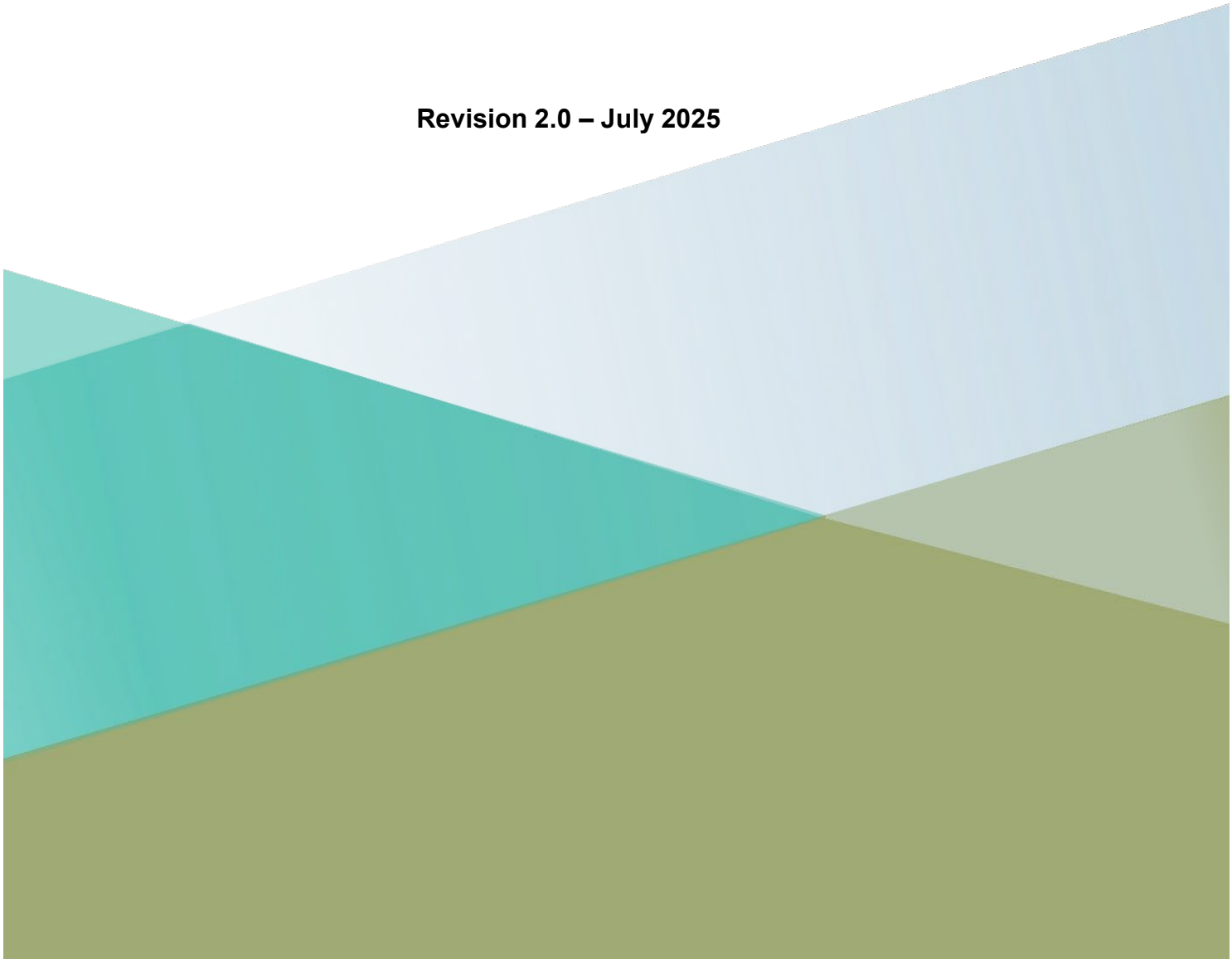
NPWS
An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra
National Parks and Wildlife Service

Application for Derogation

Under Regulation 54 & 54A of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended

Revision 2.0 – July 2025



- This form can be used by any individual or Company applying for a derogation under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 ("the Regulations") **or** any individual applying on behalf of the Minister for Housing, Local Government and Heritage under Regulation 54(A) of the Regulations.

- Note this application form is not for Domestic Dwelling Derogations (bats within private homes) which can be found here > (3D Application Form)

- Please ensure that you answer questions fully in order to avoid delays and/or your application being rejected on the basis that it does not contain sufficient information and detail for the application to be considered further.

- Please read and familiarise yourself with the NPWS Guidance on Applications for Regulation 54 Derogations for Annex IV species: Guidance for Applicants

- Please read and familiarise yourself with the European Commission's Guidance document on the strict protection of animal species of Community interest under the Habitats Directive

- Please also note that the responses to these questions are supplementary to the documentation required for the NPWS to be in a position to consider your application. A complete application should include both the application form and an associated report. Failure to supply either will result in your application being returned and/or refused.

- In circumstances in which a derogation is given on foot of this application, the Applicant is responsible for ensuring compliance with the conditions of any such derogation, even though they may employ another person to act on their behalf. To carry out any activity without, or not in accordance with, a derogation granted under regulation 54 or 54A of the Regulations constitutes a criminal offence, subject to prosecution.

- If you experience any problems filling in this form, please contact the Wildlife Licensing Unit: reg54derogations@npws.gov.ie

- Please note – applications, associated reports and derogations will be published on the NPWS website and/or the Department's Open Data website.

- Where any applicant is applying for a derogation to carry out surveys, please ensure to list all qualified ecologists and trainees under their supervision. See section 1(c) of Part A.

Part A: The Applicant - Personal Details

These questions relate to the person responsible for any proposed works and who will be the **Applicant**.
If this application is being submitted on behalf of a third party, please also complete Part B below.

1. (a) Name of Applicant

Title (Mr/Mrs/Miss/Ms/Dr)	Forename(s)	Surname
Mr	Eamonn	Power
(b) Company Name, if applicable	Kilbarry Developments Limited	
(c) Address Line 1	Studio 14, The Atrium	
Address Line 2	Maritana Gate Canada Street	
Town	Waterford	
County	Waterford	
Eircode	X91 A250	
(d) Contact number	0863885075	
(e) Email address	eamonn@whiteboxltd.ie	
(f) Address where works are to be carried out if different from (b) above.		
Address Line 1	Lacken Road	
Address Line 2	Kilbarry	
Town	Waterford	
County	Waterford	
Eircode	Grid Reference: Longitude -7.1296978, Latitude: 52.2309800	

Details of Person Submitting Application on Behalf of Applicant/Derogation Holder

Information relating to the person (e.g. ecologist) responsible for submitting the application on behalf of the applicant should be entered below:

1. (b) Name of Person/Ecologist

Title (Mr/Mrs/Miss/Ms/Dr)	Forename(s)	Surname
Dr	Jane	Russerll-O'Connor
(b) Company Name	Russell Environmental & Sustainability Services Limited	
Address Line 1	16 Newtown Park	
Address Line 2		
Town	Tramore	
County	Waterford	
Eircode	X91X4C8	
(c) Contact number	0861756495	
(d) Email address	jane@russellenvironmental.ie	

(e) Relationship to Applicant	None – Employed consultant

For Survey Derogations Only

1. (c) Please Indicate the Names to Appear on the Derogation Along with the Position Held e.g. Supervisor/Trainee

Forename(s)	Surname	Supervisor or Trainee

Part B: Species covered by the Derogation

1. **Species of Animal:** Please indicate which species is/are the subject of the application:

- Bat ☒
- Otter ☐
- Kerry Slug ☐
- Natterjack Toad ☐
- Dolphin ☐
- Whale ☐
- Turtle ☐
- Porpoise ☐

Please detail the exact species (scientific name):

1. Common Pipistrelle *Pipistrellus pipistrellus* and Leisler's Bat *Nyctalus leisleri*

2. Please provide the maximum number of individuals affected* Approximately 8 Leisler's and 1 Common pipistrelle based on sonar readings

3. Please provide the maximum number of breeding or resting sites affected* Tree works to trees in treeline

4. Please provide the maximum number of eggs to be taken* N/A

5. Please provide the maximum number of eggs to be destroyed* N/A

*If no figures can be provided for the maximum number of individuals, breeding sites, resting places and eggs to be covered by the derogation please provide reasons why.

