

Wildlife Licensing Unit
National Parks and Wildlife Service (NPWS)
Department of Housing, Local Government and Heritage
90 North King Street
Smithfield
Dublin 7
D07 N7CV
reg54derogations@npws.gov.ie.

9th December 2025

Dear Sir/Madam,

RE: Application for a Bat Derogation Licence – Proposed Works at Tully Lodge, Kilmore, Co. Roscommon

On behalf of Adaire Fox-Martin, Ecofact Environmental Consultants Ltd. are submitting this application for a Derogation Licence under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011–2023, in respect of Proposed Works at Tully Lodge, Kilmore, Co. Roscommon.

The proposed works comprise:

1. Renovation and refurbishment works to the main dwelling house.
2. Demolition of the stone outbuildings adjoining the dwelling house.
3. Demolition of the derelict gate lodge.

No other works are proposed at this time.

A bat survey of the dwelling house, outbuildings and gate lodge was undertaken by Ecofact in June 2024, with survey results and analysis provided in the attached report *Bat Survey: Tully Lodge, Kilmore, Co. Roscommon* (Ecofact 2024).

Summary of the Bat Survey Results

The survey confirmed a minor Pipistrelle roost in the rear section of the main dwelling house, used by a small number of Soprano Pipistrelle and Common Pipistrelle. Approximately 5–6 pipistrelles were observed emerging during the emergence survey, with additional activity recorded overnight by static detectors. This is a small satellite or occasional roost, with no evidence of maternity or hibernation use.

The stone outbuildings and derelict gate lodge were assessed as having limited suitability, but no roosts were recorded within these structures. The wider site supports mature trees with potential roost features; however, none of these trees will be directly affected by the proposed works.

As the dwelling house contains a confirmed bat roost, a derogation licence is required before works proceed.

Compliance with the Habitats Directive

This derogation licence application satisfies the three Regulation 54 licensing tests, as follows:

The proposed works at Tully Lodge are required for imperative reasons of overriding public interest relating to public safety, protection of residential property, and the sustainable use and restoration of an existing dwelling. The main house requires essential structural, and safety works to make it habitable and to prevent ongoing deterioration. The associated derelict outbuildings and the gate lodge are in unsafe condition and require demolition to remove hazards and allow the site to be secured and reused in accordance with planning and building regulations. These works serve a clear social and economic public interest by enabling the lawful restoration and reoccupation of an existing residential property and preventing further structural decline, hazards, and environmental degradation on the site.

These public interests outweigh the conservation interest associated with the small pipistrelle satellite roost recorded at the house. The roost is used by very small numbers of Common and Soprano Pipistrelle, both of which are widespread species of Least Concern in Ireland. The roost is not a maternity, hibernation, or significant seasonal site. The proposed mitigation measures, including strict timing of works, supervision by a licensed bat ecologist, installation of compensatory roost structures, and full lighting and habitat protection, ensure that local conservation status will not be adversely affected. Indeed, bat roosting opportunities on the site will be enhanced through the provision of high-quality bat boxes.

Accordingly, the imperative public interest in securing and restoring the dwelling, addressing safety risks, and safeguarding the long-term use of the property clearly outweighs the limited conservation interest of this small roost, particularly as the species involved will be fully protected and maintained at favourable conservation status.

Test 1: Purpose of the Derogation – Imperative Reasons of Overriding Public Interest

The proposed works are required for reasons of overriding public interest, including ensuring the structural safety and habitability of the existing dwelling house; removing structurally unsafe and hazardous derelict buildings; preventing deterioration of the site; and enabling the lawful restoration and occupation of the residential property.

Test 2: No Satisfactory Alternative

A full consideration of alternatives has been undertaken:

- Retaining the dwelling house without works is unsafe and unviable.
- Cordon-off approaches would not allow required structural works.
- Retention of outbuildings and gate lodge is unsafe and unnecessary.
- Delaying works would not address structural issues.
- Unlicensed demolition is unlawful.

- A do-nothing option provides no environmental or public benefit.

No satisfactory alternative exists that allows the dwelling to be restored without affecting the minor pipistrelle roost.

Test 3: Impact of the Derogation on Conservation Status

The proposed works will not adversely affect the conservation status of any bat species. The roost is a minor satellite roost used by widespread species of Least Concern. Mitigation ensures no negative impact, including:

- Works only between November and March.
- Supervision by a licensed bat ecologist.
- Installation of at least n=5 Schwegler 3FF bat boxes.
- Retention of mature trees and commuting corridors.
- Strict lighting controls.
- Post-construction monitoring.

These measures ensure the pipistrelle population remains at favourable conservation status.

The proposed works have the potential to impact a small satellite pipistrelle roost located within the rear section of the dwelling house. However, the scale of the roost is very limited, with only 5–6 Soprano and Common Pipistrelles recorded emerging during the survey, and no evidence of maternity, hibernation or significant seasonal use. Both species are widespread and of Least Concern in Ireland. Therefore, the magnitude of any potential impact is low.

Taking into account the full suite of mitigation and compensation measures proposed, there will be no negative effect on the conservation status of pipistrelle populations at the site or within the wider landscape. Works will be carried out only between January and March 2026, when pipistrelles are unlikely to be present in the building. All works affecting the roost area will be supervised by a licensed bat ecologist, ensuring the safe removal of any individual bats should they be unexpectedly encountered. A minimum of ten Schwegler 3FF bat boxes will be installed on mature trees in suitable locations around the site, providing high-quality compensatory roosting opportunities exceeding the suitability of the current minor roost. Mature trees and existing commuting corridors will be retained, and lighting will be strictly controlled to maintain dark flight paths.

Evidence from national and international studies demonstrates that pipistrelle species readily adopt artificial roost structures, including Schwegler 3FF and similar crevice-type boxes. Pipistrelles are known to occupy such structures within months of installation, and their use is well-documented in both residential and commercial development mitigation projects. Numerous Irish and UK monitoring studies, including those referenced in Marnell et al. (2022) and Collins (2023), confirm that artificial roost provision is an effective form of compensation for minor pipistrelle roosts, with high rates of uptake and no adverse population-level effects.

