

**Supporting Information for Bat Derogation Licence**  
**Application by Daniel Connell (CECS) for 1<sup>st</sup> January**  
**2026 to 31<sup>st</sup> December 2026 (inclusive)**

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## **Section 1: Introduction**

### **a) Objective of the proposed works**

*This derogation licence is being sought for conducting bat-related surveys in relation to ecological assessments for plans and projects and biodiversity studies. Some of these surveys require entry into known or suspected bat roosts at various times of the year to determine the presence or absence of bats and the status of the roost site. In conducting ecological assessments in relation to bats, it is important to identify and assess the use of a suspect roost and bat roosting features and to document this.*

*This derogation licence will be used for survey only, Daniel Connell would be considered a suitability trained and proficient ecologist and will maintain the welfare of the bat(s) and insure minimum level of disturbance as possible. The granting of the derogation will not be will not be detrimental to the maintenance of the population of any bat species.*

### **b) Name, qualifications and relevant experience of scientific staff, including trainees, involved in the preparation of the application and those responsible for carrying out the proposed activity**

Daniel Connell (MCIEEM) - MSc, BSc, PGDip, BA, MCIEEM, AEnvCoW

## **EDUCATION & QUALIFICATIONS**

MSc Biodiversity, Wildlife & Ecosystem health, University of Edinburgh (2018-2019)

BSc (Hons): Natural Sciences, NUI Galway (2013-2017)

English Language Studies (PGDip), CCUC, Canterbury (2002-2004)

BA (Hons) Business Studies, Coventry University (1996-2000)

## **MEMBERSHIP OF PROFESSIONAL BODIES AND LEARNED SOCIETIES**

Full Member of CIEEM (16630) MCIEEM (2016-Present).

Full Member of The Association of Environmental Clerks of Works (AEnvCoW) (2022 - Present)

*Committee Member* - Irish Ecological Association (2017) – (2022 – Present)

Member of British Ecological Society (CON-1969846) (2022 – Present)

*Chairman* – Irish Wildlife Trust Galway Branch (2017 – Present)

Member of Bat Conservation Trust (2016 – Present)

Member of Birdwatch Ireland since (2017 – Present)

Member of Botanical Society of Britain and Ireland (2020 – Present)

DAFM approved Native Woodland Scheme (NWS) Ecologist

Member of Native Woodlands Trust (2015 – Present)

Member of the Irish Environmental Law Association (IELA) (2024 – Present)

## EMPLOYMENT HISTORY

Feb 2025 – Present	CECS: Ecologist & ECoW (Director & Principal Ecologist)
September 2024 – Feb 2025	Inis Environmental, Principal Ecologist
May 2023 – September 2024	Scott Cawley, Principal Ecologist
October 2020 – April 2023	Veon Ecology, Head of Division
October 2016 – Oct 2020	Freelance Ecologist & Environmental Correspondent <i>(Consultancy clients include, but not limited to: RPS, Ryan Hanley, Atkins, Jacobs, Tobin, MKO)</i>
June 2016 – Sept 2016	Ryan Institute, NUIG, Researcher – Wild Bee Project
September 2015 - Ongoing	Irish Wildlife Trust Galway, Chairman and Field Ecologist
August 2015 – June 2016	Carna Research Station, Aquaculture Supervisor
June 2015 – August 2015	The Marine Institute, Marine Communications
June 2012 – Sept 2015	Galway Atlantaquaria, Aquarist

*Prior to working in Ecology, Daniel had an established career in Environmental Journalism in the UK:*

April 2008 - June 2012	Automotiveworld - Senior Editor & Environmental Correspondent
Sept 2004 - April 2008	Supplierbusiness - Senior Editor & Environmental Correspondent
March 2002 - Sept 2004	Kent Gazette - Business and Environmental Reporter
Sept 1997 - March 2002	Journalist (Various media houses)

## KEY SKILLS AND EXPERIENCE

- Biodiversity surveys
- Appropriate Assessment Screenings
- Natura Impact Statements
- Ecological Impact Assessment (Ecia)
- Environmental Impact Assessment (Biodiversity) (EIAR)
- Ecological Clerk of Works
- Bat Surveying
- Bird Surveying
- GIS – mapping and data management
- Project Management (IMI and HR Suite trained)
- Peer and Technical review