6. **Species of Plant:** Please indicate which species is/are the subject of the application:

- Killarney Fern ☐
- Slender Naiad ☐
- Marsh Saxifrage ☐

7. If you previously received a derogation for any species of animal or plant, please state derogation number and confirm that you have made a return to NPWS on the numbers actually affected by that derogation.

8. **Proposed Dates for Activities:** Please indicate the timeframe that you propose to carry out the activities. Dates set by NPWS may differ from dates proposed here. *A derogation will only be issued with a start and end date within a calendar year.*

Start Date:	As soon as possible
End Date:	22nd September

Part C: Nature of the Derogation.

1. Please tick which prohibition(s) the application for a derogation relates to:

Regulation 51	
Deliberately capture or kill any specimen of the relevant species in the wild	☐
Deliberately disturb these species particularly during the period of breeding, rearing, hibernation and migration	☒
Deliberately take or destroy eggs of the relevant species in the wild	☐
Damage or destroy a breeding or resting place of such an animal, or	☐
Keep, transport, sell, exchange, offer for sale or offer for exchange any specimen of the relevant species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive.	☐
Regulation 52	
Deliberately pick, collect, cut, uproot or destroy any specimen of these species in the wild, or	☐
Keep, transport, sell, exchange, offer for sale or offer for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 13(1)(b) of the Habitats Directive.	☐

Further information should be provided in the format set out in Part E: Template for Supporting Information

Part D: Derogation Tests

Note: The following <u>summary</u> information must be provided by the applicant in all cases, and will be used to determine if a derogation can be provided. Further information must be provided in the format set out in Part E: Template for Supporting Information

Test 1: Reason for the Derogation

1. Please tick which reason(s) below explains how this application qualifies under Regulation 54(2)(a-e) or Regulation 54A(2)(a-e) of the European Communities (Birds and Natural Habitats) Regulations: Please provide a summary of how the application meets the 3 conditions required to provide a derogation. Note that in all cases additional information must be provided (see Part E).

a.	In the interests of protecting wild flora and fauna and conserving natural habitats **(proceed to 2a)**	☐
b.	To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property **(proceed to 2b)**	☐
c.	In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment **(proceed to 2c)**	☒
d.	For the purpose of research and education, of re-populating and re-introducing these species and for the breeding operations necessary for these purposes, including artificial propagation of plants **(proceed to 2d)**	☐

e.	To allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species to the extent specified therein, which are referred to in the First Schedule **(proceed to 2e)**	☐

2a. In the interests of protecting wild flora and fauna and conserving natural habitats:

i) Please state the wild flora, fauna or habitats that require protection and /or conservation.

ii) Please summarise how the interests of protection and conservation of the species/habitat concerned justify affecting another species under strict protection.

2b) To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property:

i) Please summarise the nature of the potential damage, why it is considered “serious” and how this outweighs the conservation interest of the species under strict protection.

2c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment:

i) Where the reason is for public health and public safety, summarise the evidence provided to support this reason (e.g. documentary evidence of the risk from a chartered structural engineer, tree surgeon, Garda Síochána, qualified health professional etc.)

The treeline is adjacent to the Lacken Road and the granted planning application for Phase 6 of Kilbarry Housing Development, for which the construction phase 6 has not yet commenced. The trees in the treeline will **not** be removed as a result of the development, however as many of the trees are sycamore or horse chestnut, there are lower branches that are in the way of vehicle movement/scaffolding etc. Therefore, the derogation licence is required to remove the smaller sucker-type lower branches on these trees. These trees are being used by the aforementioned bat species for roosting. The location of trees that require trimming back are further detailed in section ii) in Figure 1, however, should the boughs not be cut back there is an issue of health and safety for the residents of the housing development whereby the boughs could break off and cause injury in the event of storms/high winds. There will be no permanent loss of roosts, just short term disturbance.

It is also recommended that any tree works are undertaken sensitively and under the supervision of an ecologist.

ii) Where the reason is for "other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment", summarise the nature of the public interest and how this outweighs the conservation interest of the species under strict protection.

This housing is a development that is within the zoned residential area for Waterford City as part of the Waterford City and County Council Development Plan (2022-2028) to provide housing for the City and also provides social housing. See the red line in Figure 1 which shows where the tree trimming is required. No large boughs or branches at the crown of the trees will be removed. The housing development (Phases 1-6) was granted planning by the planning authority and is in compliance with national planning policies, whereby an Environmental Impact Assessment Report was completed together with a Stage 1 Screening for Appropriate Assessment and an NIS. The mitigation measures in these documents have been implemented as part of the planning conditions and are regularly checked by a qualified ecologist to ensure their compliance. The development supports the economic and social development of Waterford City and is part of a larger phased development of 12 phases, that includes a green belt area that will be planted and seeded to enhance biodiversity (Figure 2). Therefore, providing additional habitats for bats and other wildlife that would have previously been arable farmland, subject to the use of pesticides, herbicides and fertilisers.

Figure 1 Treeline location in red

Figure 2 Master Plan and Landscape Plan

2d) For the purpose of research and education, of re-populating and re-introducing these species and for the breeding operations necessary for these purposes, including artificial propagation of plants:

i) Please summarise the objective(s) of the proposed activities making reference to those listed above and how the the purpose of such activities overrides the interests of strict protection of the species. [1]

[1] Note that this reason may be appropriate for when research involves surveys that may cause disturbance of species under strict protection. But the sole purpose of the surveys should be for research and education or the other reasons listed above under 1d.

2e) To allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species to the extent specified therein, which are referred to in the First Schedule

i) Please clearly state the objective of the activity and verify that this reason is being chosen as the objective of the activity does not match reasons a-d listed above.

ii) Please summarise how the activity will result in the taking or keeping of limited numbers of specimens of the species, how it will be applied on a selective basis and to a limited extent, and how it will be done under strictly supervised conditions.

Test 2: Absence of Alternative solutions

2. Please summarise the alternative solutions that have been considered and why these solutions are deemed unsatisfactory. This must include the option of the "do-nothing" alternative and evidence should be objective and robust. Note that in all cases further information must be provided in the format set out in Part E: Template for Supporting Information.

Alternative Solution	Reasons for "Unsatisfactory"
Do-Nothing If the proposed tree trimming was not carried out then there is a risk of the boughs being damaged and affecting the health of the trees which may lead to their death and loss of roosts.	Unsatisfactory as this would ultimately damage the trees and may result in their death and thus the roost sites
Furthermore, if the trees are not trimmed then there is a risk of boughs falling on residents of the housing development for which planning has been granted.	Unsatisfactory as there may be danger to human health

* Please insert additional rows above if needed

Test 3: Impact of a Derogation on Conservation Status

3. Please summarise the possible impacts on the population of the species that is subject to this application, taking into account all the mitigation and/or compensation measures that are to be undertaken. Evidence that such mitigation has been successful elsewhere should be provided where relevant. Mitigation measures being relied upon must ensure that the derogation will not be detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range. Note that in all cases further information must be provided in the format set out in Part E: Template for Supporting Information.

A derogation licence for the treeline for Phase 4 of the same development was granted and the boughs were cut back sensitively with no loss of bat roosts. Therefore the anticipated impact is likely to be short term disruption as the roosts will not be permanently lost. The trees will have their branches trimmed back to prevent damage and will be kept as part of the development. Guidance has been adhered to regarding the external lighting for the development in accordance with the Bat Conservation Ireland specifications.

Part F. Declaration

I declare that all of the foregoing particulars are, to the best of my knowledge and belief, true and correct. I understand that the deliberate killing, injuring, capturing or disturbing of protected species, or damage or destruction of their breeding sites or resting places or the deliberate taking or destroying of eggs is an offence without a derogation and that it is a legal requirement to comply with the conditions of any derogation I may be granted following this application. I understand that NPWS may visit to check compliance with a derogation.

Please note that under Regulation 5 of the European Communities (Birds and Natural Habitats) Regulations 2011-2021 an authorised officer may enter and inspect any land or premises for the purposes of performing any of their functions under these Regulations or for obtaining any information which they may require for such purposes.

Signature of the Applicant [signature] **Date** 16/9/25.

Name in BLOCK LETTERS EAMONN POWER.

