Part B. Details of Ecologists expected to be working under this license (2025)

Information relating to the ecologists who will be involved or responsible for bat surveys. Names in **bold** represent experienced bat workers/previous solo license holders. A minimum of one staff member listed as experienced will always be present for any surveys carried out under this license to ensure less experienced team members are supervised and trained appropriately. Experienced individuals will ensure that all surveys carried out are done so in accordance with; Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

1. (a) Name of Person/Ecologist

Title	Forename(s)	Surname	Experience
Mr	Will	Woodrow	Experienced
Ms	Róisín	NigFhloinn	Experienced
Mr	Oisín	O Sullivan	Experienced
Mr	Patrick	Power	Experienced
Ms	Louise	Gannon	Experienced
Ms	Róisín	O Connell	Experienced
Mr	Kevin	O Reilly	Experienced
Mr	Damien	Mc Andrew	Experienced
Ms	Sophie	Papczyk	Experienced
Ms	Emmi	Virkki	Experienced
Mr	Bruno	Mels	Training
Ms	Jasmin	Day	Training
Ms	Rachel	Irwin	Training
Mr	Adrian	Walsh	Training
Mr	David	McGarrell	Training
Ms	Meadhbh	Costigan	Training
Mr	Darren	Craig	Training
Mr	James	O Connor	Training
Mr	Emmeline	Cosnett	Training
Mr	Philip	Doddy	Training
Mr	Patsy	Quinn	Training
Mr	Mike	Trewby	Training
Ms	Maeve	Maher-McWilliams	Training
Ms	Julie	Kohlstruck	Training
Mr	Jesse	Young	Training

Ms	Brittany	Arendse	Training
Mr	Conn	Barry	Training

Experienced surveyors profile list

1. Will Woodrow

Will is an experienced environmentalist, having spent over 28 years spent working and studying in the nature conservation and sustainability sectors. Will relocated to Sligo and formed his own consultancy Woodrow Wildlife Consulting in 2004 (becoming Woodrow Sustainable Solutions in 2008) which has since become a part of the APEM group in 2021. Will has been undertaking bat surveys for well over a decade and has been involved in pioneering appropriate approaches in the field, notably with respect to wind farms. Will has built on his experience by developing survey techniques that provide robust baseline data on bat activity while allowing for assessment of changing and developing proposals. This tends to rely on gaining a full understanding of how sites and their features are used by bats, rather than only undertaking surveys at specific locations where infrastructure is expected to be placed.

Will has been undertaking bat roost surveys and works under licence in Rol since 2011. Works have included surveys of potential roost sites, mitigation proposals and licence applications to NPWS, as well as supervision of demolition, compliance reports and monitoring of mitigation proposals. Will has undertaken tailored training in Northern Ireland and Scotland to enhance his skills in the areas of bat ecology, survey and mitigation, and capture / handling techniques.

Relevant courses / training undertaken:

- Bat survey design, assessment and mitigation methodologies (Echoes ecology, Scotland). 2010
- Bat ecology and survey techniques (Echoes ecology, Crom, Co Fermanagh). 2009
- Bat capture and handling (Echoes ecology, Scotland). 2011

NPWS derogation licence (bat roost disturbance) – generic licences held:

- 2011 (DER/BAT 2011-29)
- 2012 (DER/BAT 2012-05)
- 2013 (DER/BAT 2013-13)
- 2014 2016 (DER/BAT 2014-16)
- 2019 2022 (DER/BAT 2019-17)

NPWS licences to capture / handle bats:

2012 (C207/2012))

2013 (C063/2013)

2014 (C058/2014) 2015 (C130/2015) 2024 (DER/BAT 2024-27)

Examples of demolition / roost closure projects undertaken under licence in Rol:

• Licence to capture protected wild animals for educational, scientific or other purposes

Hand net or hand capture only. C48/2021

 Disturbance and damage to breeding sites / resting places re: Paula Foley DER/BAT