## CURRENT WILDLIFE LICENCES

- Licence No. 002/2024 – Licence to photograph/film wild animals (*Renewal requested for 2025*)
- Licence No. C044/2025 – Licence to capture bats
- Licence No. C033/2025 – Licence to capture amphibians
- DER-BAT-2025-208 – Licence to disturb bats
- Bird Ringing Permit T/0 – Trainer: Chris Benson BTO

## HEALTH & SAFETY TRAINING

- Safe Pass Training (valid to June 2028)
- Manual Handling (Recertified May 2024)
- First Aid (Recertified May 2024)
- CIF asbestos awareness training (2023)

## ADDITIONAL TRAINING

- Native Woodland Conservation Scheme – WOI (2021)
- Agroforestry/Sustainable Woodlands Management – CELT (2019)
- SMART Seas School (TTRS) Research at Sea Field Skills (2016)
- PST Sea Safety Certificate (2016)
- Oiled Wildlife Response Network – First Responders (2017)
- PADI – Advanced Open Water (2013)
- Project Management - IMI (2022) and HR Suite (2024)

## SKILLS AND ABILITIES

Daniel Connell has over 13 years' combined experience in Ecology and Consultancy within Ireland, and more than 10 years' experience in Environmental Journalism for both ENGOs and National Press in Ireland and the UK. He holds an honours degree in Natural Sciences, from University of Galway and studied for a Masters in Biodiversity, Wildlife and Ecosystem Health at The University of Edinburgh (DL).

He has a comprehensive understanding of environmental law and an in-depth knowledge of woodland, wetlands, freshwater, coastal, and marine ecosystems, and the respective botanical, avian, invertebrate, and mammal species which inhabit them.

He has worked on large infrastructure projects including renewable energy, forestry, construction, flood relief schemes, oil & gas exploration, road projects, aviation, tourism, recreational, industrial, commercial, transport, and residential developments. He has overseen various projects as Ecological Clerk of Works (ECoW) and has carried out extensive terrestrial, freshwater, and marine ecology fieldwork and assessments throughout his career.

Daniel has experience in designing, undertaking, managing, and delivering extensive ecological field survey programmes, and in assessing impacts and designing/implementing mitigation measures for both small-scale and complex infrastructure projects to protected terrestrial fauna, breeding and wintering birds, protected aquatic species, and habitats.

He has extensive experience in the preparation of Ecological Impact Assessment (EclA), Appropriate Assessment (AA) Screening, Natura Impact Statements (NIS), Environmental Impact Assessment (EIA) and Preliminary Ecological Appraisal (PEA) reports across a range of projects and plans, including development plans, industrial, transport, residential, and renewable energy developments.

Daniel has acted as both Peer and Technical reviewer on a range of projects; including small- to large-scale residential, commercial, and industrial projects and large-scale infrastructure (e.g. national road and rail projects). He keeps up-to-date with the latest developments in environmental case law and best practice in ecological assessment through attendance at training courses, and IELA events. Alongside his involvement in green infrastructure projects, Daniel also has a keen interest in sustainability including BREEAM; Natural Capital Accounting (NCA); and Biodiversity Net Gain (BNG).

## SPECIALISMS

Daniel's principal specialisms are in classification of habitats both to Fossitt (2000) categories and identification of EU Annex I habitats, bats (including advanced survey techniques, such as use of infrared night vision aids), and in avifauna species identification and classification, particularly in relation to Ireland's passerines, raptors, seabirds, waders, and waterfowl.

### BATS

Daniel is a trained bat ecologist, including internal and external building roost inspection, tree roost identification and inspection training, and endoscope training. He has prepared derogation licences for bats and their roosts, and overseen the discharge of licence obligations.

He has conducted bat Surveys for large infrastructure projects within Ireland, as well as targeted species-specific and protect species surveys on behalf of private clients and ENGOS; from AA, NIS, EclA, and EIAR ecology reports for construction, infrastructure, forestry, solar, and windfarm projects, to conservation initiatives for national wildlife groups and individual clients.

Recent bat surveys Daniel has project-managed include, but are not limited to: Co. Kerry Solar Farm (2025 – Present); Bog Restoration Project, Co. Mayo (2025 – Present); Ballyfeeny, Crag, Milane Hill, and Killadeer windfarms (2024 – Present) on behalf of Greensource/Inis; N6 GCRR (2023-2024) on behalf of Scott Cawley; Ballinasloe Strategic Housing Project (2022) on behalf of Limshill Ltd; (no. 9) Solar Farm projects in Cork, Meath, and Offaly, respectively, on behalf of Entrust Planning Services (2020-2022); N17/R320 Junction Upgrade at Lisduff to the southeast of Claremorris town in Co Mayo, on behalf of BAM (2021); and N59 Moycullen Bypass (2021 – 2022), on behalf of Wills Bros.; including applying for Bat Derogation licences with the NPWS Wildlife Licence Unit.

