Orache (Atriplex patula)	1	31/12/1999	BSBI tetrad data for Ireland
Common Poppy (Papaver rhoeas)	1	31/12/1999	BSBI tetrad data for Ireland
Common Ragwort (Senecio jacobaea)	3	01/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards
Common Reed (Phragmites australis)	1	31/12/1999	BSBI tetrad data for Ireland
Common Sorrel (Rumex acetosa)	2	19/07/2010	Species Data from the National Vegetation Database
Common Spike-rush (Eleocharis palustris)	1	31/12/1999	BSBI tetrad data for Ireland
Common Spotted-orchid (Dactylorhiza fuchsii)	1	31/12/1999	BSBI tetrad data for Ireland
Cow Parsley (Anthriscus sylvestris)	1	31/12/1999	BSBI tetrad data for Ireland
Cowslip (Primula veris)	3	18/05/2019	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards



Crack-willow (Salix fragilis)	1	31/12/1999	BSBI tetrad data for Ireland
Creeping Bent (Agrostis stolonifera)	2	01/07/2021	Vascular plants: Online Atlas of
c. copg _c (r.g. come cco.c) c. u/	-	0=,0.,=0==	Vascular Plants 2012 Onwards
Creeping Buttercup (Ranunculus	4	13/07/2021	Vascular plants: Online Atlas of
repens)			Vascular Plants 2012 Onwards
Creeping Cinquefoil (Potentilla	1	31/12/1999	BSBI tetrad data for Ireland
reptans)			
Creeping Thistle (Cirsium arvense)	3	01/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Crested Dog's-tail (Cynosurus	3	13/07/2012	Vascular plants: Online Atlas of
cristatus)			Vascular Plants 2012 Onwards
Cuckooflower (Cardamine pratensis)	1	31/12/1999	BSBI tetrad data for Ireland
Curled Dock (Rumex crispus)	1	31/12/1999	BSBI tetrad data for Ireland
Cut-leaved Crane's-bill (Geranium	1	31/12/1999	BSBI tetrad data for Ireland
dissectum)			
Daisy (Bellis perennis)	1	31/12/1999	BSBI tetrad data for Ireland
Devil's-bit Scabious (Succisa pratensis)	1	31/12/1999	BSBI tetrad data for Ireland
Dove's-foot Crane's-bill (Geranium	1	31/12/1999	BSBI tetrad data for Ireland
molle)			
Elder (Sambucus nigra)	3	13/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Enchanter's-nightshade (Circaea	1	31/12/1999	BSBI tetrad data for Ireland
lutetiana)			
Equal-leaved Knotgrass (Polygonum	1	31/12/1999	BSBI tetrad data for Ireland
arenastrum)			
Euphrasia officinalis agg.	1	31/12/1999	BSBI tetrad data for Ireland
Fairy Flax (Linum catharticum)	1	31/12/1999	BSBI tetrad data for Ireland
False Fox-sedge (Carex otrubae)	1	31/12/1999	BSBI tetrad data for Ireland
False Oat-grass (Arrhenatherum	3	01/07/2021	Vascular plants: Online Atlas of
elatius)			Vascular Plants 2012 Onwards
False-brome (Brachypodium	1	31/12/1999	BSBI tetrad data for Ireland