PRIVACY STATEMENT

See Privacy Statement at www.npws.ie/licences

Russell Environmental and Sustainability Services Limited

KILBARRY PHASE 5

Lacken Road, Waterford

Supporting Information for the Derogation Application

19th of September 2025

Authored by: Dr Jane Russell-O'Connor

Russell Environmental and Sustainability Services Limited

Emal: jane@russellenvironmental.ie

Website: www.russellenvironmental.ie

1.0 Table of Contents Page No.

1.2 Summary

Site:	Hedgerow/treeline along the Lacken Road, Kilbarry, Waterford
Structure:	Hedgerow/treeline
Bat species present:	Leisler's Bat *Nyctalus leisleri* Common Pipistrelle *Pipistrellus pipistrellus*
Roost location:	Mature trees in hedgerow/treeline
Survey by:	**Dr. Jane Russell-O'Connor/Helena Slattery**
Date:	**7th and 8th of April 2024, 24th and 26th of March, 2025 (JROC), 10th and 11th of June 2025 (JROC/HS).**

2.0 Introduction

2.1 Objective of the proposed works

Phase 6 of the Kilbarry housing development has been granted planning and is due to begin construction. The hedgerow/treeline adjacent to the Lacken Road is also adjacent to Phase 6 of the Kilbarry Development. However, there is no intention to remove the hedgerow/treeline, but as there are number of branches coming out from the trees that will impede the construction works, the trees will require some cutting back to prevent their damage. Phase 6 is part of a 12 phased development as detailed in Figure 1. Phases 1 and 2 are now completed. Phases 3 and 4 are currently under construction. Phase 6 is the next phase scheduled for construction due to commence in October 2025.

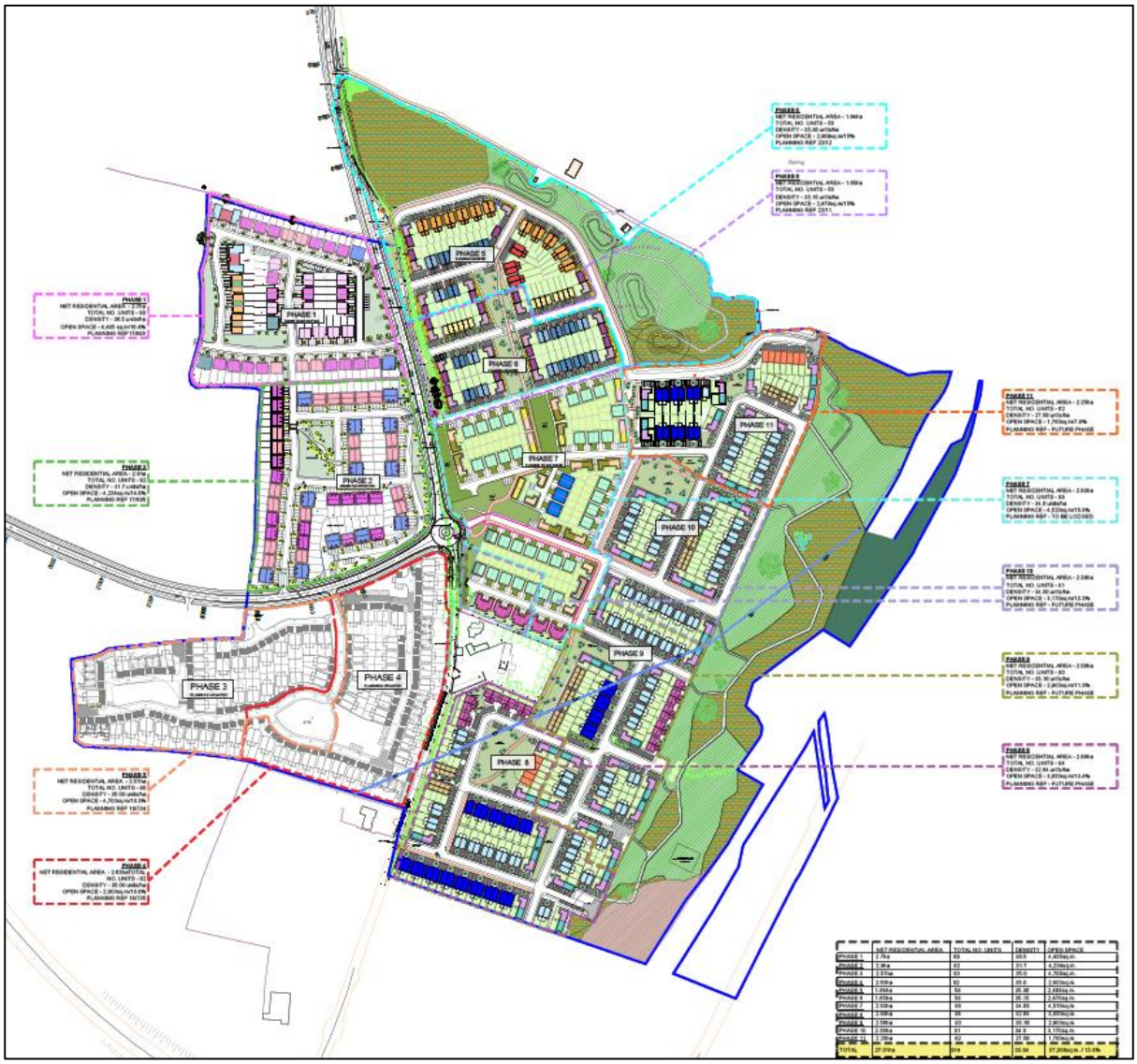


Figure 1 Master Plan for Kilbarry residential development

2.2 Statement of Authority

Russell Environmental and Sustainability Services Limited (RESS Ltd.) was contracted by Kilbarry Developments Limited, a subsidiary of Whitebox Limited, to complete a bat survey.

Dr Jane Russell-O'Connor holds a PhD in Ecology and a Degree in Ecology and Environmental Science from the University of Wolverhampton as well as a HDip in Science. She has been working in private industry in Ireland for over 12 years providing ecological and environmental services to private developers, architects and engineers as well as local authorities, government agencies, the HSE and the Heritage Council. This has involved vegetation surveys, freshwater surveys, large mammal surveys (including otter) bat surveys, Stage 1 Screening for Appropriate Assessments, NIS, Ecological Impact Assessments, Biodiversity Plans and Environmental Impact Assessments (Biodiversity Chapter). She previously managed a nature reserve and country parks in the UK, where she was trained in bat surveying through the Bat Conservation Trust and conducted surveys as part of her roles as nature reserve manager/country park manager for Wolverhampton City Council and ranger for Northampton County Council. She has more recently completed and passed both the Bat Conservation Ireland online courses. She also lectures part-time in Ecology and Environmental Science at South East Technological University, has published in peer reviewed journals and presented research at international conferences. She has conducted bat surveys in a wide range of buildings and vegetation types.

Helena Slattery is a final year student at the University of Cork, on the Ecology and Environmental Biology degree course. She commenced working for RESS Ltd. In May 2025 and has been trained by Dr. Jane Russell-O'Connor. She conducted the June 2025 surveys under the supervision of Dr. Jane Russell-O'Connor and has completed and passed both the Bat Conservation Ireland online courses.

3.0 Background

3.1 Site Location

The site is located near the Six Crossroads Business Park and Waterford City (Figures 2 and 3), along the Lacken Road. The hedgerow borders a former agricultural tillage field and is comprised of a stone-faced bank with hedgerow species and mature trees (Figures 4, 5 and 6). The midpoint of the hedgerow/treeline has the following coordinates Longitude -7.1296978, Latitude: 52.2309800.

3.2 Site Description

The hedgerow/treeline is comprised of mature deciduous trees with a number of other typical hedgerow species, atop a stone-faced hedge bank and narrow grass

verge on the roadside. The adjacent former farmland has a number of small copses and a linear woodland.