Given the small number of bats involved, the low ecological significance of the roost, the abundance of suitable foraging habitat in the surrounding landscape, and the effectiveness of the proposed mitigation, the derogation will not be detrimental to the maintenance of Common or Soprano Pipistrelle populations

at favourable conservation status. The measures proposed exceed those typically required for minor pipistrelle roosts and will ensure that the species continue to occur on the site in the long term.

Summary of Proposed Works and Mitigation

The derogation licence application covers works on the dwelling house, demolition of outbuildings, demolition of the gate lodge, and implementation of all mitigation and compensatory measures recommended by Ecofact.

Supporting Documentation

1. Completed NPWS Derogation Licence Application Form.
2. Bat Survey Report: Tully Lodge, Kilmore, Co. Roscommon (Ecofact, June 2024).
3. Site location and building layout maps.

Should you require any additional information or clarifications, please do not hesitate to contact me directly at [REDACTED]

Yours sincerely,

For ECOFACT Environmental Consultants Ltd



Dr. Will O' Connor

PhD, MSc, BSc, CBiol, CEnv, MCIEEM, FRSB

Fellow of the Royal Society of Biology

Chartered Biologist

Chartered Environmentalist



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
	Adaire	Fox-Martin
(b) Company Name, if applicable	n/.	
(c) Address Line 1	Dromod Beg,	
Address Line 2		
Town	Dromod,	
County	Co Leitrim	
Eircode		
(d) Contact number		
(e) Email address		
(f) Address where works are to be carried out if different from (b) above.		
Address Line 1	Tully Lodge, Kilmore, Co. Roscommon	
Address Line 2		
Town		
County		
Eircode		

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.	Will	O'Connor
(b) Company Name	Ecofact	
Address Line 1	Tait Business Centre	
Address Line 2	Dominic Street	
Town	Limerick	
County		
Eircode		
(c) Contact number		
(d) Email address		

(e) Relationship to Applicant	Ecological 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 | ☐ |

2. Please detail the exact species (scientific name): Pipistrellus pipistrellus, Pipistrellus pygmaeus

3. Please provide the maximum number of individuals affected* 5 -6

4. Please provide the maximum number of breeding or resting sites affected* 1

5. Please provide the maximum number of eggs to be taken* n/a

6. 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.

--

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

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

8. 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.

--

9. **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:	01-1-26
End Date:	31/3/26

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 summary 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 proposed works are required for reasons of overriding public interest, including ensuring the structural safety and habitability of the existing dwelling house; removing structurally unsafe and hazardous derelict buildings; preventing deterioration of the site; and enabling the lawful restoration and occupation of the residential property.

- 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.

The proposed works at Tully Lodge are required for imperative reasons of overriding public interest relating to public safety, protection of residential property, and the sustainable use and restoration of an existing dwelling. The main house requires essential structural, and safety works to make it habitable and to prevent ongoing deterioration. The associated derelict outbuildings and the gate lodge are in unsafe condition and require demolition to remove hazards and allow the site to be secured and reused in accordance with planning and building regulations. These works serve a clear social and economic public interest by enabling the lawful restoration and reoccupation of an existing residential property and preventing further structural decline, hazards, and environmental degradation on the site.

These public interests outweigh the conservation interest associated with the small pipistrelle satellite roost recorded at the house. The roost is used by very small numbers of Common and Soprano Pipistrelle, both of which are widespread species of Least Concern in Ireland. The roost is not a maternity, hibernation, or significant seasonal site. The proposed mitigation measures, including strict timing of works, supervision by a licensed bat ecologist, installation of compensatory roost structures, and full lighting and habitat protection, ensure that local conservation status will not be adversely affected. Indeed, bat roosting opportunities on the site will be enhanced through the provision of high-quality bat boxes.

Accordingly, the imperative public interest in securing and restoring the dwelling, addressing safety risks, and safeguarding the long-term use of the property clearly outweighs the limited conservation interest of this small roost, particularly as the species involved will be fully protected and maintained at favourable conservation status.

- 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

--	--

- 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.

--	--

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.

--

- 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	A do-nothing option provides no environmental or public benefit.
Retaining the dwelling house as is	Retaining the dwelling house without works is unsafe and unviable.
Cordon-off approaches	Cordon-off approaches would not allow required structural works.
Delaying works	Delaying works would not address structural issues.
Unlicensed demolition	Unlicensed demolition is unlawful.

* 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.

The proposed works will impact a small satellite pipistrelle roost located within the rear section of the dwelling house. However, the scale of the roost is very limited, with only 5–6 Soprano and Common Pipistrelles recorded emerging during the survey, and no evidence of maternity, hibernation or significant seasonal use. Both species are widespread and of Least Concern in Ireland. Therefore, the magnitude of any potential impact is low.

Taking into account the full suite of mitigation and compensation measures proposed, there will be no negative effect on the conservation status of pipistrelle populations at the site or within the wider landscape. Works will be carried out only between November and March, when pipistrelles are unlikely to be present in the building. All works affecting the roost area will be supervised by a licensed bat ecologist, ensuring the safe removal of any individual bats should they be unexpectedly encountered. A minimum of n=10 Schwegler 3FF bat boxes will be installed on mature trees in suitable locations around the site, providing high-quality compensatory roosting opportunities exceeding the suitability of the current minor roost. Mature trees and existing commuting corridors will be retained, and lighting will be strictly controlled to maintain dark flight paths.

Evidence from national and international studies demonstrates that pipistrelle species readily adopt artificial roost structures, including Schwegler 3FF and similar crevice-type boxes. Pipistrelles are known to occupy such structures within months of installation, and their use is well-documented in both residential and commercial development mitigation projects. Numerous Irish and UK monitoring studies, including those referenced in Marnell et al. (2022) and Collins (2023), confirm that artificial roost provision is an effective form of compensation for minor pipistrelle roosts, with high rates of uptake and no adverse population-level effects.