Fat-hen (Chenopodium album) 1 31/12/1999 BSBI tetrad data for Ireland Fen Bedstraw (Galium uliginosum) 1 31/12/1999 BSBI tetrad data for Ireland Fern-grass (Catopodium rigidum) 1 31/12/1999 BSBI tetrad data for Ireland Festuca rubra agg. 1 31/12/1999 BSBI tetrad data for Ireland Festuca rubra agg. 1 31/12/1999 BSBI tetrad data for Ireland Festuca rubra agg. 1 31/12/1999 BSBI tetrad data for Ireland Festuca rubra agg. 1 31/12/1999 BSBI tetrad data for Ireland Festuca rubra agg. 1 31/12/1999 BSBI tetrad data for Ireland Festuca rubra agg. Field Maple (Acer campestre) 1 31/12/1999 BSBI tetrad data for Ireland Field Pansy (Viola arvensis) 1 31/12/1999 BSBI tetrad data for Ireland Field Scabious (Knautia arvensis) 2 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Field-rose (Rosa arvensis) 1 31/12/1999 BSBI tetrad data for Ireland Field Finaling Sweet-grass (Glyceria I 31/12/1999 BSBI tetrad data for Ireland Finaling Sweet-grass (Glyceria I 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia Fragrant Orchid (Gymnad			,	
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Field Forget-me-not (Myosotis and Sal 1 21/1999 and SBBI tetrad data for Ireland survensis)  Field Maple (Acer campestre) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pansy (Viola arvensis) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pansy (Viola arvensis) 2 13/07/2012 and Vascular Plants 2012 Onwards seried Pansy (Great Willowherb (Epilobium) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pansy (Viola arvensis) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pansy (Great Willowherb (Epilobium) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data for Ireland seried Pantain (Plantago major) 1 31/12/1999 and SBBI tetrad data fo	Fern-grass (Catapodium rigidum)	1	31/12/1999	BSBI tetrad data for Ireland
Field Maple (Acer campestre) 1 31/12/1999 BSBI tetrad data for Ireland Field Pansy (Viola arvensis) 1 31/12/1999 BSBI tetrad data for Ireland Field Scabious (Knautia arvensis) 2 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Floating Sweet-grass (Glyceria 1 31/12/1999 BSBI tetrad data for Ireland Floating Sweet-grass (Glyceria 1 31/12/1999 BSBI tetrad data for Ireland Floating Sweet-grass (Apium nodiflorum) 1 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 2 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 2 31/12/1999 BSBI tetrad data for Ireland Conopsea) 1 31/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland SBBI tetrad data for Irela	Festuca rubra agg.	1	31/12/1999	BSBI tetrad data for Ireland
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Field Pansy (Viola arvensis) 1 31/12/1999 BSBI tetrad data for Ireland Field Scabious (Knautia arvensis) 2 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Field-rose (Rosa arvensis) 1 31/12/1999 BSBI tetrad data for Ireland Floating Sweet-grass (Glyceria 1 31/12/1999 BSBI tetrad data for Ireland fluitans) Fool's-water-cress (Apium nodiflorum) 1 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 1 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 1 31/12/1999 BSBI tetrad data for Ireland Garden Privet (Ligustrum ovalifolium) 1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland First Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland First Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland First Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland First Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland First Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland First Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland	arvensis)			
Second content of the second content of th	Field Maple (Acer campestre)	1	31/12/1999	BSBI tetrad data for Ireland
Vascular Plants 2012 Onwards Field-rose (Rosa arvensis)  1 31/12/1999 BSBI tetrad data for Ireland  floating Sweet-grass (Glyceria 1 31/12/1999 BSBI tetrad data for Ireland fluitans) Frool's-water-cress (Apium nodiflorum)  1 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 1 31/12/1999 BSBI tetrad data for Ireland conopsea)  Garden Privet (Ligustrum ovalifolium)  1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards  Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Glaucous Sedge (Carex flacca)  Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland  BSBI tetrad data for Ireland  BSBI tetrad data for Ireland  Species Data from the National Vegetation Database  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Field Pansy (Viola arvensis)	1	31/12/1999	BSBI tetrad data for Ireland
Field-rose (Rosa arvensis)  1 31/12/1999 BSBI tetrad data for Ireland  fluitans)  Fool's-water-cress (Apium nodiflorum)  1 31/12/1999 BSBI tetrad data for Ireland  Fregrant Orchid (Gymnadenia conopsea)  Garden Privet (Ligustrum ovalifolium)  Germander Speedwell (Veronica colamadenia)  Galaucous Sedge (Carex flacca)  Gooseberry (Ribes uva-crispa)  Gooseberry (Ribes uva-crispa)  Great Willowherb (Epilobium  1 31/12/1999 BSBI tetrad data for Ireland  1 31/12/1999 BSBI tetrad data for Ireland  1 31/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards  Species Data from the National Vegetation Database  1 31/12/1999 BSBI tetrad data for Ireland  Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa)  1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus)  1 31/12/1999 BSBI tetrad data for Ireland  Vegetation Database  Great Willowherb (Epilobium  1 31/12/1999 BSBI tetrad data for Ireland  Species Data from the National Vegetation Database  Great Willowherb (Epilobium  1 31/12/1999 BSBI tetrad data for Ireland  Species Data from the National Vegetation Database  Great Willowherb (Epilobium  1 31/12/1999 BSBI tetrad data for Ireland  Species Data from the National Vegetation Database  Great Willowherb (Epilobium  1 31/12/1999 BSBI tetrad data for Ireland	Field Scabious (Knautia arvensis)	2	13/07/2012	Vascular plants: Online Atlas of
Floating Sweet-grass (Glyceria 1 31/12/1999 BSBI tetrad data for Ireland fluitans)  Fool's-water-cress (Apium nodiflorum) 1 31/12/1999 BSBI tetrad data for Ireland fragrant Orchid (Gymnadenia 1 31/12/1999 BSBI tetrad data for Ireland conopsea)  Garden Privet (Ligustrum ovalifolium) 1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards  Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database  Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland  Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland  Mirsutum)  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland				Vascular Plants 2012 Onwards
fluitans) Fool's-water-cress (Apium nodiflorum) 1 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 1 31/12/1999 BSBI tetrad data for Ireland Conopsea) Garden Privet (Ligustrum ovalifolium) 1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland Mirsutum) Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Field-rose (Rosa arvensis)	1	31/12/1999	BSBI tetrad data for Ireland
Fool's-water-cress (Apium nodiflorum) 1 31/12/1999 BSBI tetrad data for Ireland Fragrant Orchid (Gymnadenia 1 31/12/1999 BSBI tetrad data for Ireland Conopsea) Garden Privet (Ligustrum ovalifolium) 1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Floating Sweet-grass (Glyceria	1	31/12/1999	BSBI tetrad data for Ireland
Fragrant Orchid (Gymnadenia 2000) Garden Privet (Ligustrum ovalifolium)  1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Giant Fescue (Festuca gigantea)  1 31/12/1999 BSBI tetrad data for Ireland Glaucous Sedge (Carex flacca)  2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa)  1 31/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus)  2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa)  3 1/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus)  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum) Greater Plantain (Plantago major)  1 31/12/1999 BSBI tetrad data for Ireland	fluitans)			
Garden Privet (Ligustrum ovalifolium)  1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards  Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database  Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland  Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Fool's-water-cress (Apium nodiflorum)	1	31/12/1999	BSBI tetrad data for Ireland
Garden Privet (Ligustrum ovalifolium)  1 13/07/2012 Vascular plants: Online Atlas of Vascular Plants 2012 Onwards  Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database  Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland  Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Fragrant Orchid (Gymnadenia	1	31/12/1999	BSBI tetrad data for Ireland
Vascular Plants 2012 Onwards	conopsea)			
Germander Speedwell (Veronica 2 19/07/2010 Species Data from the National Vegetation Database Giant Fescue (Festuca gigantea) 1 31/12/1999 BSBI tetrad data for Ireland Glaucous Sedge (Carex flacca) 2 19/07/2010 Species Data from the National Vegetation Database Gooseberry (Ribes uva-crispa) 1 31/12/1999 BSBI tetrad data for Ireland Gorse (Ulex europaeus) 2 19/07/2010 Species Data from the National Vegetation Database Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland Hirsutum) BSBI tetrad data for Ireland Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Garden Privet (Ligustrum ovalifolium)	1	13/07/2012	Vascular plants: Online Atlas of
Chamaedrys   Vegetation Database				Vascular Plants 2012 Onwards
Giant Fescue (Festuca gigantea)  Glaucous Sedge (Carex flacca)  1 31/12/1999 BSBI tetrad data for Ireland  Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa)  1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus)  2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium hirsutum)  Greater Plantain (Plantago major)  1 31/12/1999 BSBI tetrad data for Ireland  31/12/1999 BSBI tetrad data for Ireland	Germander Speedwell (Veronica	2	19/07/2010	Species Data from the National
Glaucous Sedge (Carex flacca)  2 19/07/2010 Species Data from the National Vegetation Database  Gooseberry (Ribes uva-crispa)  1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus)  2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum)  Greater Plantain (Plantago major)  1 31/12/1999 BSBI tetrad data for Ireland	chamaedrys)			Vegetation Database
Vegetation Database  Gooseberry (Ribes uva-crispa)  1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus)  2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum)  Greater Plantain (Plantago major)  1 31/12/1999 BSBI tetrad data for Ireland	Giant Fescue (Festuca gigantea)	1	31/12/1999	BSBI tetrad data for Ireland
Gooseberry (Ribes uva-crispa)  1 31/12/1999 BSBI tetrad data for Ireland  Gorse (Ulex europaeus)  2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum)  Greater Plantain (Plantago major)  1 31/12/1999 BSBI tetrad data for Ireland	Glaucous Sedge (Carex flacca)	2	19/07/2010	Species Data from the National
Gorse (Ulex europaeus)  2 19/07/2010 Species Data from the National Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum)  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland				Vegetation Database
Vegetation Database  Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum)  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Gooseberry (Ribes uva-crispa)	1	31/12/1999	BSBI tetrad data for Ireland
Great Willowherb (Epilobium 1 31/12/1999 BSBI tetrad data for Ireland hirsutum)  Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Gorse (Ulex europaeus)	2	19/07/2010	Species Data from the National
hirsutum) Greater Plantain (Plantago major)  1 31/12/1999 BSBI tetrad data for Ireland				Vegetation Database
Greater Plantain (Plantago major) 1 31/12/1999 BSBI tetrad data for Ireland	Great Willowherb (Epilobium	1	31/12/1999	BSBI tetrad data for Ireland
	hirsutum)			
Grey Sedge (Carex divulsa subsp. 1 31/12/1999 BSBI tetrad data for Ireland	Greater Plantain (Plantago major)	1	31/12/1999	BSBI tetrad data for Ireland
	Grey Sedge (Carex divulsa subsp.	1	31/12/1999	BSBI tetrad data for Ireland