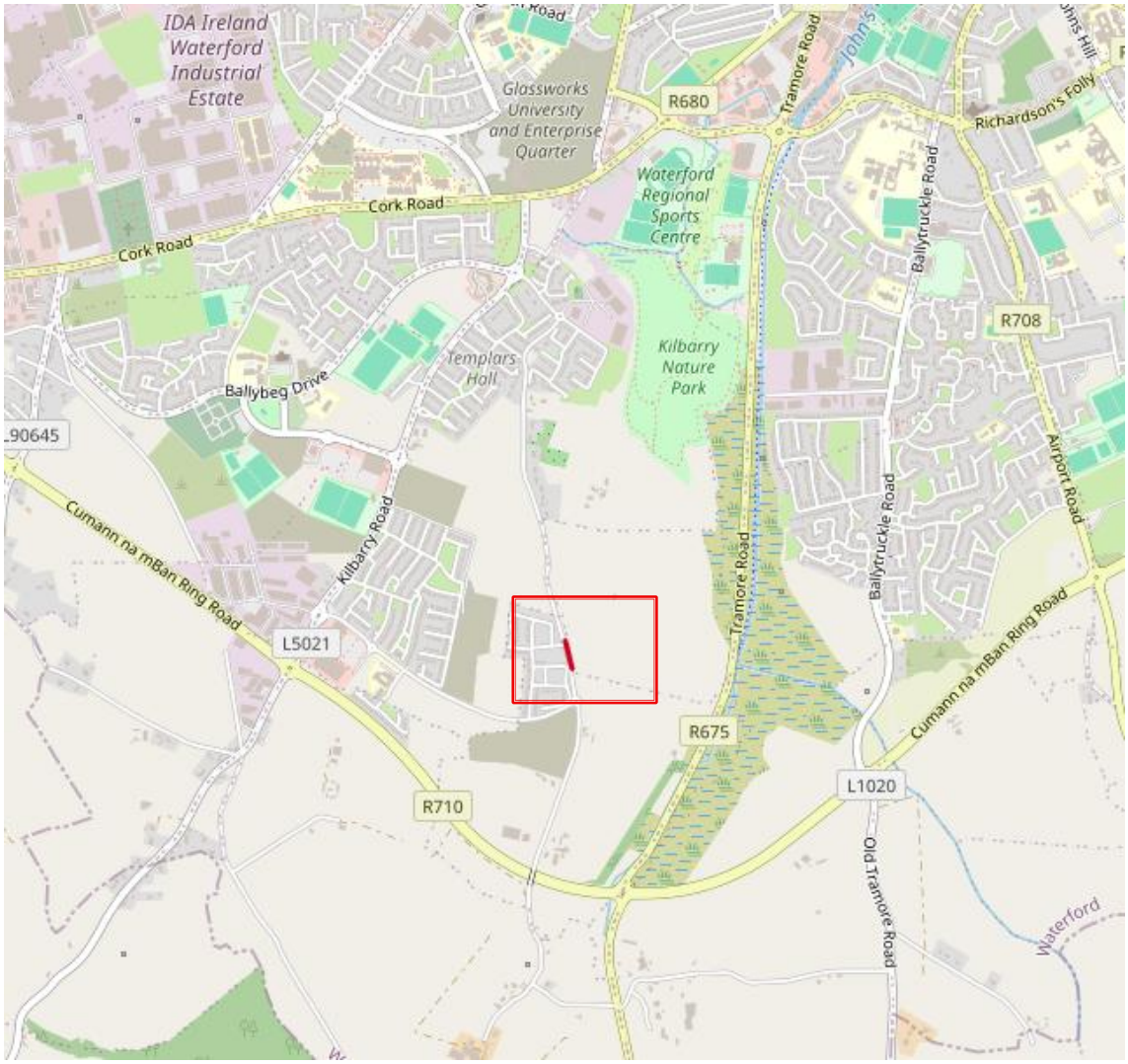


Figure 2 Location of the section of hedgerow/treeline marked in red (EPA, 2025).

Figure 3 Exact hedgerow/treeline location (EPA, 2025).

Flora

WL1/WL2/BL1 Hedgerow/Treeline/Stone Wall Mosaic.

This is the hedgerow/treeline that runs adjacent to the Lacken Road and is on the western boundary of Phases 5, 6 and 7 of the Kilbarry Development. It is classed as WL1/WL2/BL1 Mosaic due to the mature tree species present and the stone faced bank upon which the hedgerow/treeline sits (Fossitt, 2000). The main tree species present in this habitat are Blackthorn *Prunus spinosa,* Elder *Sambucus nigra*, Grey Willow *Salix cinerea,* Hawthorn *Crataegus monogyna,* Horse chestnut *Aesculus hippocastanum,* Privet *Ligustrum vulgare,* Sycamore *Acer pseudoplatanus* and Sweet cherry *Prunus avium*.

The species present in the ground flora are Bindweed (Hedge) *Calystegia sepium*, Bracken *Pteridium aquilinum*, Bramble *Rubus fruiticosus agg.,* Cleavers *Galium aparine,* Common sowthistle *Sonchus oleraceus,* Cow Parsley *Anthriscus sylvestris,* Creeping buttercup *Ranunculus repens,* Creeping cinquefoil *Potentilla reptans*, Dock *Rumex obtusifolius,* Foxglove *Digitalis purpurea,* Germander speedwell *Veronica chamaedrys,* Greater stitchwort *Stellaria holostea*, Hawksbit (Rough)*Leontodon hispidus,* Herb-Robert *Geranium robertainum,* Hogweed *Heracleum sphondylium,* Honeysuckle *Lonicera periclymenum,* Ivy *Hedera helix,* Navelwort *Umbilicus rupestris,* Nettle *Urtica dioica*, Nipplewort *Lapsana communis*, Purple deadnettle *Lamium purpureum,* Ribwort plantain *Plantago lanceolata*, Rosebay willowherb *Chamaenerion angustifolium,* Soft shield fern *Polystichum setiferum*, Spleenwort (Black) *Asplenium adiantum-nigrum,* Thistle (Bull) *Cirsium vulgare,* Vetch (Bush)*Vicia sepium*, White clover *Trifolium repens,* and Wood sage *Teucrium scorodonia.*

Grass species within the hedgerow are Cocks-foot *Dactylis glomerata,* Common bent *Agrostis tenuis,* Creeping bent *Agrostis stolonifera,* False oat-grass *Arrhenatherum*

elatus, Red fescue *Festuca rubra,* Smooth meadow grass *Poa pratensis,* Soft brome *Bromus hordeaceus* and Yorkshire Fog *Holcus lanatus.*

3.3 Brief Description of the Site from the Perspective of Bats

The site is located in a peri-rural location of Waterford City and surrounded by occasional dwellings and farmland, mostly under tillage with associated hedgerows and or hedgerows/treelines. Phases 1 and 2 of the Kilbarry housing development are completed and Phase 3 and 4 are under construction (a previous derogation licence was sought and granted for works of a similar nature for the treeline/hedgerow adjacent to Phase 4 of the development). The hedgerows and/or hedgerows/treelines provide suitable habitats for foraging for bats and the more mature trees may provide crevices that are suitable for roosting.

Figure 4 WL1/WL2/BL1 Hedgerow/Treeline/Stone Wall Mosaic.

Figure 5 WL1/WL2/BL1 Hedgerow/Treeline/Stone Wall Mosaic

Figure 6 WL1/WL2/BL1 Hedgerow/Treeline/Stone Wall Mosaic.