Given the small number of bats involved, the low ecological significance of the roost, the abundance of suitable foraging habitat in the surrounding landscape, and the effectiveness of the proposed mitigation, the derogation will not be detrimental to the maintenance of Common or Soprano Pipistrelle populations at favourable conservation status. The measures proposed exceed those typically required for minor pipistrelle roosts and will ensure that the species continue to occur on the site in the long term.

Part E: Template for Supporting Information

This application form should provide a summary of the evidence that the applicant has provided. In all cases, it is necessary to provide separate supporting information so that the assessment of the application can be undertaken in a robust and comprehensive manner. Applicants should refer to guidance provided by the NPWS and the European Commission whilst preparing this application form and the supporting information.

It is essential that supporting information is prepared in a consistent manner using the template below so that NPWS officials assessing the application can locate the relevant evidence to determine if the three Tests can be met. Failure to provide sufficient evidence will result in the application being refused.

The structure of the Supporting Information should be as follows:

- 1) Table of Contents
- 2) Introduction
 - a. Objective of the proposed works (for example, as part of construction of a national road, repair of roofing, undertaking surveys etc.)
 - b. Name, qualifications and relevant experience of scientific staff, including trainees, (e.g. ecologist) involved in the preparation of the application and those responsible for carrying out the proposed activity.

- c. If this application is for the carrying out of surveys that may cause disturbance, qualifications of all involved must be provided and trainees must be clearly identified.
- 3) Background to proposed activity including location, ownership, type of and need for the proposed activity, planning history, policy context, zoning in relevant Development plan (or equivalent), etc.
- 4) Full details of proposed activity to be covered by the derogation (including a site plan). The site may be inspected by an NPWS representative, so the details given should clearly reflect the extent of the project. This information will be used to compare site conditions with the Method Statement.
- 5) Ecological Survey and site assessment (Not required for applications to carry out surveys)
 - a. Pre-existing information on species at location and environs.
 - b. Status of the species in the local/regional area (relevant to the consideration of the impact on the population at the relevant geographic scale (Test 3))
 - c. Objective(s) of survey
 - d. Description of Surveys Area
 - e. Survey methodology (including evidence as to how the methodology represents best practice and is appropriate to the Objective). Methodology should include survey maps, details of timing, climate, equipment used and identify any uncertainties or difficulties encountered.
 - f. Survey results including raw data, any processed or aggregated data, and negative results as appropriate. Photographs and maps must be provided where site-specific features are referred.
 - g. Population size class assessment.
- 6) Evidence to support the Derogation Tests
 - a. Test 1 - Reason for Derogation:
 - i. There should be a clear explanation as to why a specific reason(s) has been selected in the application form.
 - ii. Applicants are advised to read the guidance published by the NPWS '[Guidance on Applications for Regulation 54 Derogations for Annex IV species: Guidance for Applicants](#)' with specific reference to Section 3.1.
 - b. Test 2 - Absence of Alternative Solutions
 - i. Applicants must list the alternatives to the proposed activity that have been considered, including the do-nothing alternatives in a clear and objective manner. A basic requirement is that these alternatives should be compared in terms of their impact on the species subject to strict protection. It should be clear to NPWS officials as to why the chosen approach has been selected.
 - ii. Applicants are advised to read the guidance published by '[Guidance on Applications for Regulation 54 Derogations for Annex IV species: Guidance for Applicants](#)' with specific reference to Section 3.2.
 - c. Test 3 - Impact of a derogation on Conservation Status
 - i. Applicants should include details of the population at the appropriate geographic scale and an evaluation of how the proposed activity will affect the conservation status both before and after mitigation measures have been applied.
 - ii. Full and detailed descriptions of proposed mitigation measures that are relevant to the potential impact on the target species. Evidence that such mitigation has been successful elsewhere should be provided, where available.
 - iii. Applicants are advised to read the guidance published '[Guidance on Applications for Regulation 54 Derogations for Annex IV species: Guidance for Applicants](#)' with specific reference to Section 3.3.

7) Monitoring the impacts of the derogations

- a. Applicants must include details of how they propose to verify whether the derogations have been implemented correctly and whether they achieved their objective, using scientifically based evidence, and, if necessary, how the applicant will take corrective measures where required.
- b. Applicants should provide details of proposed reports to be submitted to the NPWS including the results of monitoring.
- c. Applicants are advised to read the guidance published by the European Commission [“Guidance document on the strict protection of animal species of Community interest under the Habitats Directive”](#) with specific reference to Section 3.4.

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



Date

27/11/25

On behalf of Adaire Fox-
Martin

Name in BLOCK LETTERS

Adaire Fox-Martin

See Privacy Statement at www.npws.ie/licences

npws.ie

Department of Housing, Local Government and Heritage



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Tully Lodge, Kilmore, Co Roscommon



Bat Survey

Version: 11th June 2024



Tait Business Centre, Dominic Street, Limerick City, Ireland.

w. www.ecofact.ie



TABLE OF CONTENTS

1.	INTRODUCTION	4
1.1	BAT SPECIES IN IRELAND	4
1.2	LEGISLATION RELATING TO BATS	4
1.2.1	<i>Wildlife Act 1976</i>	4
1.2.2	<i>EU Habitats Directive</i>	5
1.2.3	<i>Bern and Bonn Conventions</i>	5
1.2.4	<i>Derogation licences</i>	5
2.	METHODOLOGY	8
2.1	GUIDELINES	8
2.2	DESK STUDY	8
2.3	FIELD SURVEYS	8
2.4	LIMITATIONS	9
3.	RESULTS	10
3.1	DESK STUDY	10
3.1.1	<i>Previous Records</i>	10
3.2	FIELD SURVEY	10
3.2.1	<i>Daytime Inspection</i>	10
3.2.2	<i>Emergence Watch</i>	11
4.	IMPACTS	14
4.1	ROOST HABITAT LOSS	14
4.2	FORAGING / COMMUTING HABITAT LOSS	14
4.3	DISTURBANCE AND DISPLACEMENT	14
4.4	LIGHTING	14
5.	MITIGATION	15
5.1	LICENSE REQUIREMENTS	15
5.2	<i>Surveys and monitoring</i>	15
5.2	AVOIDANCE MITIGATION	15
5.3	COMPENSATORY ROOSTS	16
6.5	LANDSCAPING	16
5.4	LIGHTING	16
7.	CONCLUSIONS	17
	PLATES	18
	REFERENCES	21