divulsa)			
Ground-elder (Aegopodium podagraria)	1	31/12/1999	BSBI tetrad data for Ireland
Groundsel (Senecio vulgaris)	1	31/12/1999	BSBI tetrad data for Ireland
Guelder-rose (Viburnum opulus)	2	28/05/2024	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Hairy Bitter-cress (Cardamine hirsuta)	1	31/12/1999	BSBI tetrad data for Ireland
Hairy Sedge (Carex hirta)	1	31/12/1999	BSBI tetrad data for Ireland
Hairy-brome (Bromopsis ramosa)	1	31/12/1999	BSBI tetrad data for Ireland
Hard Rush (Juncus inflexus)	1	31/12/1999	BSBI tetrad data for Ireland
Hawthorn (Crataegus monogyna)	3	13/07/2012	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Hazel (Corylus avellana)	1	31/12/1999	BSBI tetrad data for Ireland
Heath Bedstraw (Galium saxatile)	1	19/07/2010	Species Data from the National
			Vegetation Database
Hedge Bindweed (Calystegia sepium)	1	31/12/1999	BSBI tetrad data for Ireland
Hedge Mustard (Sisymbrium officinale)	1	31/12/1999	BSBI tetrad data for Ireland
Hemlock Water-dropwort (Oenanthe crocata)	1	31/12/1999	BSBI tetrad data for Ireland
Hemp-agrimony (Eupatorium cannabinum)	1	31/12/1999	BSBI tetrad data for Ireland
Herb-Robert (Geranium robertianum)	1	31/12/1999	BSBI tetrad data for Ireland
Hoary Willowherb (Epilobium	1	31/12/1999	BSBI tetrad data for Ireland
parviflorum)			
Hogweed (Heracleum sphondylium)	3	01/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Holly (Ilex aquifolium)	1	31/12/1999	BSBI tetrad data for Ireland
Honeysuckle (Lonicera periclymenum)	1	31/12/1999	BSBI tetrad data for Ireland
Horned Pondweed (Zannichellia	1	31/12/1999	BSBI tetrad data for Ireland
palustris)			

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Hybrid Water-cress (Rorippa	1	31/12/1999	BSBI tetrad data for Ireland
nasturtium-aquaticum x microphylla =			
R. x sterilis)			
Ivy (Hedera helix)	2	13/07/2012	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Ivy-leaved Speedwell (Veronica	1	31/12/1999	BSBI tetrad data for Ireland
hederifolia)			
Ivy-leaved Toadflax (Cymbalaria	1	31/12/1999	BSBI tetrad data for Ireland
muralis)			
Jointed Rush (Juncus articulatus)	1	31/12/1999	BSBI tetrad data for Ireland
Knotgrass (Polygonum aviculare)	1	31/12/1999	BSBI tetrad data for Ireland
Knotted Pearlwort (Sagina nodosa)	1	31/12/1999	BSBI tetrad data for Ireland
Lady's Bedstraw (Galium verum)	3	13/07/2012	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Large Bindweed (Calystegia silvatica)	1	31/12/1999	BSBI tetrad data for Ireland
Lesser Burdock (Arctium minus)	1	31/12/1999	BSBI tetrad data for Ireland
Lesser Hawkbit (Leontodon saxatilis)	1	31/12/1999	BSBI tetrad data for Ireland
Lesser Marshwort (Apium inundatum)	1	31/12/1999	BSBI tetrad data for Ireland
Lesser Spearwort (Ranunculus	1	31/12/1999	BSBI tetrad data for Ireland
flammula)			
Lesser Trefoil (Trifolium dubium)	1	31/12/1999	BSBI tetrad data for Ireland
Long-headed Poppy (Papaver dubium	1	31/12/1999	BSBI tetrad data for Ireland
subsp. dubium)			
Long-stalked Yellow-sedge (Carex	1	31/12/1999	BSBI tetrad data for Ireland
viridula subsp. brachyrrhyncha)			
Malus sylvestris sens.lat.	1	31/12/1999	BSBI tetrad data for Ireland
Marsh Arrowgrass (Triglochin	1	31/12/1999	BSBI tetrad data for Ireland
palustre)		' '	
Marsh Cudweed (Gnaphalium	1	31/12/1999	BSBI tetrad data for Ireland
uliginosum)			
Marsh Lousewort (Pedicularis	1	31/12/1999	BSBI tetrad data for Ireland
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palustris)			
Marsh Ragwort (Senecio aquaticus)	1	31/12/1999	BSBI tetrad data for Ireland
Marsh Thistle (Cirsium palustre)	2	19/07/2010	Species Data from the National
, ,			Vegetation Database
Marsh Willowherb (Epilobium	1	31/12/1999	BSBI tetrad data for Ireland
palustre)			
Marsh Yellow-cress (Rorippa palustris)	1	31/12/1999	BSBI tetrad data for Ireland
Marsh-bedstraw (Galium palustre)	1	31/12/1999	BSBI tetrad data for Ireland
Marsh-marigold (Caltha palustris)	1	31/12/1999	BSBI tetrad data for Ireland
Meadow Buttercup (Ranunculus acris)	2	19/07/2010	Species Data from the National
			Vegetation Database
Meadow Fescue (Festuca pratensis)	1	31/12/1999	BSBI tetrad data for Ireland
Meadow Vetchling (Lathyrus	2	13/07/2012	Vascular plants: Online Atlas of
pratensis)			Vascular Plants 2012 Onwards
Meadowsweet (Filipendula ulmaria)	1	31/12/1999	BSBI tetrad data for Ireland
Mimulus aggregate	1	31/12/1999	BSBI tetrad data for Ireland
Mouse-ear-hawkweed (Pilosella	1	31/12/1999	BSBI tetrad data for Ireland
officinarum)			
Narrow-fruited Water-cress (Rorippa	1	31/12/1999	BSBI tetrad data for Ireland
microphylla)			
Nipplewort (Lapsana communis)	1	31/12/1999	BSBI tetrad data for Ireland
Opium Poppy (Papaver somniferum)	1	31/12/1999	BSBI tetrad data for Ireland
Oxeye Daisy (Leucanthemum vulgare)	1	31/12/1999	BSBI tetrad data for Ireland
Pale Persicaria (Persicaria lapathifolia)	1	31/12/1999	BSBI tetrad data for Ireland
Papaver dubium	1	31/12/1999	BSBI tetrad data for Ireland
Pedunculate Oak (Quercus robur)	1	31/12/1999	BSBI tetrad data for Ireland
Perennial Rye-grass (Lolium perenne)	3	01/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Perforate St John's-wort (Hypericum	1	19/07/2010	Species Data from the National
perforatum)			Vegetation Database
Petty Spurge (Euphorbia peplus)	1	31/12/1999	BSBI tetrad data for Ireland