Daniel has also volunteered with Bat Conservation Ireland (BCI) and the Vincent Wildlife Trust (VWT), respectively, on a variety of Bat conservation initiatives, and has advised clients, local ENGOS and Citizen Scientists on Bat surveying techniques, appropriate Bat Box Schemes, and mitigation measures.

## SELECTED RECENT EXPERIENCE - ADDITIONAL PROJECTS AVAILABLE ON REQUEST

- **Hare's Corner (Burren Beo Trust) (2025 - Ongoing)** Ecologist on behalf of Hare's Corner for Pond creation and Plans for Nature, respectively. Counties: Galway, Meath, Mayo, and Offaly.
- **Ecological Clerk of Works (ECoW) 2025 - Ongoing (OMC Group)** ECoW for various Housing Developments in Co. Galway, including Hotel expansion.
- **Solar Farms, Co. Cork/Clare/Offaly/Tipperary/Meath/Kerry 2022 – Ongoing (various clients including: Soleire Renewables, ESB, Fehily Timoney).** *Full ecological assessment of various proposed solar farms* in Co. Cork, Offaly, Meath, Tipperary, and Kerry, respectively, including Preliminary Ecological Appraisals (PEAs), AA-Screenings, Natura Impact Statements (NIS), Appropriate Assessment (AA), Ecological Impact Assessment (EclA), Biodiversity Management Plan (BMP), Habitat assessment and mapping, aquatic Surveys, protected mammal Surveys (including Badger, Bats, Pine marten, Red squirrel, and Otters), breeding bird and wintering bird surveys.
- **Bat Surveys - various Infrastructure Projects (2016 – Ongoing).** *Bat Surveys for large infrastructure programmes within Ireland, inc. construction, infrastructure, forestry, solar, and windfarm projects.* Recent bat Surveys include: Coillte forest site (2025 - Ongoing), Kerry Solar Farm (2025 - Ongoing); Ballyfeeny, Crag, Milane Hill, and Killadeer windfarms (2024 – 2025); the N6 GCRR (2023); Ballinasloe Strategic Housing Project (2022); Various Solar and Wind Farm projects in Cork, Clare, Tipperary, Meath, and Offaly, respectively, on behalf of Entrust Planning Services (2020-2022) and ESB (2022); N59 Moycullen Bypass (Wills) (2022 – 2023); and N5 Turlough to Westport (Wills-BAM (JV) and RPS) (2019).
- **Ornithological surveys for wind turbine developments, solar farms, and other large scale infrastructure projects (2016 – Ongoing).** Daniel has conducted surveys include Vantage Point (VP) counts, hinterland, feeding distribution, general breeding, and wintering surveys, as well as specialised wader and single species surveys such as Woodcock, Barn Owl, Hen Harrier, Merlin, and other raptors, in Counties Galway,

Cork, Clare, Tipperary, Meath, and Offaly, respectively. Most recently at Co. Kerry (2025); Ballyfeeny, Crag, Milane Hill, and Killadeer windfarms (2024 – Present).