Document Version: -

Date	Revision	Status	Authors / Licenced bat ecologists	Reviewed By
12/06/24	1.5	Issued	Dr Will O'Connor Grace Walsh, BSc, MSc.	Dr Will O'Connor

Dr. Will O' Connor

PhD, MSc, BSc, CBiol, CEnv, MCIEEM, FRSB, MIFM

Chartered Biologist

Chartered Environmentalist

Date: 12th June 2024



1. INTRODUCTION

Ecofact were commissioned to undertake a bat survey Tully lodge, Kilmore, Co Roscommon. The brief was to survey the main building, outhouses, and gate lodge. The current survey was a presence / absence bat survey of these buildings and the adjoining trees. The survey was completed in early June at the start of the main bat activity season.

The site location is given in Figure 1 and Figure 2 below. The subject house, outbuildings, and gate lodge are shown in the plates section. The current report provides the results of a daytime inspection, emergence watch, and activity survey. The purpose of the survey was to establish if bats were present or not, and to recommend any actions that are necessary to protect bats.

1.1 Bat species in Ireland

There are eleven recorded bat species in Ireland, nine of which are considered resident on the island. Eight resident bat species and one of the vagrant bat species are members of the Vespertilionidae family. The ninth resident species is the Lesser Horseshoe Bat *Rhinolophus hipposideros*, which belongs to the Rhinolophidae family.

The resident Irish bat species are:

- Daubenton's bat (*Myotis daubentonii*)
- Whiskered bat (*Myotis mystacinus*)
- Natterer's bat (*Myotis nattereri*)
- Leisler's bat (*Nyctalus leisleri*)
- Nathusius' Pipistrelle (*Pipistrellus nathusii*)
- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Brown Long-eared bat (*Plecotus auritus*)
- Lesser Horseshoe Bat (*Rhinolophus hipposideros*)

Other bat species (vagrants) recorded are:

- Brandt's bat (*Myotis brandtii*)
- Greater horseshoe bat (*Rhinolophus ferrumequinum*)

1.2 Legislation Relating to Bats

Bats are strictly protected under both national and international law. The purpose of this legislation is to maintain and restore bat populations within their natural range. This implies that the habitats on which they rely, and the ecology of their life cycles should not be compromised by human activities. Where activities have the potential to compromise bat populations, measures are required to be put in place to avoid impacts or compensate and mitigate for those impacts. The key legislation which provides protection to bats is outlined below.

1.2.1 Wildlife Act 1976

In the Republic of Ireland, all bats and their roosts are protected under Schedule 5 of the *Wildlife Act 1976* (amended 2000). It is unlawful to disturb either without the appropriate Licence.



1.2.2 EU Habitats Directive

In addition to domestic legislation bats are also protected under the *EC Directive on the Conservation of Natural habitats and of Wild Fauna and Flora* (Habitats Directive 1992). This Directive seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All bat species are protected under Annex IV of the EU Habitats Directive, while the lesser horseshoe bat (*Rhinolophus hipposideros*) is listed under Annex II. Member states are required to designate Special Areas of Conservation for all species listed under Annex II in order to protect them. The EU Habitats Directive has been transposed into Irish law with the European Communities (Birds and Natural Habitats) Regulations 2011.

A total of 41 SACs have been designated for the Annex II species lesser horseshoe bat (1303), of which nine have also been selected for the Annex I habitat 'Caves not open to the public' (8310).

1.2.3 Bern and Bonn Conventions

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

1.2.4 Derogation licences

Any works interfering with bats and especially their roosts, may only be carried out under a derogation Licence granted by National Parks and Wildlife Service (NPWS) pursuant to Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish law).

The destruction, alteration or evacuation of a known bat roost is a notifiable action and can only be carried out with a derogation licence from the National Parks and Wildlife Service. Any works that might interfere with bats or their roost sites can only be carried out under licence to derogate from Regulation 23 of the Habitats Regulations 1997 and Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish Law). Details with regards to Appropriate Assessments, procedures and parameters under which derogation licences may be obtained are outlined in Circular Letter NPWS 2/07 '*Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species / applications for derogation licences*' issued on the 16th of May 2007 on behalf of the Minister of the Environment, Heritage and Local Government.



Figure 1 Location of Tully lodge, Kilmore, Co Roscommon



Figure 1 Location of Tully lodge, Kilmore, Co Roscommon (Site boundary).



2. METHODOLOGY

2.1 Guidelines

The survey and assessment had regard to the methodology outlined in:

- *Bat Mitigation Guidelines for Ireland v2* by Marnell *et al.*, (2022)
- *Bat Tree Habitat Key (BTHK)* by Andrews, H (2018).
- *Bat Surveys for Professional Ecologists: Best Practice Guidelines 3rd Edition* by Collins (2016)
- *Guidance on the strict protection of certain animal and plant species under the Habitats Directive in Ireland* by NPWS (2021)
- *Bat Workers' Manual 3rd Edition* by JNCC (2004) and
- *British Bat Calls: A Guide to Species Identification* (Russ, 2012).

Table 1 Definition of bat roost types adapted from Collins (2016).

Roost Type	Definition
Day Roost	A place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.
Night Roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
Feeding Roost	A place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
Transitional/occasional Roost	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
Swarming Site	Where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.
Mating Sites	Where mating takes place from late summer and can continue through winter.
Maternity Roost	Where female bats give birth and raise their young to independence.
Hibernation Roost	Where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
Satellite Roost	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

2.2 Desk study

The bat suitability of habitat in the study area for bats was obtained using the National Biodiversity Data Centre (NBDC) database. This map provides a picture of the broad scale geographic patterns of occurrence and local roosting habitat requirements for Irish bat species. The maps are a visualization of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats (Lundy *et al* 2011). The NBDC online National Bat Database of Ireland was also accessed to review bat records in the study area.