4.0 Bat Survey

4.1 Pre-existing Information on Species Location and Environs

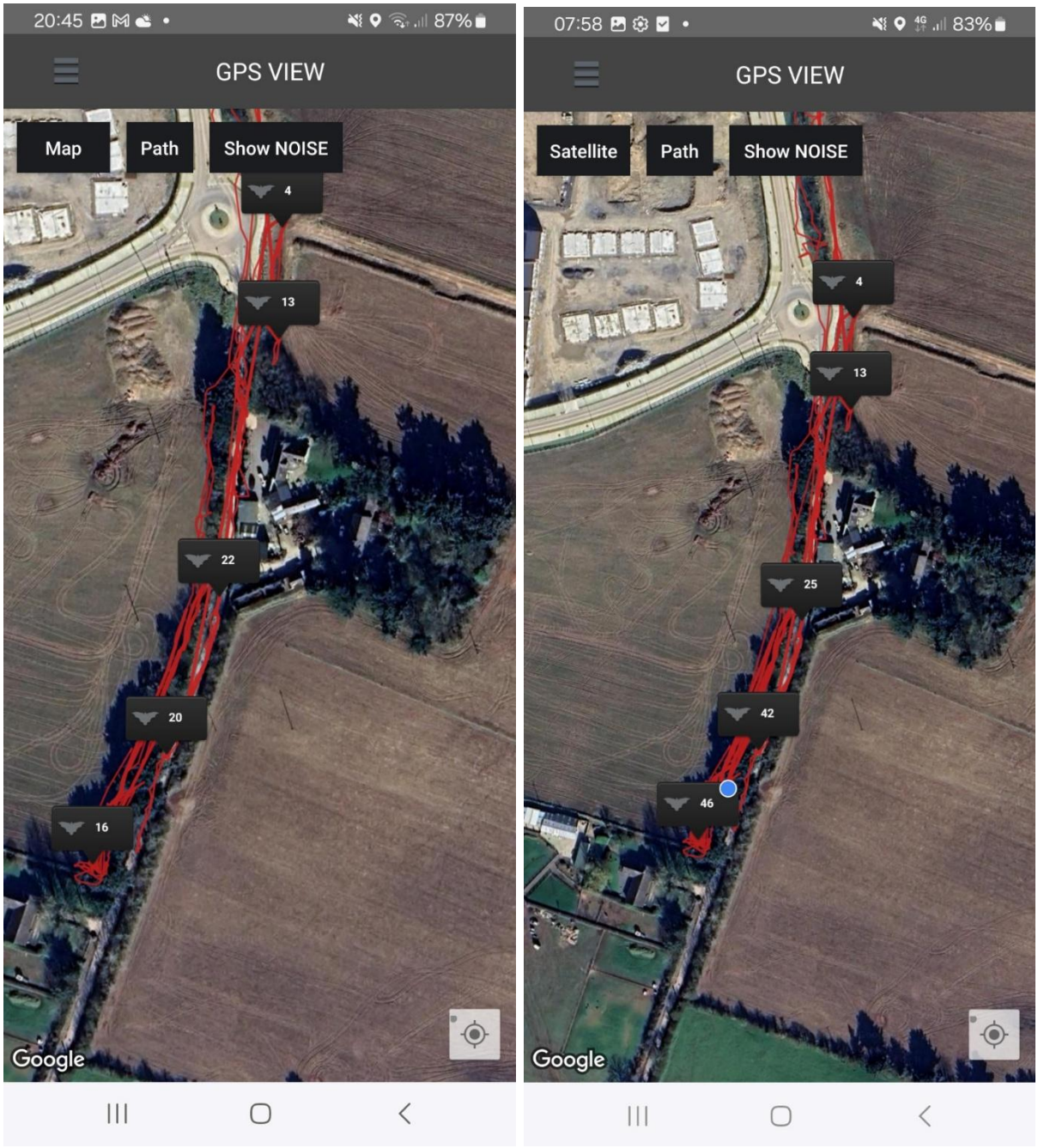
A bat survey was conducted in October 2024 for the application to cut back branches for a number of trees also on the Lacken Road but on the opposite side of the road for Phase 4 of the development (Figure 7). A total of 54 bats were detected during the dusk survey and the dawn survey recorded a further 55 bats by the Echo Touch 2 Pro meter The species present in these surveys are detailed in Table 1. Based on the surveys of this section of the Lacken Road, it appears that there are roosts with greater numbers in these trees. This may be as a result of the tree species, which are predominantly very mature Monterey cypress and Monterey pine, which have more fissures in the bark to accommodate bats roosting.

Species	Locations
Soprano pipistrelle (*Pipistrellus pygmaeus)*	Foraging in the environs, roosting in the mature coniferous trees of the hedgerow/treeline
Common pipistrelle (*Pipistrellus pipistrellus*)	Foraging in the environs, roosting in the mature coniferous trees of the hedgerow/treeline
Leisler's bat (*Nyctalus leisleri)*	Foraging in the environs, roosting in the mature coniferous trees of the hedgerow/treeline

Table 1 Bat species present in the treeline/hedgerow adjacent to Phase 4

Figure 7 Survey of hedgerow/treeline adjacent to Phase 4 in green and subject site in red.

Figures 8 and 9 show the sonogram readings for the Phase 4 hedgerow/treeline marked in green in Figure 7. There are a number of bats roosting in the mature trees.



Figures 8 and 9. The sonogram readings for the hedgerow/treeline at Lacken Road. NB: These are cumulative readings from both the survey in April 2024 (count of 21) and the dusk readings on the 23rd of October (Count of 54).

The location of the subject site for which this application applies to is within the 2km grid square S50Z. Figures 10 and 11 show the distribution of the two species found in the subject hedgerow/treeline within the vicinity of the site (Biodiversity Ireland, 2025). Figures 10 and 11, together with bat surveys for the Phase 4 hedgerow/treeline show that there is a good distribution of both Common soprano and Leisler's bat in the surrounding area.

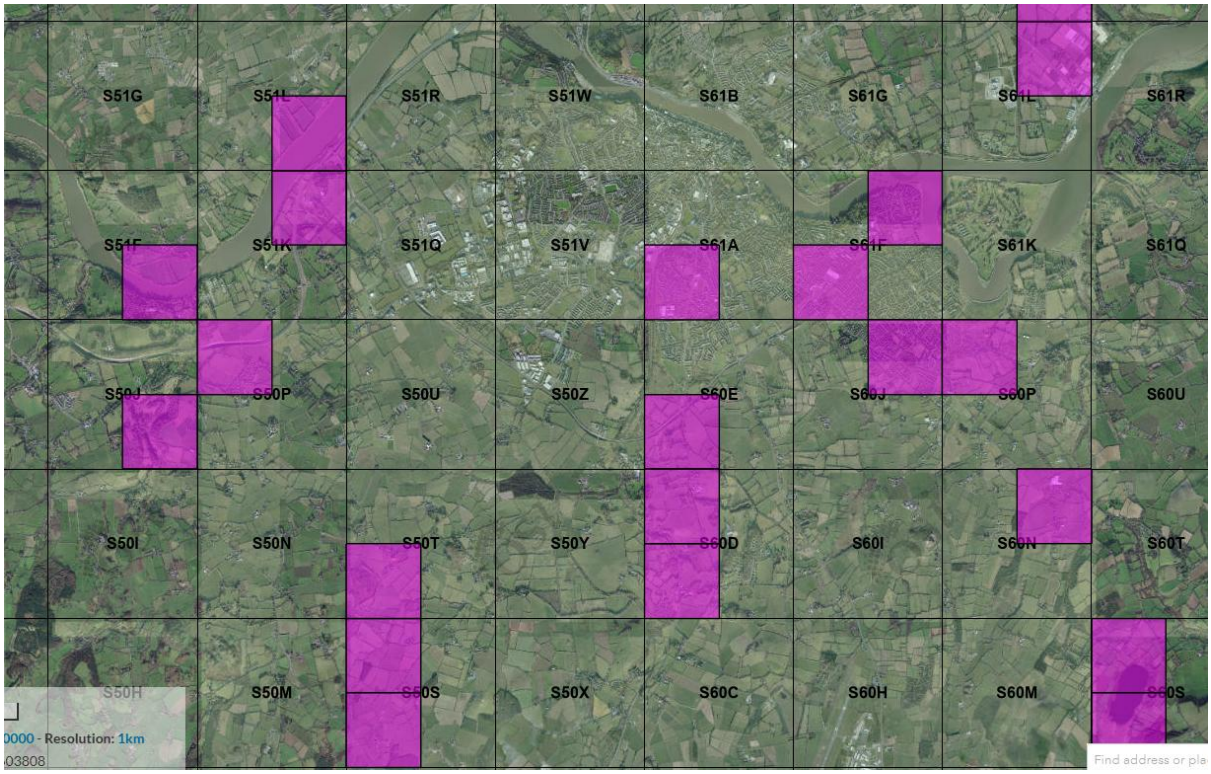


Figure 10 Distribution of Common pipistrelle (Pipistrellus pipistrellus) in the vicinity (Biodiversity Ireland, 2025)

