Derogation Licence – Supporting Information

Ecology Ireland General Bat Surveys

Prepared for the Attention of the Licensing Unit of NPWS

20 October 2026

Contents

Introduction 1
Statement of Competence 1
Proposed Activity 2
Evidence to Support the Derogation Tests 2
Test 1: Reason for Derogation 2
Test 2: Absence of Alternative solutions 3
Test 3: Impact of a Derogation on Conservation Status 3
Conclusion 4

Introduction

Dr Karen Mullen, Senior Ecologist at Ecology Ireland Wildlife Consultants Ltd, proposes to carry out a programme of bat surveys during the 2027 survey season. These surveys will be undertaken in connection with a number of projects for which Ecology Ireland Wildlife Consultants Ltd. has been, or will be, commissioned.

Statement of Competence

Dr Karen Mullen (BSc PhD) has over twelve years of professional experience in ecological surveying and ecological impact assessment in both the United States and Ireland. She has worked on numerous projects related to renewable energy, infrastructure, housing, and various other development projects. She is an experienced field ecologist with a wide range of survey experience, including habitats, amphibians, reptiles, terrestrial mammals, and birds. She is also experienced in producing maps and visualising biological datasets using QGIS.

Dr Mullen has extensive bat survey training and experience from her ecology consultancy work in both the US and Ireland, including designing and running large-scale passive acoustic surveys, conducting radio-telemetry, mist-netting and harp-netting bat surveys, analysing bat call data using AnaLook and Kaleidoscope, and carrying out active and passive surveys across multiple projects. Since relocating to Ireland in 2025, she has built on this over the past year by accompanying licensed bat ecologists on roost inspections and on active and passive bat surveys. Through this work she has become proficient in identifying potential roost features, recognising signs of bat presence, and surveying safely and with minimal disturbance to bats. Details of my training and supervised survey work are set out below.

Bat Acoustic Monitoring and Survey Techniques Training	
Bat Conservation and Management Workshop, Bat Conservation International	Truckee, California (2007)
Acoustic Monitoring and Analysis Workshop, Bat Conservation International	Lava Beds National Monument, California (2008)
North American Symposium on Bat Research (NASBR)	Portland, Oregon (2009)
AnaLook Acoustic Monitoring and Call Analysis Workshop taught by Dr Cori Lausen and Kim Livengood	Las Vegas, Nevada (2010)
North American Symposium on Bat Research (NASBR)	Monterey, California (2015)
International Symposium on Bat Echolocation Research	Tuscon, Arizona (2017)
Volunteer Bat Survey Experience	
Lower Colorado River Multi-Species Conservation Program monitoring; radio telemetry, harp-netting and mist-netting	California, Nevada and Arizona (2015-2016)
Southwestern Desert Bats Class; assistant instructor	Zzyzx, Mojave Desert, California (c. 2016)
Stephanie Remington, independent bat biologist; volunteered on active acoustic surveys and emergence surveys for transportation projects in southern California	Southern California (2014-2017)

Project Survey Experience	
Dromoland Castle Project, Co. Clare	Active and passive bat surveys (2026)
Corbally Residential Project, Limerick City	Active and passive bat surveys (2026)
Gas Network Ireland Project, Kildysart, Co. Clare	Car transect surveys and deployment of passive bat detectors (2026)
HSE Nursing Home Project, Ennis, Co. Clare	Deployment of passive bat detectors, inspection survey of PRF's, emergence surveys (2026)
NM20 Construction Project, Co. Cork	Deployment of passive bat detectors (2026)
Shannon Shamrock Development Project, Bunratty, Co. Clare	Deployment of passive bat detectors (2026)
Grapevine Specific Plan and Community Project, California	Design, implementation and analysis of large-scale passive bat surveys (2013)
Tehachapi Renewable Transmission Project, California	Biological compliance manager – final review of bat survey design over the 173 mile project and reports before submission to agencies (2010-2011)

Proposed Activity

Ecology Ireland are seeking to undertake these surveys in compliance with the Wildlife Acts 1976-2018 and the EU Habitats Directive and following guidance outlined in *Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland* (NPWS Guidance Series, 2021), *Bat Mitigation Guidelines for Ireland – V2* (Marnell *et al.* 2022) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023, 4th Edition) where the surveys have been designed to minimize potential disturbance to bats and their roosts. Our bat surveys typically involve the following:

Preliminary Roost Assessment. A detailed inspection to identify potential roosts and suitable roost locations. This includes checking buildings, trees, and other structures for signs of bat activity, such as droppings or feeding remains.