2.3 Field Surveys

The was visited on the 4th of June 2024. This survey involved a daytime inspection of the site during daylight hours. The surveys involve looking for evidence of roosting bats including live bats, remains of dead bats, droppings, staining, and feeding remains.



An emergence and activity survey was undertaken following the site inspection on the 4th of June 2024. The survey extended over a full night and included the use of three static bat detectors. The emergence survey extended from 30 mins before dusk to 2 hours after.

The surveys involved the use of handheld bat detectors (Elekon Batscanner, Echo Meter Touch Pro 2). Bat detectors with ultrasonic microphones are used as the ultrasonic calls produced by bats cannot be heard by human hearing. Bat species emerging from the main building, outhouses, and gate lodge and adjoining trees were recorded.

A Passive Static Bat Survey was also completed over one night, using Anabat Express units. This type of survey involves leaving a static bat detector unit (with ultrasonic microphone) in a specific location and set to record for a specified period of time. Bats which pass near enough to the monitoring unit are recorded and their calls are stored for analysis post surveying.

Data recorded on the Anabat Express units was downloaded and analysed using Anabat Insight software. Bat Calls were identified to species level (where possible) with reference to *British Bat Calls: A Guide to Species Identification* (Russ, 2012). Audio files are a maximum of 15 seconds long and each audio file is taken as a bat pass for each bat species recorded within the audio file. Each bat pass does not equate to the number of individuals of bats flying in vicinity of the recording device but is representative of bat activity levels. Some species such as the pipistrelles will continuously fly around a habitat and therefore it is likely that a series of bat passes within a similar time frame (i.e. separate audio files within a small time frame) is one individual bat. On the other hand, Leisler's bats tend to travel through an area quickly and therefore an individual sequence of echolocation calls or bat pass is more likely to be indicative of individual bats.

2.4 Limitations

The weather conditions were suitable for the surveys, and it was completed within the appropriate season. However, the night of the survey was a bit cool with some light rain and this survey was completed at the start of the bat activity season. Unfortunately, one of the Anabat Express units did not record any data. This occasionally happens when a file corruption error occurs. Efforts were made to recover the data, but they were unsuccessful. It is noted that the other two detectors worked perfectly and recorded data over a full night. As with any survey of this type several of the bat passes could not be identified.



3. RESULTS

3.1 Desk Study

The National Biodiversity Data Centre (NBDC) maps landscape suitability for bats based on Lundy et al., (2011). The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats. Table 1 below gives the suitability of the study area for the bat species found in Ireland (based on NBDC) along with their Irish Red List Status (from Marnell et al., 2009). The overall assessment of bat habitats for the current study area is given as 32.89, which is considered to be Low. However, the rating for a number of bat species (Soprano Pipistrelle, Common Pipistrelle, Leisler's bat) is moderate.

Table 2 Suitability of the study area for the bat species previously recorded in the Leixlip area (based on the NBDC data). Irish Red list status also indicated (based on Marnell et al., 2009).

Common name	Scientific name	Suitability index	Irish red list status
All bats		32.89	
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	45	Least Concern
Brown Long-eared bat	<i>Plecotus auritus</i>	39	Near Threatened
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	45	Least Concern
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	1	Least Concern
Leisler's bat	<i>Nyctalus leisleri</i>	46	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	13	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	38	Least Concern
Nathusius' Pipistrelle	<i>Pipistrellus nathusii</i>	27	Least Concern
Natterer's bat	<i>Myotis nattereri</i>	42	Least Concern

3.1.1 Previous Records

According to the National Bat Database of Ireland as viewed on the National Biodiversity Data Centre, the closest bat record is from approximately 2km north of the subject site and was for a Common Pipistrelle. There are no other records in the general area of the site. Bats are generally under recorded in Ireland and records available for a particular are often limited.

3.2 Field Survey

3.2.1 Daytime Inspection

The subject site was visited on the 5th of July 2023. The site is located approximately 1km to the south of Kilmore village and approximately 1km northeast of Tully Lough. Lough Boderg is located c.2km to the east. The landscape surrounding the site is generally agricultural with a network of hedgerows. Much of the grassland is rough grazing and not intensively managed. The site itself has many mature trees and is an overgrown formerly developed property. There are also mature trees outside the site boundary to the northwest, and these are continuous with the treelines on the site.

The main focus of the survey was the dwelling house onsite, the outbuildings, and the gate lodge. This was not a bat survey of the entire site within the red line boundary. However, the full site was considered in the walkover and habitat surveys.



The gate lodge is derelict with no roof. It was considered to have limited bat potential but had crevices and some ivy growth, which can be used by bats. The avenue up to the main house has a number of mature trees and they have not been recently managed. Potential Bat Roost Features (BRFs) were recorded in several trees, including knot holes and ivy mats. The main house is in good condition. An external inspection was undertaken and the main house and it is very well sealed in the front with no potential for bat use. The outbuildings on the north side of the house were also inspected. They were in a derelict state and could not all be inspected. There were considered to have some bat potential. There is an outbuilding attached to the house on the north side that has a see through roof. There was an old bird's nest in here (probably Swallow *Hirundo rustica*). This area was searched in detail, and a few bat droppings were recorded on the surfaces. It was thought that bats may fly in and out of here, rather than use it for roosting. The south side of the house was also well sealed, and the observatory had no bat potential. A search was completed, and no bat droppings were found. The rear area of the house is then connected to an older building. This was considered to have significant bat potential with suitable entry and exit points. No bat signs were recorded but this is not unusual as droppings and other signs can be blown away by the wind and are often not obvious.

There is another old derelict building to the northeast of the main house. This was not part of the main survey, but it considered to be very suitable for use by roosting bats and was covered with ivy.