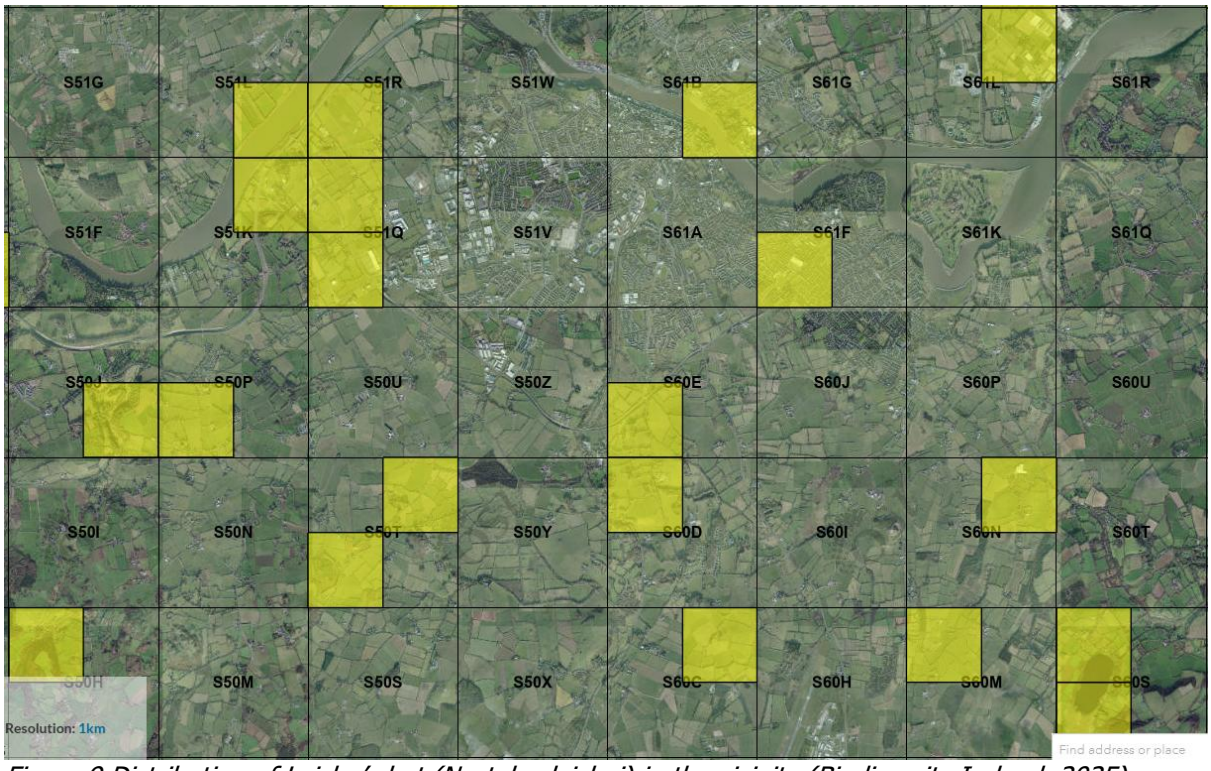


Figure 9 Distribution of Leisler's bat (Nyctalus leisleri) in the vicinity (Biodiversity Ireland, 2025)

4.2 Objective of the Survey

The surveys that were carried out were conducted to inform the design of the development and as part of the Biodiversity Chapter for the EIAR that was part of

the planning applications for each phase. Although additional surveys were carried out within the Master Plan site to inform a previous derogation licence application (now granted and tree works completed) as detailed in Section 4.1.

4.3 Survey Methodology

Survey of fauna was carried out by means of a thorough search within the hedgerow/treeline. The survey methodology was undertaken in accordance with those set out in Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).

During the dusk and dawn surveys a SSF Bat 2 heterodyne, ultrasonic detector and an Echo Meter Touch 2 Pro (for Android) Bat detector with software app on Samsung Galaxy were used. An Echo Meter Touch 2 Pro (for iPhone) with associated software app, was also used.

A SSF Bat 2 Fledermaus Detector was also used at a range of different frequencies. A DS300 Depstech Digital Borescope, fibre optic, inspection camera was also used to look into small cavities, where necessary.

Vantage points where adjacent to the hedgerow/treeline along the Lacken Road.

The nature and type of habitats present are also indicative of the species likely to be present.

A digital camera was used to document items of interest.

4.3.1 Survey Constraints

The survey was carried out by means of a thorough examination of the hedgerow/treeline. There were no climatic and seasonal constraints in regard to survey as it was undertaken within the active season at dusk. However the dawn survey on the 8th of April 2024 was inhibited by rain, which was a light drizzle at the start of the survey that soon progressed into heavy rain, hence the results did not yield as many recordings as expected. There were no constraints to the remaining surveys in March 2025 and June 2025. Although the March survey was a little early (i.e. optimal survey time would commence in April), there were bats detected roosting in the wider area of this development as the temperatures were relatively high for the time of year and bats appeared to have come out of hibernation for feeding.

5.0 Ecological Survey and Site Assessment

The initial survey was of the hedgerow/treeline along the Lacken Road during dusk of the 7th of April, dawn of the 8th of April 2024. The emergence dusk survey commenced at 8.45pm and was completed at 9.15pm. The dawn re-entry survey took place from am until 5.10am. The post-dawn survey took place from 6.10am until 6.35am. The

second and third surveys took place during the dusk of 24th of March at 7.15pm until 7.50pm and on the 26th of March at 7.15pm until 7.50pm. The fourth and fifth surveys took place at dusk on the 10th of June at 10.17pm and dawn at 4.20am.

In the dusk and dawn surveys conducted there was evidence of roosting sites in the mature trees of the subject site hedgerow/treeline. The sonar results identified that two species of bat were using the hedgerow/treeline at the time of surveying (Leisler's Bat *Nyctalus leisleri*) and Common Pipistrelle *Pipistrellus pipistrellus*). The activity in the trees shown on the sonar readings in Figure 12.

Throughout the June 2025 dusk and dawn surveys, the hedgerow/treeline was observed by two surveyors for emergence and re-re-entry of bats species.

5.1 Indication of Significance of Site for Bats

During the dusk to dawn surveys, there were a number of bats seen flying along and in the hedgerow/treeline. This activity was also recorded by both bat detectors and recorded by the Echo Touch meter pro detectors (Figure 12).

The dawn survey on the 8th of April 2024 did not have any records due to unexpected heavy rainfall as many of the bats would have returned to the roost prior to rainfall as bats do not like to fly in the rain, especially the heavy rainfall experienced in the dawn survey. However it is worth noting that as detailed in Table 2 and Figure 12, the numbers of individuals of each species are not as great as the bats identified in the treeline/hedgerow on the other side of the road (Figure 7, in green). This may be as a result of the species and age of the trees present. As mentioned in section 4.1 the higher count may be due to the maturity and structure of the Monterey pine and Monterey cedar trees compared with the Sycamore and Horse chestnut trees in the subject hedge, that are not as tall. Based on the numbers of each species found, it is likely that the roosts in this hedgerow/treeline are likely to be bachelor roosts. Similar numbers were also recorded in the June 2025 surveys (these have not been shown as the sonogram recordings are cumulative)

Species	Count	Locations
Common pipistrelle (*Pipistrellus pipistrellus*)	11	Foraging in the environs, roosting in the mature trees of the hedgerow/treeline
Leisler's bat (*Nyctalus leisleri)*	1	Foraging in the environs, roosting in the mature trees of the hedgerow/treeline

Table 2 Species and count of each recoded in the subject hedgerow/treeline based on March 2025 sonar readings