2019-21

- Demolition of Dun Maeve Hotel, Ballisodare (disturbance and damage to breeding sites / resting places) DER/BAT 2013-39
- Demolition of 2 buildings south of Collooney, Co Sligo. (disturbance and damage to breeding sites / resting places) DER/BAT 2016-86
- Closure of pipistrelle bat roost, Cloonamahon Learning Disability Centre, Co Sligo. DER/BAT 2015/69

2. Róisín NigFhloinn

Róisín currently works for Woodrow Sustainable Solutions Itd. as an Associate Director. She has carried out numerous bat activity surveys and preliminary tree roost assessments for Woodrow during the last 6 years she has worked for them. She previously worked as a Senior Ecologist for Scott Cawley from 2014 – 2017 and undertook numerous building, tree and structure inspections under various derogation

licences for this company. Work was initially overseen by one of the Directors, Paul Scott, and she eventually progressed to carrying out inspections under the company licences. Structures that she has surveyed ranged from old buildings, more modern buildings and trees under the company licences. She has surveyed several confirmed bat roosts with Paul Scott. Dr. Daniel Buckley and colleagues during the course of my work (e.g. Lesser Horseshoe Roost at Melough Castle, Co. Galway; Castleboro House, Co. Wexford and Coolbawn House, Co. Wexford – where hibernating bats were recorded) and have also personally identified bat roosts during bat survey work for this company (e.g. Leisler's and a pipistrelle bat roosts in Manulla, Co. Mayo and pipistrelle bat roosts at Auburn House, Co. Dublin). Survey records were provided to Bat Conservation Ireland by Scott Cawley. Róisín has undertaken bat surveys, including both activity surveys, tree and structure inspections. She previously worked for Mott MacDonald (as a Graduate Ecologist and was promoted to Ecologist) in Bristol UK (2009 – 2014) and carried out bat surveys (including building and bridge inspections under the supervision of Bat Ecologists licenced under Natural England licences, often overseen by licensed Bat Ecologist Joanne Bates. Work included such projects as potential bat roost inspections of school buildings due for development, inspections of bridges for South Wales Trunk Roads Agency (SWTRA) and the Highways Agency, and numerous bat activity surveys. Róisín surveyed a known pipistrelle maternity roost at Rhoscrowther in Wales and identified a bat roost at Loch Lomond in Scotland (likely Myotis sp. or Brown long- eared bat, noted distinctive bat droppings on the external walls of slatted shed/caretaker building while assisting with Freshwater pearl mussel survey for the Glasgow office.

Relevant courses / training undertaken:

- Bat Tree Roost Identification & Endoscope Training Workshop (Bat Conservation Ireland). 2019
- Internal training, radio tracking and handling of lesser horseshoe bats (Scott Cawley)

2017

- Bat Surveying and Analysis (Dr. Emma Stone/University of Bristol) 2012
- Bat Surveying Training Day (Avon Bat Group) 2012
- Bat Ecology Training course, including mist netting & handling (Richard Crompton/Field Studies Council) 2012

NPWS derogation licence (bat roost disturbance) – generic licences held:

2019 (DER/BAT 2019-33)

2021 (DER/BAT 2019-33)

2022 (DER/BAT 2019-33)

2024 (DER/BAT 2024-27)

Examples of demolition / roost closure projects undertaken under licence in Rol:

• Demolition of Cottage, Camroos Td, Ballymote, Co. Sligo DER-BAT-2021-112

3. Oisín O Sullivan

Over the last 4 years Oisín was involved in roost surveys and bioacoustics monitoring on over 20 wind farm sites. Oisín has also been involved in numerous surveys for bridge repair, building demolitions, and quarry projects. During his first year with Woodrow, he acquired extensive internal training on roost inspections including the use of endoscopes. In May 2022, he also attended a bat handling course provided by Echoes Ecology in Scotland, which included the handling of common and soprano pipistrelles, Daubenton's bat, whiskered bat, and brown longeared bat. In 2022 he was also involved in a roost count of a significant lesser horseshoe bat maternity roosts on one of our sites (approx. 70 individuals). This survey was attended by the local

NPWS ranger, Elaine Keegan. This was followed by the supervision of 3 days of restorative works to the building in December 2023 with permission from the NPWS as there was determined to be a high likelihood of irreversible environmental damage to the roost.