The habitat around the house consisted of overgrown areas, mature trees, and the access roads. Overall, the site was considered to have significant bat potential. It is noted again that the instruction was to survey the house, outbuildings, and gate lodge. The survey as then planned to focus on these areas, and in particular the rear of the house and the adjoining outbuilding where bat droppings had been found. As the gate lodge was located away from the house it was planned to also do an emergence survey at this building as it was indicated to have at least some bat potential.

3.2.2 Emergence Watch

The survey commenced at 21:45 with one observer at the main house, and the other observer at the gate lodge. At the house the first bat was seen at 22:20 and was a Common Pipistrelle. This bat was seen emerging from the rear from the main house and flew to north. Another Common Pipistrelle emerged from the house after this. These bats foraged around trees near the house and were joined by another. The first Soprano Pipistrelles were recorded at 22:45 and these bats emerged from one of the buildings or one of the adjacent trees. Two more Soprano Pipistrelles then emerged from the rear of the house area. The first Leisler's bat was recorded 23:30. This bat did not emerge from the subject buildings or adjacent trees. Overall, it was estimated that 5-6 pipistrelles emerged from the rear area of the main house. No bats were seen to emerge from the nearby outbuildings. The bats foraged around the trees and the house for around 20 mins before moving on. The activity level was low. At 23:50 it started raining and no other observations of emerging bats were made.

At the gate lodge the first bat was recorded at 22:50 and was a Soprano Pipistrelle. This bat did not emerge from the gate lodge. A generally low level of pipistrelle activity was recorded in this area with bats foraging around the trees in this area. A few Leisler's bats were recorded but they did not emerge from the gate lodge. Some of the bats recorded are thought to have emerged from trees on the site but the overall levels of activity were low. The rain came in before midnight, and the night was overall cooler than was expected. The survey indicated that there were a small number of bats roosting in the rear area of the main house and that the outbuildings and gate lodge were not being used by roosting bats. There are a large number of trees on the site, and other structures, that all have bat roosting potential, and there was a low level of bat activity along the internal roads.



Three Anabat Express units were also employed during the survey and were operated from dusk to dawn on the night of the 5th to 6th June 2024. The first unit (Anabat A) was located in the front of the house. The data file from this unit was unfortunately corrupted and the data could not be retrieved.

Anabat unit B was placed at the rear of the main building and over the full night a total of 166 bat passes were recorded. Please note the 166 passes does not extrapolate to 166 individuals but passes recorded as a result of a smaller number of individuals passing the detector. The majority of the detections were of Soprano Pipistrelles (*Pipistrellus pygmaeus*), comprising 59.64% (99 detections) of the total. Common Pipistrelles (*Pipistrellus pipistrellus*) accounted for 18.07% (30 detections). A total of 10 passes of Leisler's bats (*Nyctalus leisleri*) were recorded, making up 6.02% of the detections. There were 25 detections (15.06%) of unidentified bat species. Brown long-eared bats (*Plecotus auritus*) had 2 detections, representing 1.20% of the total.

From the bat survey conducted with Anabat C which was located between the house and the outbuildings to the north, a total of 205 bat passes were recorded over the full night. Soprano Pipistrelle (*Pipistrellus pygmaeus*) was again the most frequently detected species, comprising 75.61% (155 passes) of the total. Common Pipistrelles (*Pipistrellus pipistrellus*) accounted for 16.59% (34 passes). Leisler's bat (*Nyctalus leisleri*) passes were recorded 3 times, making up 1.46% of the detections. Both unidentified species and Natterer's bats (*Myotis nattereri*) had 6 detections each, each representing 2.93% of the total. There was 1 detection (0.49%) of an unidentified *Myotis* species.

The overall number of passes recorded on the Anabat units was considered on the low end. Although one of the units did not successfully record data, data from a full night was available from the two other detectors. The results were very similar to what had been observed with the handheld / visual surveys but provided information over the full night.

The current survey was completed at the very start of the bat breeding season which was delayed this year due to adverse weather conditions. The survey night was cooler than had been forecast and rain also came in. The survey provides a snapshot of activity at the site and meet the objectives of the survey which was to determine presence/absence of bats in the main house, outbuildings, gate lodge, and adjoining trees. Bats are confirmed present with a minor pipistrelle roost detected. There are a large number of trees on the site along with other structures that all have significant bat potential. The implications of this on the proposed development of the site is outlined in the followed sections.



Table 3 Results of the Anabat Express Static detector survey on the 5th to 6th June 2024.

Common Name	Species name	Anabat A: 5 th to 6 th June 2024	
		No	%
Leisler's bat	<i>Nyctalus leisleri</i>	No results / recording error	-
Unidentified species	n/a		-
Common pipistrelle	<i>Pipistrellus pipistrellus</i>		-
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>		-
Brown long-eared bat	<i>Plecotus auritus</i>		-
Natterer's bat	<i>Myotis nattereri</i>		-
<i>Myotis</i> spp. (unidentified)			
Total		-	

Table 4 Results of the Anabat Express Static detector survey on the 5th to 6th June 2024.

Common Name	Species name	Anabat B: 5 th to 6 th June 2024	
		No	%
Leisler's bat	<i>Nyctalus leisleri</i>	10	6.02
Unidentified species	n/a	25	15.06
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	30	18.07
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	99	59.64
Brown long-eared bat	<i>Plecotus auritus</i>	2	1.20
Natterer's bat	<i>Myotis nattereri</i>	0	0.00
<i>Myotis</i> spp. (unidentified)		0	0.00
Total		166	-

Table 4 Results of the Anabat Express Static detector survey on the 5th to 6th June 2024.

Common name	Species name	Anabat B: 5 th to 6 th June 2024	
		No	%
Leisler's bat	<i>Nyctalus leisleri</i>	3	1.46
Unidentified species	n/a	6	2.93
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	34	16.59
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	155	75.61
Brown long-eared bat	<i>Plecotus auritus</i>	0	0.00
Natterer's bat	<i>Myotis nattereri</i>	6	2.93
<i>Myotis</i> spp. (unidentified)		1	0.49
Total		205	-



4. IMPACTS

The required mitigation measures, as detailed in Section 5, include further surveys, timing works outside peak bat activity periods, conducting works under a derogation license, minimising lighting impact, integrating bat-friendly landscaping, and creating new roosting environments for bats. The general potential impacts are outlined below.