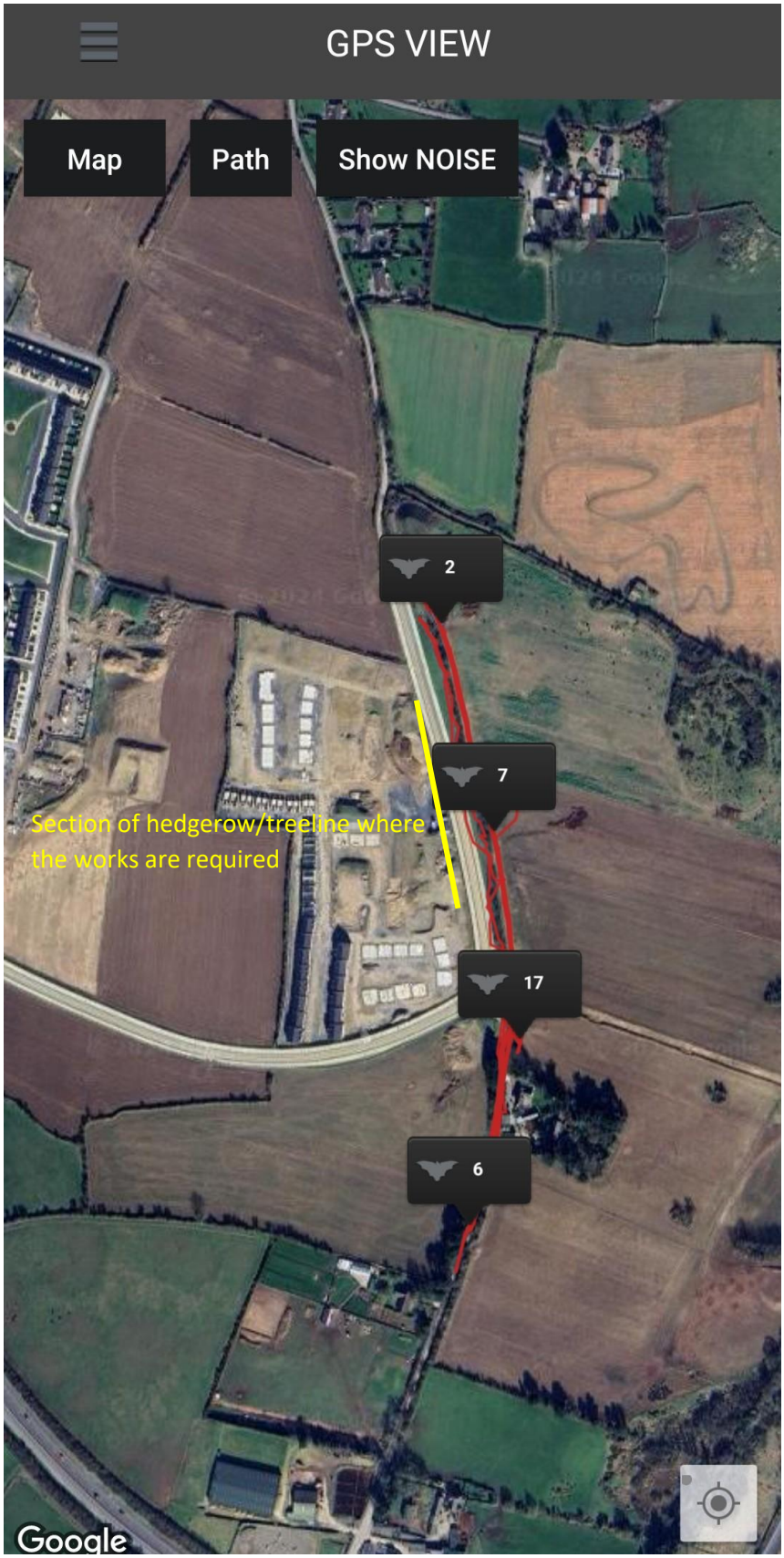


Figure 12 The sonogram readings for the hedgerow/treeline at Lacken Road April 2025

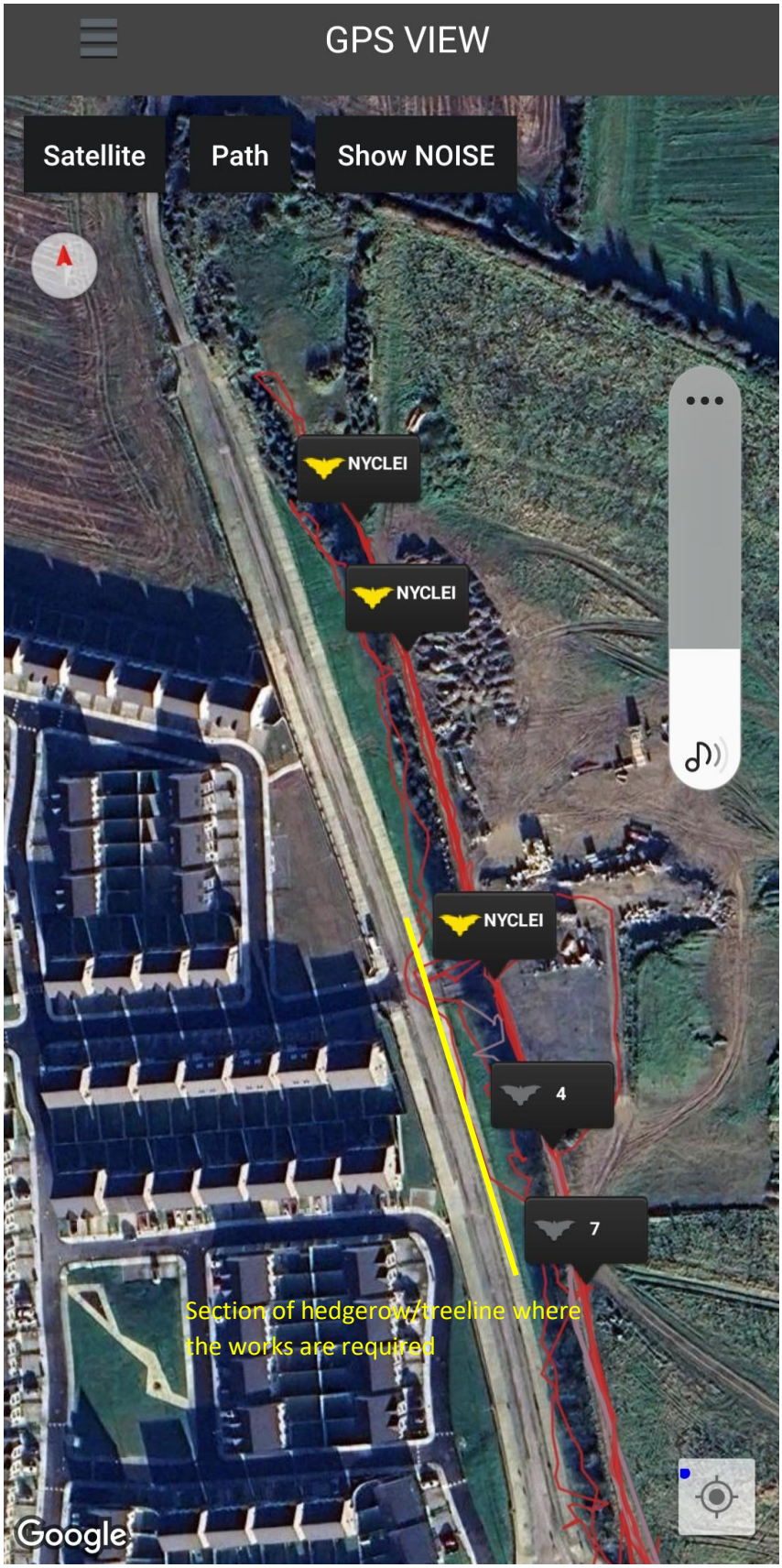


Figure 13 The sonogram readings for the hedgerow/treeline at Lacken Road March 2025

5.2 Legal Status and Conservation Issues – Bats

All Irish bat species are protected under the Wildlife Act (1976) and Wildlife Amendment Act (2000). Also, the EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive 1992), seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. Across Europe, they are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both these conventions.

All bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat is further listed under Annex II.

6.0 Evidence to Support the Derogation Tests

As two species of bat were roosting in the trees (Common Pipistrelle *Pipistrellus pipistrellus* and Leisler's Bat *Nyctalus leisleri*), the works be required to cut back the branches of the trees require derogation licence.

Test 1: The reason for the derogation is (c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment

i) In the interests of public health and public safety:

The treeline is adjacent to the Lacken Road and the granted planning application for Phase 6 of Kilbarry Housing Development, for which the construction has not yet commenced. The trees in the treeline will **not** be removed as a result of the development, however as many of the trees are sycamore or horse chestnut, there are lower branches that are in the way of vehicle movement/scaffolding etc. Therefore, the derogation licence is required to remove the smaller sucker-type lower branches on these trees. These trees are being used by the aforementioned bat species for roosting. The location of trees that require trimming back is in Figure 2. However, should the boughs not be cut back there is an issue of health and safety for the residents of the housing development whereby the boughs could break off and cause injury in the event of storms/high winds. There will be no permanent loss of roosts, just short term disturbance.

ii) Where the reason is for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment:

This housing is a development that is within the zoned residential area for Waterford City as part of the Waterford City and County Council Development Plan (2022-2028) to provide housing for the City and also provides social housing. See the red line in Figure 2 which shows where the tree trimming is required. No large boughs or branches at the crown of the trees will be removed. The housing development (Phases 1-6) was granted planning by the planning authority and is in compliance with national planning policies, whereby an Environmental Impact Assessment Report was completed together with a Stage 1 Screening for Appropriate Assessment and an NIS. The mitigation measures in these documents have been implemented as part of the planning conditions and are regularly checked by a qualified ecologist to ensure their compliance. The development supports the economic and social development of Waterford City and is part of a larger phased development of 12 phases, that includes a green belt area that will be planted and seeded to enhance biodiversity, therefore, providing additional habitats for bats and other wildlife that would have previously been arable farmland, subject to the use of pesticides, herbicides and fertilisers.