Phleum pratense sens.lat.	1	31/12/1999	BSBI tetrad data for Ireland
Pineappleweed (Matricaria discoidea)	1	31/12/1999	BSBI tetrad data for Ireland
Plicate Sweet-grass (Glyceria notata)	1	31/12/1999	BSBI tetrad data for Ireland
Poa pratensis sens.lat.	1	31/12/1999	BSBI tetrad data for Ireland
Polygonum aviculare agg. sensu lato	1	31/12/1999	BSBI tetrad data for Ireland
Prickly Sow-thistle (Sonchus asper)	1	31/12/1999	BSBI tetrad data for Ireland
Primrose (Primula vulgaris)	3	19/04/2018	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Procumbent Pearlwort (Sagina	1	31/12/1999	BSBI tetrad data for Ireland
procumbens)			
Purple Moor-grass (Molinia caerulea)	1	31/12/1999	BSBI tetrad data for Ireland
Quaking-grass (Briza media)	1	31/12/1999	BSBI tetrad data for Ireland
Quercus petraea x robur = Q. x	1	31/12/1999	BSBI tetrad data for Ireland
rosacea			
Raspberry (Rubus idaeus)	1	31/12/1999	BSBI tetrad data for Ireland
Red Bartsia (Odontites vernus)	1	31/12/1999	BSBI tetrad data for Ireland
Red Clover (Trifolium pratense)	4	13/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Red Dead-nettle (Lamium purpureum)	1	31/12/1999	BSBI tetrad data for Ireland
Red Fescue (Festuca rubra)	1	19/07/2010	Species Data from the National
			Vegetation Database
Redshank (Persicaria maculosa)	1	31/12/1999	BSBI tetrad data for Ireland
Reed Canary-grass (Phalaris	1	31/12/1999	BSBI tetrad data for Ireland
arundinacea)			
Ribwort Plantain (Plantago	3	13/07/2012	Vascular plants: Online Atlas of
lanceolata)			Vascular Plants 2012 Onwards
Rigid Hornwort (Ceratophyllum	1	31/12/1999	BSBI tetrad data for Ireland
demersum)			
Rorippa nasturtium-aquaticum agg.	1	31/12/1999	BSBI tetrad data for Ireland
Rosa canina agg.	1	31/12/1999	BSBI tetrad data for Ireland
Rough Meadow-grass (Poa trivialis)	1	31/12/1999	BSBI tetrad data for Ireland



Rubus ulmifolius	1	31/12/1999	BSBI tetrad data for Ireland
Rumex crispus x obtusifolius = R. x pratensis	1	31/12/1999	BSBI tetrad data for Ireland
Rumex sanguineus	1	31/12/1999	BSBI tetrad data for Ireland
Russian Comfrey (Symphytum	1	31/12/1999	BSBI tetrad data for Ireland
officinale x asperum = S. x uplandicum)			
Rusty Willow (Salix cinerea subsp. oleifolia)	1	31/12/1999	BSBI tetrad data for Ireland
Salix cinerea	1	31/12/1999	BSBI tetrad data for Ireland
Sanicle (Sanicula europaea)	1	31/12/1999	BSBI tetrad data for Ireland
Scarlet Pimpernel (Anagallis arvensis)	1	31/12/1999	BSBI tetrad data for Ireland
Selfheal (Prunella vulgaris)	3	13/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Sheep's Sorrel (Rumex acetosella)	1	31/12/1999	BSBI tetrad data for Ireland
Sheep's-fescue (Festuca ovina)	1	19/07/2010	Species Data from the National Vegetation Database
Shepherd's-purse (Capsella bursa-pastoris)	1	31/12/1999	BSBI tetrad data for Ireland
Sherard's Downy-rose (Rosa sherardii)	1	31/12/1999	BSBI tetrad data for Ireland
Short-fruited Willowherb (Epilobium obscurum)	1	31/12/1999	BSBI tetrad data for Ireland
Silene vulgaris subsp. vulgaris	2	13/07/2012	Vascular plants: Online Atlas of
, ,			Vascular Plants 2012 Onwards
Silverweed (Potentilla anserina)	1	31/12/1999	BSBI tetrad data for Ireland
Slender Sandwort (Arenaria	1	31/12/1999	BSBI tetrad data for Ireland
serpyllifolia subsp. leptoclados)			
Slender Speedwell (Veronica filiformis)	1	31/12/1999	BSBI tetrad data for Ireland
Small-leaved Sweet-briar (Rosa agrestis)	1	31/12/1999	BSBI tetrad data for Ireland