4.1 Roost Habitat Loss

All bats and their roosts are **strictly protected** in Ireland and listed under Annex IV of the EU Habitats Directive. The EU Habitats Directive has been transposed into Irish law with the *European Communities (Birds and Natural Habitats) Regulations* (2011) (S.I. No. 477/2011). All bat species are also protected here under the *Wildlife Act* (1976) and *Wildlife (Amendment) Act* (2000) (S.I. No. 38 of 2000). Impacts on bats may also be the subject of claims under the *European Communities (Environmental Liability) Regulations* (2008) (S.I. No. 547/2008) where bat and their roosts may have been adversely affected by unauthorised activities.

No works can take place on the house in the absence of a derogation licence. The building is a confirmed bat roost. The evidence points to this probably being a minor satellite roost used by small numbers of male or non-breeding female bats. Works on the building will result in the loss of a roost – so mitigation and a derogation licence will be required a precaution. It is noted that any derelict building could, at any time, be used by roosting Pipistrelles. It is not an unusual finding, and this is a common an adaptable bat species.

The current survey has also concluded that there are a large number of trees on the site with potential bat roosting features. These trees could be potentially affected indirectly by developing the site due to indirect noise and lighting impacts. If trees are to be felled or is works are carried out near roosts in trees this could lead to further disturbance and displacement impacts on roosting bats. However, this can be mitigated, and significant impacts can be avoided.

4.2 Foraging / Commuting Habitat Loss

The site provides bat foraging and commuting habitat. Developing the site will affect bat habitats (and other ecological receptors) on the site. Mitigation will be required for this also.

4.3 Disturbance and Displacement

The proposed development will result in increased noise and human activity on the proposed development site during the works. In the operational phase there will also be an increase in human activity on the site. The proposed works may disturb / displace bats that are roosting on the proposed development site either in buildings or trees. Even if the full site isn't being directly affected, works nearby along with any associated lighting could disturb bats. Further surveys are recommended.

4.4 Lighting

The proposed development will likely result in increased lighting on the proposed development site which can cause habitat loss. Increased lighting will impact commuting and foraging bats. If the exit / entry points of any roosts are illuminated this will also deter bats from using them and could result in the abandonment of a roost.



5. MITIGATION

5.1 License Requirements

As bats are roosting on the proposed development site a derogation licence is required for all works. This derogation licence is required under Regulation 54 of the European Communities EC (Birds and Natural Habitats) Regulations 2011 and will be obtained from the National Parks and Wildlife Service in advance of any works taking place on the site. Disturbance of a known bat roost is a notifiable action under current national and European legislation.

All bats and their roosts are **strictly protected** in Ireland and listed under Annex IV of the EU Habitats Directive. The EU Habitats Directive has been transposed into Irish law with the European Communities (Birds and Natural Habitats) Regulations (2011) (S.I. No. 477/2011). All bat species are also protected here under the Wildlife Act (1976) and Wildlife (Amendment) Act (2000) (S.I. No. 38 of 2000). Impacts on bats may also be the subject of claims under the European Communities (Environmental Liability) Regulations (2008) (S.I. No. 547/2008) where bat and their roosts may have been adversely affected by unauthorised activities.

These licences are routinely granted for works like this. Works on any derelict buildings like the subject ones will often require this licence to be in place.

5.2 Surveys and monitoring

The current report includes the results of a daytime bat habitat survey and one night of bat activity surveys. The survey was focused on the main house, outbuildings, and gate lodge. The was a preliminary presence/absence survey and more survey work will be required.

Further assessment and monitoring surveys are proposed to ensure that the site is development is a sustainable way and does not cause any significant impacts on the local biodiversity and bat populations.

The additional bat surveys will need to have regard to the new Collins (2023) bat survey guidelines.

5.2 Avoidance Mitigation

Works can be planned for outside active bat season and completed under a derogation licence. The bird nesting season should also be avoided. Works should take place during the period October to February. It is likely that bats do not use the buildings on the proposed development site during the winter months. Once the mating season ends bats will move to their hibernation sites. This generally occurs after September. Therefore, works which involve the removal of roosts should take place between November and the end of March to avoid the possibility of any bats being present. It is not envisaged that any bats are present during the winter, but this remains a possibility. If bats are recorded during any point the construction works NPWS must be immediately contacted.

Demolition and vegetation clearance should not take place within the bird nesting season which runs from 1st March to the 31st of August. It is illegal to remove or cause disturbance to an active bird nest during the bird nesting season under the Wildlife Act 1976 (2000).



5.3 Compensatory roosts

Bat boxes should be installed on mature trees on the site offering artificial roosting accommodation. This should mitigate for the loss of potential roosts on the site. It is recommended that 10 no. Schwegler 3FF bat boxes be obtained. The Schwegler 3FF is a large flat, crevice-type box, suited for many species of bat including the Soprano pipistrelle (which was one of the most abundant species found on site). This design has a large crevice opening, with enough internal space to allow clustering by groups of Soprano pipistrelle, meeting the guidelines for this species - “*tree crevice-type box, with 25-35mm crevices*” and “*providing a void in which bats can cluster*” (Marnell *et al.*, 2022). This bat box is also open at the bottom which allows droppings to fall out, meaning cleaning and maintaining the box is not required and does not have to be in a very accessible location.

The selected tree position should be on a tree with clean bark (no ivy) and have no branches for a 1m radius around the box. The boxes should be placed as high as possible, at least 4m above the ground to avoid predation. Ideally the boxes should be sheltered from strong winds and exposed to sun for part of the day, i.e., usually erected facing in a south-east to south-west direction. The bat boxes should also be situated in areas where there is no artificial lighting which would deter bats from using the boxes (Bat Conservation Ireland, 2014; Reason and Wray, 2023). An ecologist will need to advise on the location and orientation of these bat boxes based on the relevant guidelines.