- **Avian Collision Risk Modelling at various Windfarms 2022-2025 (FuturEnergy, BioSphere Environmental Services, Greensource, EDF).** Provided Collision Risk Modelling to Wind farm sites. Target species included Woodcock, Barn Owl, Hen Harrier, Red Kite, and Merlin, and other upland birds and raptors. Most recently at Ballyfeeny, Crag, Milane Hill, and Killadeer windfarms (2024 – Present).
- **N6 GCRR, Co. Galway 2023-2025 (Scott Cawley and ARUP Group on behalf of Galway County Council)** Project Manager, responsible for the delivery of the ecological surveys, options selection assessment, the assessment of impacts and development of the mitigation strategy. Lead author of the biodiversity chapter of the EIAR, the AA Screening Report and the NIS. Daniel designed and conducted extensive habitat, mammal (inc. bats), marsh fritillary, amphibian, and wintering and breeding bird surveys (inc. Woodcock) in and around Galway city to support the planning application of the N6 Galway City Ring Road. These included vantage point surveys, transects and dedicated raptor surveys.
- **Galway Racecourse Stables (2023-2024 Scott Cawley and ARUP Group on behalf of Galway City Council)** Project Manager and lead author, responsible for the delivery of the ecological surveys. Lead author of the biodiversity chapter of the EIAR, the AA Screening Report and the NIS. Daniel designed and conducted habitat, mammal (inc. bats), marsh fritillary, and wintering and breeding bird surveys within the Racecourse Project area to support the planning application.
- **Bective Hotel, County Meath 2021 – 2023.** Construction of the Bective Hotel, a 104-bedroom hotel at the historic Bective House in Navan County Meath. Projects Daniel managed included: AA-Screenings, NISs, EclAs, CEMP formulations, Protected Species surveying, derogation licence applications, ECoW monitoring and regulation of bridge and embankment works; breeding and targeted (Dipper) bird surveys.
- **N59 Moycullen Bypass 2021 – 2023 (Wills)** Ecologist in attendance (ECoW) throughout the construction works of the N59 Moycullen Bypass. Also conducted IAPS surveys, mammal surveys, breeding bird surveys, and bat surveys.
- **N17 R320 Lisduff Junction Upgrade 2022 – 2023 (BAM)** Conducted Bat Surveys, and IAPS Phase 1 surveys and Method Statements for IAPS removal for the N17 R320 Lisduff Junction Upgrade. Ecologist in attendance for the supervised removal of IAPS and demolition of buildings located within the projected works.
- **OPW Appropriate Assessment of the 2020-2024 arterial drainage maintenance programme (Ryan Hanley).** NIS element of the Appropriate Assessment. Daniel was involved in the habitat classification, protected species surveys, and invasive-species surveys of approximately 515km of channels and embankments for six Arterial Drainage Schemes.
- **N5 Turlough to Westport, 2019 - 2020 (Wills BAM JV/RPS).** Daniel co-led the protected habitat, mammal, bat, bird (breeding), and IAPS surveying teams, respectively, prior to commencement of works in February 2020. Daniel was also one of the Ecological Clerk of Works on the N5 project.
- **Pipeline Sites, IAPS Investigation & Management Plans, Limerick City, County Limerick 2021 – 2023 (Limerick County Council).** Daniel surveyed sites across Co. Limerick to develop Phase 1 and Phase 2 invasive species management plans for seven different districts including Limerick West, Limerick North, Limerick East, Cappamore, Kilmallock, Adare Rathkeale, and Newcastle west.
- **(Woodland) Natural Capital Assessment, 2021 – 2023 (Veon Ecology).** Project involved designing and carrying out Baseline Ecological Surveys (including Bat Surveys) to inform a Natural Capital Assessment (NCA) of a client's entire Forest Portfolio (20 sites amounting to 679 hectares).

c) **Application is for the carrying out of surveys that may cause disturbance. Qualifications of all involved**

Daniel Connell – Qualifications As Above

Website: CECS.ie

CV and Insurances: Attached separately.

## **Section 2: Background to proposed activity**

*This derogation licence is being sought for conducting bat-related surveys in relation to ecological assessments for plans and projects and/or biodiversity studies.*

Some of these surveys require entry into known or suspected bat roosts at various times of the year to determine the presence or absence of bats and the status of the roost site. In conducting ecological assessments in relation to bats, it is important to identify and assess the use of a suspect roost and bat roosting features and to document this.

Preference to identifying these elements would be conducted via non-intrusive methods such as ground visual assessment, manual/automated detectors during emergence/re-entry surveys and use of an IR camera. However, this may not be feasible in hard to view or difficult to access areas and may require close inspections of potential roost features in trees/ crevices or entry into a suspected bat roost. This can confirm if features are suitable for potential roosting bats and/or if there is evidence of bats, using torchlight and an endoscope in a careful and sensitive manner.

*This derogation licence would aim to inform potential mitigation measures and strategies.*

All surveys will follow UK and Ireland good practice guidelines as outlined by CIEEM, Bat Conservation Ireland and Bat Conservation Trust.

Daniel is a trained bat ecologist, including internal and external building roost inspection, tree roost identification and inspection training, and endoscope training. He has prepared derogation licences for bats and their roosts, and overseen the discharge of licence obligations. While at Scott Cawley, Daniel experienced bat handling training under the guidance of Neil Middleton, as part of internal training.