Relevant courses / training undertaken:

- Woodrow internal inspection training covering inspection and endoscope usage (Róisín NigFhloinn). 2020
- Bat capture and handling (Echoes ecology, Scotland). 2022

NPWS derogation licence (bat roost disturbance) – generic licences held:

2021 (DER-BAT-2021-44)

2022 (DER-BAT-2022-70)

2023 (DER-BAT-2023-77)

2024 (DER/BAT 2024-27)

NPWS licences to capture / handle bats:

2023 (Section 23 & 34 Licence (Bats) - Oisin O'Sullivan (231))

4. Louise Gannon

Louise currently works at Woodrow as an Ecologist. During her time at Woodrow, she has been heavily involved in bat surveys, bat data analysis and reporting. This work has

included carrying out walked and driven transects. Louise has carried out numerous walked and driven transects for wind farm sites and smaller scale projects (e.g. Predemolition surveys) during the 2021 – 2023 bat seasons and will continue to be involved in this work in the 2025 season. Carrying out emergence/re-entry surveys at derelict buildings, potential tree roosts and bridges. She had also carried out multiple emergence/re-entry surveys during the 2021 – 2023 bat seasons. Louise has carried out emergence/re-entry survey on treelines, bridges and derelict buildings for residential development projects and windfarm sites. Her work included carrying out ground level roost suitability surveys, using BCI Guidelines, to inform Bat Assessments and EclAs and conducting roost inspection surveys on potential tree roosts and buildings/bridges supervised by a licenced roost surveyor.

Relevant courses / training undertaken:

 2021 Woodrow internal inspection training covering inspection and endoscope usage

(Oisín O Sullivan)

- 2022 Introduction to Bat Ecology and Bat Surveys (CIEEM)
- 2022 Bats: Assessing the Impact of Development on Bats, Mitigation and Enhancement (CIEEM)
- 2023 Alternative Bat Identification and Handling Techniques (James Shipman/Jersey Bat Group)

NPWS derogation licence (bat roost disturbance) – generic licences held:

2023 (DER-BAT-2023-25) 2024 (DER-BAT-2023-25) 2024 (DER/BAT 2024-27)

Patrick Power

Patrick Power works at Woodrow as an Ecologist for the last three years and has been heavily involved in static deployments, bat roost surveys, and roost inspections under

supervision of fully licensed surveyors. Since getting his training license he has assisted in roost inspections on over 20 site visits between 2022 and 2023 consisting of wind farms, building demolition, and other various development projects with suspected roosts. He was also present with Oisín O Sullivan during the supervision of remedial works to the Burren Fadda lesser horseshoe bat roost in the winter of 2023 and summer roost survey count in July 2024.

Relevant courses / training undertaken:

 2022, 2023 Woodrow internal inspection training covering inspection and endoscope usage (Oisín O Sullivan, Róisín O'Connell, Frederico Hintze)

NPWS derogation licence (bat roost disturbance) – generic licences held:

2022 (DER-BAT-2022-171)

2023 (DER-BAT-2023-131)

2024 (DER/BAT 2024-27)