6.5 Landscaping

The trees on the site should be retained wherever possible and could be planted supplementally with native species. Any planting undertaken on the site should endeavour to utilise native species wherever possible. Plants chosen for landscaping should also follow the All-Ireland Pollinator Plan, which would provide suitable foraging opportunities for bat species in the area, as well as promote biodiversity (National Biodiversity Data Centre, 2021).

5.4 Lighting

The proposed development will likely result in additional light spill on and around the proposed development site. This will need to be assessed in relation to bat foraging and commuting. Light spill should be minimised insofar as possible in the interest of local bat species and nocturnal fauna. LED lighting does have a greater impact on bats when compared with other lighting such as low-pressure sodium. If LEDs must be used, colours other than white may be used to lessen potential light spill impacts. Warmer colour wavelengths between 2700 and 3000 Kelvin seem to have less impacts on wildlife (Marnell *et al.*, 2022; Bat Conservation Trust & Institute of Lighting Professionals 2018). Consideration should be given to restrictions during dark hours, such as reducing light levels, or turning off lights, during late hours of the night. Motion sensor lighting could also be considered.

Bat Conservation Trust & Institute of Lighting Professionals (2018) guidance may also be followed, as well as Bat Conservation Ireland’s *Bats & Lighting: Guidance Notes for Planners, Engineers, Architects and Developers* (2010).



7. CONCLUSIONS

The proposed development has the potential to result in the loss of Soprano pipistrelle roosting habitat and a commuting corridor for various bat species near the derelict pool area, with associated disruptions caused by increased human activity, noise, and lighting, impacting roosting and foraging bats. However, these impacts can be fully mitigated with the measures proposed in this report.

Overall, it is concluded that the proposed development will not have a significant impact on bats providing the mitigation measures outlined in the current report are adhered to.



PLATES



Plate 1 The subject house (thermal image).



Plate 2 Southern face of the subject house.



Plate 3 Rear of the house – bats are roosting in this area.



Plate 4 Outbuilding / extension area on the north side of the house (bat droppings found).



Plate 5 Outbuilding on the north side of the main house.



Plate 6 The derelict gate house.



Plate 7 Anabat Express unit set up at the rear of the house.



Plate 8 The wider site provides significant potential bat habitats.



Plate 9 Building on the site that has bat potential (not directly affected, not surveyed).



REFERENCES

Bat Conservation Ireland (2010). Bats & Lighting: Guidance Notes for Planners, Engineers, Architects and Developers.

https://www.batconservationireland.org/wp-content/uploads/2013/09/BCIrelandGuidelines_Lighting.pdf

Bat Conservation Trust & Institute of Lighting Professionals (2018) Bats and Artificial Lighting in the UK. Guidance Note 08/18 Institute of Lighting Professionals, Warwickshire.

<https://cdn.bats.org.uk/uploads/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?v=1542109349>

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists. Good Practice Guidelines. 4th edition Bat Conservation Trust, London.

Collins, J. H., Ross A. J., Ferguson J. A., Williams C. A. & Langton S. D. (2020). The implementation and effectiveness of bat roost mitigation and compensation measures for *Pipistrellus* and *Myotis* spp. and brown long-eared bat (*Plecotus auritus*) included in building development projects completed between 2006 and 2014 in England and Wales. Conservation Evidence (2020) 17, 19-26.

Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982.

Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979.

EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992. <http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104>

Kelleher, C. & Marnell, F. (2006) Bat Mitigation Guidelines for Ireland. Irish Wildlife Manuals, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland. <https://www.npws.ie/sites/default/files/publications/pdf/IWM25.pdf>

Lundy, MG, Aughney T, Montgomery WI, Roche N (2011) Landscape conservation for Irish bats & species-specific roosting characteristics. Bat Conservation Ireland. http://www.batconservationireland.org/wp-content/uploads/2013/09/Landscape_Conservation_Irish_Bats.pdf

Marnell, F., Kingston, N. & Looney, D. (2009) Ireland Red List No.3: Terrestrial Mammals, National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. <https://www.npws.ie/sites/default/files/publications/pdf/RL3.pdf>

Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat Mitigation Guidelines for Ireland v2. *Irish Wildlife Manuals* No. 134. National Parks and Wildlife Manuals. Department of Housing, Local Government and Heritage, Ireland. <https://www.npws.ie/sites/default/files/publications/pdf/IWM134.pdf>

National Biodiversity Data Centre (2021). All-Ireland Pollinator Plan 2021-2025. <https://pollinators.ie/wp-content/uploads/2021/03/All-Ireland-Pollinator-Plan-2021-2025-WEB.pdf>

NRA, (2006). Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes. Dublin: National Roads Authority.



Reason, P.F. and Wray, S. (2023) *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

Reason, P.F. and Wray, S. (2023) *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

Russ, J. (2012). *British Bat Calls: A Guide to Species Identification*. Pelagic Publishing. ISBN-13:978-1907807251.

Schober, W. & E. Grimmberger (1993) *A Guide to Bats of Britain and Europe*. Hamlyn; New edition.
Stone, E.L., Harris, S. and Jones, G., 2015. Impact of artificial lighting on bats: A review of challenges and solutions. *Mammalian Biology*, 80, 3, 213-219.
https://www.researchgate.net/publication/272889669_Impacts_of_artificial_lighting_on_bats_A_review_of_challenges_and_solutions

Stone, E.L., Jones, G. and Harris, S., 2009. Street lighting disturbs commuting bats. *Current Biology*, 19, 1-5. <https://www.ncbi.nlm.nih.gov/pubmed/19540116>

Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation. Bats and Lighting Research Project, University of Bristol www.batsandlighting.co.uk

Stone, E.L., Jones, G. and Harris, S. (2013) Mitigating the effect of development on bats in England with derogation licensing. *Conservation Biology*, 27, 1324-1334.