Passive Detector Deployment. The deployment of static passive bat detectors at various locations within and in proximity to structures in order to record bat activity which will be analysed using software such as Kaleidoscope.

Emergence Surveys. These will involve bat surveyors recording bats as they emerge from a potential roost site, should a roost site be present.

Evidence to Support the Derogation Tests

Test 1: Reason for Derogation

These surveys are being carried out as part of the initial phase of a number of projects that, at a future date, will be developing the sites in which these structures are located. Therefore Item 10 (c) of the derogation licence application applies. Item 10 (c) is as follows:

"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"

These surveys will be carried out in the early stages of development projects, where information on the project nature and scale is still in the early design phase, and the extent of the demolition/alteration/felling of structures (if any) is not yet known. Licences are being sought so that bat surveys can be conducted where the presence of a roost, or the status of a roost (species, number of bats, roost type, etc) has not been determined. Sources of potential disturbance include roost inspections, particularly in attic spaces, crevices, etc., and the placement of passive detectors. Equipment used in the course of these surveys include passive detectors, torches, endoscopes, and night vision aids (NVAs).

These surveys are required so that comprehensive information on the status (species/roost type/etc.) of any roost recorded in the course of a survey can be used to inform on suitable alterations to a project in the design phase and provide specific and appropriate mitigation measures for the protection of bats, if deemed necessary and in accordance with the guidelines outlined in NPWS Guidance Series (2021), Marnell *et al*. (2022) and Collins, (2023).

Test 2: Absence of Alternative solutions

As set out in Stage 3 of the Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland (NPWS 2021) we considered the alternatives available. Annex IV species are present and therefore the potential to avoid such impacts, in every way possible needs to be considered. As stated in Stage 3 of Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland (NPWS 2021) "*A satisfactory solution is one which addresses the situation faced by the project proponent while protecting the species at the same time*."

Alternative Option 1. An alternative option considered is that no bat surveys are undertaken, and that sites are progressed without information on the presence, status or characteristics of any bat roosts. This option is not feasible as, in the absence of survey data, it would not be possible to determine whether bats or their roosts are present, or to assess the potential impacts of any future works. Proceeding without this information would risk inadvertent disturbance or damage to legally protected roost sites. Undertaking bat surveys at an early stage is therefore necessary to inform project design, allow appropriate avoidance or mitigation measures to be incorporated where required, and to ensure legal compliance. A "do nothing" approach would undermine the protection of bats by deferring or preventing the collection of essential ecological information.

Alternative Option 2. Alternative non-invasive survey methodologies that do not require a derogation licence have been considered. Non-invasive methodologies are not always suitable or sufficient on their own in providing adequate information on the characteristics of a roost in order to inform an impact assessment, and are primarily used in conjunction with preliminary roost assessment surveys. For example, standard observation surveys (e.g., emergence surveys) have a limited scope where bat activity is restricted by weather conditions, survey timing and where the location of the roost inside a structure cannot be confirmed by an external observation survey alone. In the case of trees, such surveys are only recommended in limited circumstances such as where the presence of bats is already known or where the tree cannot be safely accessed (Collins, 2023).

Test 3: Impact of a Derogation on Conservation Status

No detrimental effects on bat populations are expected to arise as a result of the bat surveys. Survey methodologies have been specifically designed to minimise the risk of disturbance to bats and their roosts and will be carried out in accordance with relevant best practice guidance, *Guidance on the Strict Protection of Certain Animal and Plant Species*

under the Habitats Directive in Ireland (NPWS Guidance Series, 2021), *Bat Mitigation Guidelines for Ireland – V2* (Marnell *et al.* 2022) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023, 4th Edition). As such, the derogation licence to allow surveys will not be detrimental to the maintenance of bat populations at a favourable conservation status in their natural range, as is required under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations.

Conclusion

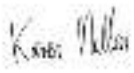
The potential impacts of survey activity will be monitored during the course of the surveys. All survey activities will be undertaken by suitably qualified and experienced ecologists. No specific mitigation measures are required in the case of these surveys. The surveys have been designed in strict accordance with relevant guidance, i.e., NPWS Guidance Series (2021), Marnell *et al.* (2022) and Collins, (2023). Records of survey activity and findings will be maintained, and required licence returns will be submitted to the NPWS in accordance with licence conditions.

I therefore seek a license to:

- Disturb bats and their roosts as afforded by Article 16 of the EU Habitats Directive, in the course of undertaking bat surveys.

If you require any more information in relation to this application, please contact the undersigned.

Yours sincerely,



Dr Karen Mullen