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Smooth Hawk's-beard (Crepis	1	31/12/1999	BSBI tetrad data for Ireland	
capillaris)				
Smooth Meadow-grass (Poa	1	31/12/1999	BSBI tetrad data for Ireland	
pratensis)				
Smooth Sow-thistle (Sonchus	1	31/12/1999	BSBI tetrad data for Ireland	
oleraceus)				
Snowberry (Symphoricarpos albus)	1	31/12/1999	BSBI tetrad data for Ireland	
Soft-brome (Bromus hordeaceus)	1	31/12/1999	BSBI tetrad data for Ireland	
Soft-rush (Juncus effusus)	1	31/12/1999	BSBI tetrad data for Ireland	
Spear Thistle (Cirsium vulgare)	1	31/12/1999	BSBI tetrad data for Ireland	
Square-stalked St John's-wort	1	31/12/1999	BSBI tetrad data for Ireland	
(Hypericum tetrapterum)				
Sticky Mouse-ear (Cerastium	1	31/12/1999	BSBI tetrad data for Ireland	
glomeratum)				
Sun Spurge (Euphorbia helioscopia)	1	31/12/1999	BSBI tetrad data for Ireland	
Sweet Vernal-grass (Anthoxanthum	2	19/07/2010	Species Data from the National	
odoratum)			Vegetation Database	
Sycamore (Acer pseudoplatanus)	1	31/12/1999	BSBI tetrad data for Ireland	Invasive Species: Invasive Species    Invasive
				Species: Invasive Species >> Medium Impact
				Invasive Species
Tall Fescue (Festuca arundinacea)	1	31/12/1999	BSBI tetrad data for Ireland	
Taraxacum aggregate	2	13/07/2012	Vascular plants: Online Atlas of	
			Vascular Plants 2012 Onwards	
Thale Cress (Arabidopsis thaliana)	1	31/12/1999	BSBI tetrad data for Ireland	
Thyme-leaved Sandwort (Arenaria	1	31/12/1999	BSBI tetrad data for Ireland	
serpyllifolia)				
Thyme-leaved Speedwell (Veronica	1	31/12/1999	BSBI tetrad data for Ireland	
serpyllifolia)				
Timothy (Phleum pratense)	2	19/07/2010	Species Data from the National	
			Vegetation Database	
Toad Rush (Juncus bufonius)	2	31/12/1999	BSBI tetrad data for Ireland	



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Tormentil (Potentilla erecta)	1	19/07/2010	Species Data from the National
			Vegetation Database
Tufted Forget-me-not (Myosotis laxa)	1	31/12/1999	BSBI tetrad data for Ireland
Tufted Hair-grass (Deschampsia cespitosa)	1	31/12/1999	BSBI tetrad data for Ireland
Tufted Vetch (Vicia cracca)	2	01/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards
Upright Hedge-parsley (Torilis japonica)	2	13/07/2012	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards
Vicia sativa	1	31/12/1999	BSBI tetrad data for Ireland
Wall Speedwell (Veronica arvensis)	1	31/12/1999	BSBI tetrad data for Ireland
Water Figwort (Scrophularia auriculata)	1	31/12/1999	BSBI tetrad data for Ireland
Water Forget-me-not (Myosotis scorpioides)	1	31/12/1999	BSBI tetrad data for Ireland
Water Mint (Mentha aquatica)	1	31/12/1999	BSBI tetrad data for Ireland
Water-cress (Rorippa nasturtium- aquaticum)	1	31/12/1999	BSBI tetrad data for Ireland
Water-pepper (Persicaria hydropiper)	1	31/12/1999	BSBI tetrad data for Ireland
Wavy Bitter-cress (Cardamine flexuosa)	1	31/12/1999	BSBI tetrad data for Ireland
White Campion (Silene latifolia)	1	31/12/1999	BSBI tetrad data for Ireland
White Clover (Trifolium repens)	4	13/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards
White Dead-nettle (Lamium album)	1	31/12/1999	BSBI tetrad data for Ireland
White Stonecrop (Sedum album)	3	13/07/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards
White Willow (Salix alba)	1	31/12/1999	BSBI tetrad data for Ireland
Whorl-grass (Catabrosa aquatica)	1	31/12/1999	BSBI tetrad data for Ireland
Wild Angelica (Angelica sylvestris)	1	31/12/1999	BSBI tetrad data for Ireland
Wild Carrot (Daucus carota subsp.	1	31/12/1999	BSBI tetrad data for Ireland



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carota)			
Wild Carrot (Daucus carota)	1	31/12/1999	BSBI tetrad data for Ireland
Wild Plum (Prunus domestica)	1	31/12/1999	BSBI tetrad data for Ireland
Wild Privet (Ligustrum vulgare)	1	31/12/1999	BSBI tetrad data for Ireland
Wild Strawberry (Fragaria vesca)	1	31/12/1999	BSBI tetrad data for Ireland
Wild Thyme (Thymus polytrichus)	1	31/12/1999	BSBI tetrad data for Ireland
Winter Heliotrope (Petasites fragrans)	1	31/12/1999	BSBI tetrad data for Ireland
Wood Avens (Geum urbanum)	1	31/12/1999	BSBI tetrad data for Ireland
Wood Speedwell (Veronica montana)	2	13/07/2012	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Wood-sedge (Carex sylvatica)	1	31/12/1999	BSBI tetrad data for Ireland
Wych Elm (Ulmus glabra)	1	31/12/1999	BSBI tetrad data for Ireland
Yarrow (Achillea millefolium)	4	01/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Yellow Iris (Iris pseudacorus)	1	31/12/1999	BSBI tetrad data for Ireland
Yellow Oat-grass (Trisetum flavescens)	1	31/12/1999	BSBI tetrad data for Ireland
Yellow Sedge (Carex viridula)	1	31/12/1999	BSBI tetrad data for Ireland
Yellow-juiced Poppy (Papaver dubium	1	31/12/1999	BSBI tetrad data for Ireland
subsp. lecoqii)			
Yorkshire-fog (Holcus lanatus)	5	01/07/2021	Vascular plants: Online Atlas of
			Vascular Plants 2012 Onwards
Octospora musci-muralis	1	19/12/1990	Fungal Records for Ireland
Field Horsetail (Equisetum arvense)	1	31/12/1999	BSBI tetrad data for Ireland
Marsh Horsetail (Equisetum palustre)	1	31/12/1999	BSBI tetrad data for Ireland
Water Horsetail (Equisetum fluviatile)	1	31/12/1999	BSBI tetrad data for Ireland
7-spot Ladybird (Coccinella	3	16/10/2024	Ladybirds of Ireland
septempunctata)			
Black Sexton Beetle (Nicrophorus	1	17/04/2023	Carrion Beetles of Ireland
humator)			
Elmis aenea	1	01/05/2007	River Biologists' Database (EPA)
Limnius volckmari	1	01/05/2007	River Biologists' Database (EPA)