6. Róisín O'Connell

Róisín is works as an Ecologist at Woodrow during her last three years, she has been extensively involved in bat surveys, static deployments, bat data analysis, the compilation of bat results reports and bat impact assessments roost assessments and roost inspections in over several wind farm sites. In Róisín's previous employment as part of induction at Scott Cawley, she received in-house training in bat survey techniques for dusk/pre-dawn emergence and re-entry surveys, walked transects, and roost inspections (such as for buildings and trees). She further augmented this training by participating in various online training webinars listed below. In her current role at Woodrow, Róisín assists in conducting roost inspection surveys, utilizing equipment such as thermal cameras and endoscopes under the supervision of licensed roost surveyors. This has equipped her with the necessary skills to employ safe survey techniques that minimize the risk of significant disturbance to roosting bats. Róisín routinely performs ground-level roost suitability surveys following BCI Guidelines to

inform Bat Assessments and Ecological Impact Assessment (EcIA). These non-invasive

survey techniques involve inspecting and assessing potential bat roost features. Róisín routinely conducts emergence/re-entry surveys at derelict buildings, potential tree roosts, and bridges. She carried out multiple surveys during the 2021 bat season and remains engaged in this work in the 2022 – 2024 seasons and beyond. She has also volunteered with Bat Conservation Ireland

Relevant courses / training undertaken:

- 2022 (July) Daubentons' Bat waterway site training course (Bat Conservation Ireland)
- 2022, 2023 Woodrow internal inspection training covering inspection and endoscope usage (Oisín O Sullivan)
- 2023 Bat Handling, Identification and Advanced Survey Techniques (Bat Conservation Ireland)
- 2023 Bat Ecology and Survey (CIEEM/Emma Boston)
- 2024 Bat monitoring scheme

NPWS derogation licence (bat roost disturbance) – generic licences held:

2022 (December) (DER-BAT-2022-167)

2023 (DER-BAT-2022-167)

2024 (DER/BAT 2024-27)

Volunteering

Bat Conservation Ireland: The Cavan Bat Group 2023 - Present

7. Kevin O'Reilly

Kevin is presently working as an Ecologist at Woodrow and during his time here he has been exclusively involved in bat surveys, bat data analysis and compiling bat results reports and bat impact assessments. He has received in-house training in bat survey techniques for dusk/ pre-dawn emergence and re-entry surveys, walked transects, and driving transects. In 2022 he volunteered with Prespa NET and Protection and Preservation of Natural Environment in Albania and conducted numerous roost emergence surveys and potential roost feature surveys at caves, bunkers and other underground sites. Currently, working at Woodrow, he regularly assists in conducting potential roost feature surveys under the supervision of licenced roost surveyors at Woodrow. This involves assessing potential roost suitability from ground level and searching for visual indications of roost presence. This has developed his skills in recognising and identifying potentially suitable roost features. Kevin routinely conducts emergence/re-entry surveys on derelict buildings, potential tree roosts, and bridges. Since being granted his license in 2022- 2024 he has been involved in roost inspections of known and suspected roosts including a roost survey count of the Burren Fadda lesser horseshoe bat roost in the summer of 2024. He has also volunteered with Bat Conservation Ireland.

Relevant courses / training undertaken:

- Woodrow internal inspection training covering inspection and endoscope usage (Oisín O Sullivan, Frederico Hintze, Róisín O'Connell) 2023
- Bat Handling, Identification and Advanced Survey Techniques (Bat Conservation Ireland) 2023
- Bat Conservation Ireland Car-based Monitoring Programme (Bat Conservation Ireland) 2023
- Using Night Vision Aids to Enhance Bat Surveys (CIEEM) 2023.

NPWS Derogation licence (bat roost disturbance) – generic licences held:

2023 (DER-BAT-2023-100) 2024 (DER/BAT 2024-27)

8. Damien Mac Andrew

Damien joined Woodrow as a Bat Ecologist in 2024. Having come from a background in general ecology, Damien received in-house training whilst working for JBA Consulting in bat survey techniques for dusk/pre-dawn emergence and re-entry surveys, walked transects, and roost inspections (such as buildings and trees). Damien's bat survey experience includes preliminary roost assessments on trees and structures, endoscope inspections of potential roost features (PRFs) on trees and

structures (including attic spaces), walked bat activity transects, presence/absence surveys of PRFs on trees and structures, deployment of static detectors, assessment of habitat suitability and bat call analysis.