Test 2 Absence of a Satisfactory Alternative Solution

Table 3 details the alternative solutions and illustrates that these are unsatisfactory

Alternative Solution	Reasons for "Unsatisfactory"
Do-Nothing If the proposed tree trimming was not carried out then there is a risk of the boughs being damaged and affecting the health of the trees which may lead to their death and loss of roosts.	Unsatisfactory as this would ultimately damage the trees and may result in their death and thus the roost sites
If the trees are not trimmed then there is a risk of boughs falling on residents of the housing development for which planning has been granted.	Unsatisfactory as there may be danger to human health

Table 3 Alternative Solutions

Test 3 Impact of a Derogation on Conservation Status

Given that the tree works required are only to remove the smaller sucker type side branches, it is unlikely that the population of either species will be affected permanently as the trees will be kept. Furthermore, as there are established roosts very close to the treeline, where work has already been completed to remove any overhanging branches, there are opportunities for the 12 individuals to relocate temporarily, whilst the works are being carried out. The design of the development took into consideration the Guidelines for Lighting for Bats (Bat Conservation Trust, 2023; Kelleher, C. & Marnell, F., 2006) and colour temperatures for street lighting are less than or equal to 2700K with hoods to prevent light spill.

However, what is essential is that the works be carried out before the hibernation period so the bats do have an opportunity to relocate.

7.0 Monitoring the Impacts of the Derogation

No works should be carried out until a derogation licence is secured.

7.1 Mitigation Measures

To protect the bats present in the treeline/hedgerow the following mitigation measures must be implemented:

Measure 1: timing of maintenance/removal works

Work must be undertaken outside of the hibernation period (November 1st.to 31st March) and maternity period (1st if May to 31st of August) (See Figure 14).

Measure 2: Tree works
Tree works are to be carried out by a licenced tree surgeon and under the supervision of a qualified ecologist.

Any cutting of branches shall be done carefully with the possibility that individual bats may be found. If discovered, the animals shall be retained in a box until dusk and released on site.

Any branches that are cut should be sectioned and are to remain on the ground for up to 4 days to allow any bats contained within in them to move to another roost site.

Measure 3: rodenticides
No rodenticide usage in or near the hedgerow/treeline.

Measure 4:
All construction activities near the hedgerow/treeline should only take place during daylight hours.

Measure 5:
Any lighting used for construction should be directed away from the hedgerow/treeline.

Measure 6: bat boxes
Bat boxes are suitable for both species of bats found in the environs and may be erected on trees.

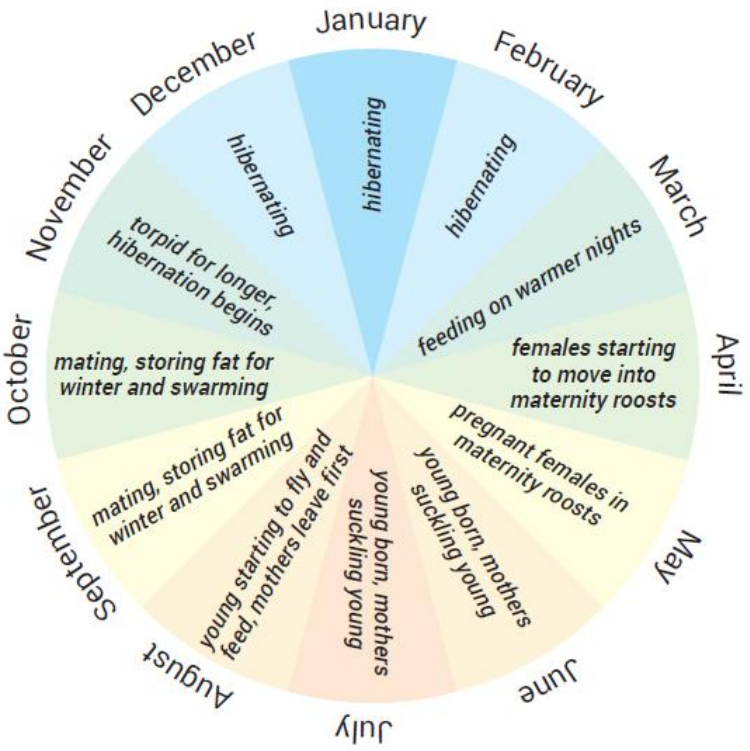


Figure 14 Bat life cycle (Collins, 2023)

7.2 Monitoring and Verification of the Derogation

No works will take place until a derogation licence is secured. As detailed in Mitigation Measure 1, the timing of the works will be when there are no young or pregnant females roosting or during the hibernation period when individuals are unable to relocate to another roost during the cutting back activities.

Furthermore, as detailed in Mitigation measure 2, a qualified ecologist will be present on the site throughout the tree works to ensure that they are carried out correctly.

Following the completion of the tree works, a further dusk and dawn survey should be completed for the hedgerow and the nearby hedgerow on the other side of Lacken Road to ensure that the numbers of individuals for each species have not been permanently affected by the tree works. The findings of this survey will be submitted to NPWS.

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Appendices

Appendix i General Bat Ecology

The bat is the only mammal that is capable of true flight. There are over 1,100 species worldwide, representing almost a quarter of all mammal species. There are 47 species in Europe - in Ireland, ten species of bat are currently known to exist, which are classified into two families, the Rhinolophidae (Horseshoe bats) and the Vespertilionidae (Common bats).

Prey

All the European bat species feed exclusively on insects. A Pipistrelle, weighing only 4 to 8 grams, will eat up to 3000 insects every night, ensuring a build-up of fat in the bat's body to allow it to survive the winter deep in hibernation.

Breeding and longevity

Irish bats can produce one young per year but, more usually, only one young is born every two years (Boyd & Stebbings, 1989). This slow rate of reproduction inhibits repopulation in areas of rapid decline. Although bats have been known to live for twenty or more years, this is rare as most die in their first and the average lifespan, in the wild, is four years.

Threats

All bat species are in decline as they face many threats to their highly developed and specialised lifestyles. Many bats succumb to poisons used as woodworm treatments within their roosting sites (Racey & Swift, 1986). Agricultural intensification, with the loss of hedgerows, treelines, woodlands and species-rich grasslands have impacted bat species also. Habitual roosting or hibernation sites in caves, mines, trees and disused buildings are also often lost to development. Summer roosts are prone to disturbance from vandals. Agricultural pesticides accumulate in their prey, reaching lethal doses (Jefferies, 1972). Chemical treatments in cattle production sterilise dung thus ensuring that no insects can breed within it to be fed upon by bats. Likewise, river pollution, from agricultural runoff, reduces the abundance of aquatic insects. Road building, with the resultant loss of foraging and roosting sites is a significant cause in the reduction of bat populations across Europe.

Extinction

As recently as 1992, the greater mouse-eared bat *Myotis myotis* became the first mammal to become extinct in Britain since the wolf in the 18th century.

Appendix ii Description of Bat Species Known or Expected in the Area

Common pipistrelle *Pipistrellus pipistrellus*
This species was only recently separated from its sibling, the soprano or brown pipistrelle *P. pygmaeus*, which is detailed below (Barratt *et al*, 1997). The common pipistrelle's echolocation calls peak at 45 kHz. The species forages along linear landscape features such as hedgerows and treelines as well as within woodland.

Soprano pipistrelle *Pipistrellus pygmaeus*
The soprano pipistrelle's echolocation calls peak at 55 kHz, which distinguishes it readily from the common pipistrelle on detector. The pipistrelles are the smallest and most often seen of our bats, flying at head height and taking small prey such as midges and small moths. Summer roost sites are usually in buildings but tree holes and heavy ivy are also used. Roost numbers can exceed 1,500 animals in mid-summer.

Leisler's bat *Nyctalus leisleri*
This species is Ireland's largest bat, with a wingspan of up to 320mm; it is also the third most common bat, preferring to roost in buildings, although it is sometimes found in trees and bat boxes. It is the earliest bat to emerge in the evening, flying fast and high with occasional steep dives to ground level, feeding on moths, caddis-flies and beetles. The echolocation calls are sometimes audible to the human ear being around 15 kHz at their lowest. The audible chatter from their roost on hot summer days is sometimes an aid to location. This species is uncommon in Europe and as Ireland holds the largest national population the species is considered as Near Threatened here.