Comma (Polygonia c-album)	1	29/07/2023	Butterflies of Ireland post 2021	
Green-veined White (Pieris napi)	6	01/06/2021	Butterflies of Ireland pre-2022	
Marsh Fritillary (Euphydryas aurinia)	6	31/12/1982	All Ireland Marsh Fritillary Database	Protected Species: EU Habitats Directive    Protected Species: EU Habitats Directive >> Annex II    Threatened Species: Vulnerable
Meadow Brown (Maniola jurtina)	3	18/06/2018	Butterflies of Ireland pre-2022	
Orange-tip (Anthocharis cardamines)	2	01/05/2020	Butterflies of Ireland pre-2022	
Ringlet (Aphantopus hyperantus)	1	31/12/1976	Distribution Atlas of Butterflies in Ireland 1979 (An Foras Forbartha)	
Small Copper (Lycaena phlaeas)	1	01/06/2021	Butterflies of Ireland pre-2022	
Small Tortoiseshell (Aglais urticae)	5	01/09/2021	Butterflies of Ireland pre-2022	
Small White (Pieris rapae)	2	01/09/2021	Butterflies of Ireland pre-2022	
Speckled Wood (Pararge aegeria)	2	14/05/2021	Butterflies of Ireland pre-2022	
Agonopterix yeatiana	1	16/04/2023	Moths Ireland	
Beaded Chestnut (Agrochola lychnidis)	1	24/09/2023	Moths Ireland	
Brimstone Moth (Opisthograptis luteolata)	1	24/05/2023	Moths Ireland	
Broken-barred Carpet (Electrophaes corylata)	1	24/05/2023	Moths Ireland	
Brown Silver-line (Petrophora chlorosata)	1	24/05/2023	Moths Ireland	
Buff-tip (Phalera bucephala)	1	24/05/2023	Moths Ireland	
Chestnut (Conistra vaccinii)	1	16/04/2023	Moths Ireland	
Clay Triple-lines (Cyclophora linearia)	1	24/05/2023	Moths Ireland	
Clouded Drab (Orthosia incerta)	1	16/04/2023	Moths Ireland	
Clouded Silver (Lomographa temerata)	1	24/05/2023	Moths Ireland	
Clouded-bordered Brindle (Apamea crenata)	1	24/05/2023	Moths Ireland	
Common Marbled Carpet (Chloroclysta truncata)	2	24/09/2023	Moths Ireland	



Common Quaker (Orthosia cerasi)	1	16/04/2023	Moths Ireland
Common Swift (Hepialus lupulinus)	1	24/05/2023	Moths Ireland
Double-striped Pug (Gymnoscelis	1	16/04/2023	Moths Ireland
rufifasciata)			
Early Grey (Xylocampa areola)	1	16/04/2023	Moths Ireland
Esperia sulphurella	1	24/05/2023	Moths Ireland
Flame Carpet (Xanthorhoe designata)	1	24/05/2023	Moths Ireland
Garden Carpet (Xanthorhoe fluctuata)	1	24/05/2023	Moths Ireland
Green Carpet (Colostygia pectinataria)	1	24/05/2023	Moths Ireland
Hebrew Character (Orthosia gothica)	1	16/04/2023	Moths Ireland
Least Black Arches (Nola confusalis)	1	24/05/2023	Moths Ireland
May Highflyer (Hydriomena	1	24/05/2023	Moths Ireland
impluviata)			
Mottled Pug (Eupithecia exiguata)	1	24/05/2023	Moths Ireland
Muslin Moth (Diaphora mendica)	2	24/05/2023	Moths Ireland
Ochreous Pug (Eupithecia indigata)	1	24/05/2023	Moths Ireland
Pale Pinion (Lithophane hepatica)	1	16/04/2023	Moths Ireland
Pale Tussock (Calliteara pudibunda)	1	24/05/2023	Moths Ireland
Pebble Prominent (Notodonta ziczac)	1	24/05/2023	Moths Ireland
Pink-barred Sallow (Xanthia togata)	1	24/09/2023	Moths Ireland
Powdered Quaker (Orthosia gracilis)	1	16/04/2023	Moths Ireland
Red-green Carpet (Chloroclysta	2	24/09/2023	Moths Ireland
siterata)			
Rosy Rustic (Hydraecia micacea)	1	24/09/2023	Moths Ireland
Scalloped Hazel (Odontopera	1	24/05/2023	Moths Ireland
bidentata)			
Scorched Wing (Plagodis dolabraria)	1	24/05/2023	Moths Ireland
Scrobipalpa costella	1	16/04/2023	Moths Ireland
Shoulder Stripe (Anticlea badiata)	1	16/04/2023	Moths Ireland
Silver-ground Carpet (Xanthorhoe	1	24/05/2023	Moths Ireland
montanata)			



Small Angle Shades (Euplexia lucipara)	1	24/05/2023	Moths Ireland	
Small Phoenix (Ecliptopera silaceata)	1	24/05/2023	Moths Ireland	
Small Quaker (Orthosia cruda)	1	16/04/2023	Moths Ireland	
Small Square-spot (Diarsia rubi)	1	24/05/2023	Moths Ireland	
Small Wainscot (Chortodes pygmina)	1	24/09/2023	Moths Ireland	
Spruce Carpet (Thera britannica)	1	24/05/2023	Moths Ireland	
Stigmella aurella	1	16/04/2023	Moths Ireland	
Streamer (Anticlea derivata)	1	16/04/2023	Moths Ireland	
White Ermine (Spilosoma lubricipeda)	1	24/05/2023	Moths Ireland	
White-pinion Spotted (Lomographa	1	24/05/2023	Moths Ireland	
bimaculata)				
Gorse Shieldbug (Piezodorus lituratus)	1	05/05/2018	True Bugs (Heteroptera) of Ireland	
Even Scalewort (Radula complanata)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Mueller's Pouchwort (Calypogeia	1	31/12/1949	Bryophytes of Ireland	Threatened Species: Least concern
muelleriana)				
Notched Pouchwort (Calypogeia	1	30/09/1958	Bryophytes of Ireland	Threatened Species: Least concern
arguta)				
Two-horned Pincerwort (Cephalozia	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
bicuspidata)				
Ancylus fluviatilis	1	24/09/1977	All Ireland Non-Marine Molluscan	
			Database	
Arion (Arion)	2	30/09/1984	All Ireland Non-Marine Molluscan	
			Database	
Arion (Arion) vulgaris	1	30/09/1984	All Ireland Non-Marine Molluscan	Invasive Species: Invasive Species    Invasive
			Database	Species: Invasive Species >> Medium Impact
				Invasive Species
Arion (Carinarion) circumscriptus	1	24/09/1977	All Ireland Non-Marine Molluscan	
			Database	
Arion <i>(Kobeltia)</i>	1	24/09/1977	All Ireland Non-Marine Molluscan	
			Database	
Brown Lipped Snail (Cepaea (Cepaea)	2	30/09/1984	All Ireland Non-Marine Molluscan	