Relevant courses / training undertaken:

- JBA Consulting internal inspection training covering inspection and endoscope usage.
- Introduction to Bat Ecology and Bat Surveys, CIEEM 2022

NPWS derogation licence (bat roost disturbance) – generic licences held:

2022 (DER/BAT 2022-19) 2024 (2024 (DER/BAT 2024-27)

Examples of demolition/roost closure projects undertaken under licence in Rol:

Licence No. DER/BAT 2022-19. Licence issued for 8/9 Rutland Street, Opera Development Site, Limerick City, Co. Limerick V94 F2K7

Volunteering

Bat Conservation Ireland All-Ireland Daubenton's Waterways Survey 2022 - Present

Bat Conservation Ireland: The Bat Panel 2024 - Present

9. Sophie Papczyk

Sophie joined Woodrow in late 2023 and has experience in bat identification, preliminary roost assessments, roost inspections, activity surveys, transect surveys, static surveys, netting, capture and handling, presence/absence surveys, backtracking, emergence, trapping, radio tagging and telemetry, echolocation call analysis. These surveys were carried out under license in Germany while working on the "SuedOstLink (SOL)" power line from North to South Germany. They were done across the 2020 survey season.

NPWS derogation licence (bat roost disturbance) – generic licences held:

2024 (DER/BAT 2024-27)

10. Emmi Virkki

Emmi has extensive experience in wide variety of bat surveys that she has gained over a seven-year period working in ecological consultancy in Ireland. She is a Senior Ecologist with Woodrow since May 2023 and a full member of Chartered Institute of Ecology and Environmental Management. Emmi's bat survey experience includes preliminary roost assessments on trees and structures, endoscope

inspections of potential roost features (PRFs) on trees and structures (including attic spaces), walked bat activity transects, presence/absence surveys of PRFs on trees and structures, deployment of static detectors, hand and mist netting, harp trapping, bat handling, radio tracking of tagged bats, assessment of habitat suitability and bat call analysis. This experience relates to commercial, educational and transport projects mainly in urban settings and has been carried out under licenses outlined below. Her experience also includes mitigation proposals and supervision of removal of confirmed bat tree roosts under licenses.

NPWS derogation licence (bat roost disturbance) – generic licences held:

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2019 (DER/BAT 2019-13)
2019 (DER/BAT 2019-15)
2019 (DER/BAT 2019-64)
2020 (DER/BAT 2020-67)
2021 (DER/BAT 2021-01)
2022 (DER/BAT 2022-02)
2024 (DER/BAT 2024-27)
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NPWS licences to capture / handle bats:

• 2021 (C2/2021)

Examples of demolition/roost removal projects undertaken under licence in Rol:

• Licence Nos. DER/BAT 2019-15 and DER/BAT 2019-64. Licences issued for the removal of potential bat tree roosts.

Emmi has been active in undertaking numerous courses and training on bats to enhance her skills in the areas of bat ecology, survey, mitigation, as well as capture and handling. She has also volunteered with Bat Conservation Ireland.

Relevant in-person courses/training undertaken:

- Bat capture and handling (Bat Conservation Ireland). 2017.
- Bat tree roost and endoscope training (Bat Conservation Ireland). 2019.
- · Relevant online courses undertaken:
- BatAbility webinars, including:
- Artificial bat roosts. 2021.
- Bats and artificial light at nights (ALAN). 2021.
- Bats and hibernation, 2021.
- Bat call analysis and BatExplorer basics. 2020.
- Echolocation More Advanced Bat Call Analysis. 2020.
- Bat Echolocation Call Structure and Influence of Habitat. 2020.
- Bat Conservation Trust's Big Bat Skills Event (online), including workshops on
- hibernation, building and tree surveys. 2020.
- Wildlife Acoustics webinar on Kaleidoscope Pro Bat Auto-ID. 2020.

- Volunteering
 BATLAS 2020 survey volunteer for Bat Conservation Ireland. 2017