nemoralis)			Database	
Budapest Slug (Tandonia budapestensis)	2	30/09/1984	All Ireland Non-Marine Molluscan Database	Invasive Species: Invasive Species    Invasive Species: Invasive Species >> Medium Impact Invasive Species
Cellar Snail (Oxychilus (Oxychilus) cellarius)	2	30/09/1984	All Ireland Non-Marine Molluscan Database	
Clear Glass Snail (Aegopinella pura)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	
Columella	1	24/09/1977	All Ireland Non-Marine Molluscan Database	
Common Chrysalis Snail <i>(Lauria (Lauria</i> )	2	30/09/1984	All Ireland Non-Marine Molluscan Database	
Common Garden Snail <i>(Cornu</i> aspersum)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	Invasive Species: Invasive Species    Invasive Species: Invasive Species >> Medium Impact Invasive Species
Crystal Snail (Vitrea crystallina)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	
Darparnaud's Glass Snail (Oxychilus (Oxychilus) draparnaudi)	2	30/09/1984	All Ireland Non-Marine Molluscan Database	
Dusky Slug (Arion (Mesarion) subfuscus)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	
Dwarf Pond Snail <i>(Galba (Galba)</i> truncatula)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	
Dwarf Snail <i>(Punctum (Punctum)</i> pygmaeum)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	
Eccentric Grass Snail (Vallonia cf. excentrica)	2	30/09/1984	All Ireland Non-Marine Molluscan Database	
English Chrysalis Snail (Leiostyla (Leiostyla) anglica)	1	24/09/1977	All Ireland Non-Marine Molluscan Database	Threatened Species: Vulnerable
Euconulus	1	24/09/1977	All Ireland Non-Marine Molluscan Database	



Garlic Snail (Oxychilus (Oxychilus)	2	30/09/1984	All Ireland Non-Marine Molluscan	
alliarius)	_	30/03/1304	Database	
Giant Pea Shell (Pisidium amnicum)	1	24/09/1977	All Ireland Non-Marine Molluscan	
Glarie i ea Sileii (i isiaiam ammeam)	-	2 1,03, 23, 7	Database	
Great Grey Slug (Limax maximus)	1	24/09/1977	All Ireland Non-Marine Molluscan	
Great Grey Stag (Emilax maximus)	-	2 1,03, 23, 7	Database	
Hairy Snail (Trochulus (Trochulus)	2	30/09/1984	All Ireland Non-Marine Molluscan	
hispidus)		30,00,200	Database	
Heath Snail (Helicella itala)	1	24/09/1977	All Ireland Non-Marine Molluscan	Threatened Species: Vulnerable
, , , , , , , , , , , , , , , , , , , ,		- 1, 55, -51	Database	
Hedgehog Slug (Arion (Kobeltia)	1	24/09/1977	All Ireland Non-Marine Molluscan	
intermedius)		, ,	Database	
Horny Orb Mussel (Sphaerium	1	30/09/1984	All Ireland Non-Marine Molluscan	
corneum)		, ,	Database	
Jenkins' Spire Snail (Potamopyrgus	1	24/09/1977	All Ireland Non-Marine Molluscan	Invasive Species: Invasive Species   Invasive
antipodarum)			Database	Species: Invasive Species >> Medium Impact
				Invasive Species
Keeled Ramshorn (Planorbis	1	24/09/1977	All Ireland Non-Marine Molluscan	
carinatus)			Database	
Large Amber Snail (Succinea putris)	1	24/09/1977	All Ireland Non-Marine Molluscan	
			Database	
Least Slippery Snail (Cochlicopa cf.	2	30/09/1984	All Ireland Non-Marine Molluscan	
lubricella)			Database	
Lesser Bulin (Merdigera obscura)	1	24/09/1977	All Ireland Non-Marine Molluscan	Threatened Species: Endangered
			Database	
Long-toothed Herald Snail (Carychium	2	30/09/1984	All Ireland Non-Marine Molluscan	
tridentatum)			Database	
Milky Crystal Snail (Vitrea contracta)	2	30/09/1984	All Ireland Non-Marine Molluscan	
			Database	
Netted Slug (Deroceras (Deroceras)	2	30/09/1984	All Ireland Non-Marine Molluscan	
reticulatum)			Database	



Pellucid Glass Snail (Vitrina pellucida)	2	30/09/1984	All Ireland Non-Marine Molluscan	
			Database	
Prickly Snail (Acanthinula aculeata)	1	24/09/1977	All Ireland Non-Marine Molluscan	Threatened Species: Near threatened
			Database	
Ribbed Grass Snail (Vallonia costata)	1	30/09/1984	All Ireland Non-Marine Molluscan	
			Database	
Rock Snail (Pyramidula pusilla)	2	30/09/1984	All Ireland Non-Marine Molluscan	
			Database	
Rounded Snail (Discus (Gonyodiscus)	2	30/09/1984	All Ireland Non-Marine Molluscan	
rotundatus)			Database	
Slippery Moss Snail (Cochlicopa cf.	2	30/09/1984	All Ireland Non-Marine Molluscan	
lubrica)			Database	
Smooth Glass Snail (Aegopinella	2	30/09/1984	All Ireland Non-Marine Molluscan	
nitidula)			Database	
Strawberry Snail (Trochulus	2	30/09/1984	All Ireland Non-Marine Molluscan	
(Trochulus) striolatus)			Database	
Striated Whorl Snail (Vertigo (Vertigo)	1	24/09/1977	All Ireland Non-Marine Molluscan	Threatened Species: Near threatened
substriata)			Database	
Tree Slug (Lehmannia marginata)	1	24/09/1977	All Ireland Non-Marine Molluscan	
			Database	
Twisted Ramshorn (Bathyomphalus	1	30/09/1984	All Ireland Non-Marine Molluscan	
contortus)			Database	
Two-toothed Door Snail (Clausilia	2	30/09/1984	All Ireland Non-Marine Molluscan	
(Clausilia) bidentata)			Database	
Wandering Snail (Radix balthica)	1	24/09/1977	All Ireland Non-Marine Molluscan	
			Database	
White Ramshorn (Gyraulus (Gyraulus)	1	24/09/1977	All Ireland Non-Marine Molluscan	
albus)			Database	
White-lipped Snail (Cepaea (Cepaea)	1	30/09/1984	All Ireland Non-Marine Molluscan	
hortensis)			Database	
Yellow Slug (Limacus flavus)	1	24/09/1977	All Ireland Non-Marine Molluscan	



			Database	
Bank Haircap (Polytrichum formosum)	1	30/09/1958	Bryophytes of Ireland	
Big Shaggy-moss (Rhytidiadelphus triquetrus)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Bird's-claw Beard-moss (Barbula unguiculata)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Bryum dichotomum	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Capillary Thread-moss (Bryum capillare)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Chalk Comb-moss (Ctenidium molluscum)	1	17/09/1969	Bryophytes of Ireland	
Common Pocket-moss (Fissidens taxifolius)	1	17/09/1969	Bryophytes of Ireland	
Common Tamarisk-moss (Thuidium tamariscinum)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Ditrichum flexicaule sensu lato	1	17/09/1969	Bryophytes of Ireland	
Don's Thread-moss (Bryum donianum)	3	31/12/1958	Bryophytes of Ireland	Threatened Species: Least concern
Fallacious Beard-moss (Didymodon fallax)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Fine-leaved Marsh Feather-moss (Campyliadelphus elodes)	1	03/05/1949	Bryophytes of Ireland	Threatened Species: Near threatened
Flat Neckera (Neckera complanata)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Fringed Bog-moss (Sphagnum fimbriatum)	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
Glittering Wood-moss (Hylocomium splendens)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Golden Feather-moss (Campyliadelphus chrysophyllus)	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
Green-tufted Stubble-moss (Weissia controversa)	1	17/09/1969	Bryophytes of Ireland	
Hair-pointed Feather-moss	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern



(Cirriphyllum piliferum)				
Hart's-tongue Thyme-moss (Plagiomnium undulatum)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Hasselquist's Hyssop (Entosthodon fascicularis)	2	31/12/1949	Bryophytes of Ireland	Threatened Species: Near threatened
Isothecium myosuroides var. myosuroides	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
Lateral Cryphaea (Cryphaea heteromalla)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Lesser Cow-horn Bog-moss (Sphagnum inundatum)	1	03/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
Lesser Pocket-moss (Fissidens bryoides var. bryoides)	1	30/04/1949	Bryophytes of Ireland	Threatened Species: Least concern
Little Shaggy-moss (Rhytidiadelphus loreus)	1	30/09/1958	Bryophytes of Ireland	Threatened Species: Least concern
Long-shanked Pincushion (Ptychomitrium polyphyllum)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Montagne's Cylinder-moss (Entodon concinnus)	1	30/04/1949	Bryophytes of Ireland	Threatened Species: Least concern
Neat Feather-moss (Scleropodium purum)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Nodding Thread-moss (Pohlia nutans)	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
Philibert's Tamarisk-moss (Thuidium assimile)	1	30/04/1949	Bryophytes of Ireland	Threatened Species: Least concern
Pink-fruited Thread-moss (Pohlia melanodon)	1	30/04/1949	Bryophytes of Ireland	Threatened Species: Least concern
Pointed Spear-moss (Calliergonella cuspidata)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Redshank (Ceratodon purpureus)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Red-stemmed Feather-moss (Pleurozium schreberi)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern



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Ringless Hook-moss (Warnstorfia	1	31/12/1993	Bryophytes of Ireland	
exannulata)				
Rock Pocket-moss (Fissidens dubius)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Rough-stalked Feather-moss	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
(Brachythecium rutabulum)				
Rusty Beard-moss (Didymodon	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
ferrugineus)				
Schistidium apocarpum sensu lato	1	17/09/1969	Bryophytes of Ireland	
Silky Wall Feather-moss	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
(Homalothecium sericeum)				
Silver-moss (Bryum argenteum)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Slender Haircap (Polytrichum	1	31/05/1949	Bryophytes of Ireland	
longisetum)				
Spiky Bog-moss (Sphagnum	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
squarrosum)				
Spiral Extinguisher-moss (Encalypta	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
streptocarpa)				
Springy Turf-moss (Rhytidiadelphus	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
squarrosus)				
Supine Plait-moss (Hypnum	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
cupressiforme var. resupinatum)				
Variable Forklet-moss (Dicranella	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
varia)				•
Wall Screw-moss (Tortula muralis)	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
Wavy Beard-moss (Didymodon	1	31/05/1949	Bryophytes of Ireland	Threatened Species: Least concern
sinuosus)				
White-tipped Bristle-moss	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
(Orthotrichum diaphanum)				
Yellow Feather-moss (Homalothecium	1	17/09/1969	Bryophytes of Ireland	Threatened Species: Least concern
lutescens)				
Eastern Grey Squirrel (Sciurus	3	01/09/2018	Mammals of Ireland 2016-2025	Invasive Species: Invasive Species    Invasive

carolinensis)				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)
Eurasian Badger (Meles meles)	10	23/03/2013	Atlas of Mammals in Ireland 2010- 2015	Protected Species: Wildlife Acts
European Otter (Lutra lutra)	1	31/08/2010	Atlas of Mammals in Ireland 2010- 2015	Protected Species: EU Habitats Directive    Protected Species: EU Habitats Directive >> Annex II    Protected Species: EU Habitats Directive >> Annex IV    Protected Species: Wildlife Acts
Hazel Dormouse (Muscardinus avellanarius)	1	08/01/2015	Atlas of Mammals in Ireland 2010- 2015	
Irish Hare (Lepus timidus subsp. hibernicus)	1	28/10/2019	Mammals of Ireland 2016-2025	
Red Fox (Vulpes vulpes)	6	29/09/2018	Mammals of Ireland 2016-2025	
Sika Deer (Cervus nippon)	1	27/06/2013	Atlas of Mammals in Ireland 2010- 2015	Invasive Species: Invasive Species    Invasive Species: Invasive Species >> High Impact Invasive Species    Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)    Protected Species: Wildlife Acts
West European Hedgehog (Erinaceus europaeus)	6	22/09/2023	Hedgehogs of Ireland	Protected Species: Wildlife Acts

# Appendix 2: Pictures of the site

Fig no.	Description	Image



Hedge and verges at north end of route, by the monument.





**2** Grassland adjacent to road with occasional patches of *J. effusus*.



Existing car parking bay, which will be upgraded.



Area of rank GA2 south of parking area



Large field to the east of road.