He has conducted bat Surveys and worked as an Ecological Clerk of Works (ECoW) for large infrastructure projects within Ireland, as well as targeted species-specific and protect species surveys on behalf of private clients and NGOs; from AA, NIS, EcIA, and EIAR ecology reports for construction, infrastructure, forestry, solar, and windfarm projects, to conservation initiatives for national wildlife groups and individual clients.

Recent projects Daniel has managed with relation to bats include, but are not limited to:

- Glennamong Wild Western Peatlands Project, Coillte (2025)
- Tralee Solar Farm Project, Fehily Timoney (2025)
- Actions for Nature Plan (Various Private Clients) (2025)
- Ballyfeeny, Crag, Milane Hill, and Killadeer windfarms (2024 – Present) on behalf of Greensource/Inis;
- N6 GCRR (2023-2025) on behalf of Scott Cawley and Arup;
- Galway Racecourse New Stables Application (2023-2025) on behalf of Scott Cawley and Arup;
- Ballinasloe Strategic Housing Project (2022) on behalf of Limshill Ltd;
- (no. 9) Solar Farm projects in Cork, Meath, and Offaly, respectively, on behalf of Entrust Planning Services (2020-2022);
- N17/R320 Junction Upgrade at Lisduff to the southeast of Claremorris town in Co Mayo, on behalf of BAM (2021);
- N59 Moycullen Bypass (2021 – 2022), on behalf of Wills Bros.; including applying for Bat Derogation licences with the NPWS Wildlife Licence Unit.

Daniel has also volunteered with Bat Conservation Ireland (BCI) and the Vincent Wildlife Trust (VWT), respectively, on a variety of Bat conservation initiatives, and has advised clients, local ENGOS and Citizen Scientists on Bat surveying techniques, appropriate Bat Box Schemes, and mitigation measures.

*This license is not specific to any location and will support Daniel Connell's work as a Freelance ecologist.*

Daniel Connell is requesting a licence to carry out the following activities restricted under the Wildlife Act and Birds and Natural Habitats Regulations 2011:

- To carry out bat roost surveys (Country-wide) including entry to known roosts to collect scientific data
- To use endoscope to explore inaccessible locations in structures and trees
- To capture bats by hand net, harp trap, by hand, and by mist net
- To photograph bats within roosts for scientific and research purposes (Country-wide)

Daniel Connell has undertaken a variety of bat-related surveys in relation to environmental impact assessments for proposed developments. Some of these surveys require entry into known or suspected bat roosts at various times of year to determine the presence or absence of bats and the status of the roost site. Often new bat roosts are only revealed during surveys and in the absence of a Licence the survey must be ceased, preventing collection of useful information.

A licence is therefore requested to enter roosts as part of standard bat surveys.

### **Section 3: Full details of proposed activity to be covered by the derogation.**

- **Species covered by the Derogation:** All Bat Species (Chiroptera) in Ireland
- **Maximum number of individuals affected:** Unknown at Present
- **Maximum number of breeding or resting sites affected:** Unknown at Present

This derogation licence will be used for survey only, Daniel Connell would be considered a suitability trained and proficient ecologist and will maintain the welfare of the bat(s) and insure minimum level of disturbance as possible. The granting of the derogation will not be will not be detrimental to the maintenance of the population of any bat species.

Daniel Connell has in the past been granted general derogation licences to be involved in any works listed as either Full Licensee or Trainee under supervision of a named Full Licensee – work is for entry to a known roost (disturbance) or handling/capture of bats. Licence is for:(a) Roost disturbance; (b) Handling/capture of bat species (c) Actions authorised within the licence used for carrying out inspections of known or suspected roost sites, while separate derogation licences have been applied for on a project specific basis where required.

Daniel is a trained bat ecologist, including internal and external building roost inspection, tree roost identification and inspection training, and endoscope training. He has prepared derogation licences for bats and their roosts, and overseen the discharge of licence obligations. He has conducted bat Surveys for large infrastructure projects within Ireland, as well as targeted species-specific and protect species surveys on behalf of private clients and ENGOS; from AA, NIS, EclA, and EIAR ecology reports for construction, infrastructure, forestry, solar, and windfarm projects, to conservation initiatives for national wildlife groups and individual clients.

Daniel has held previous licenses for capturing all bat species by hand net. While at Scott Cawley, Daniel experienced bat handling training under the guidance of Neil Middleton, as part of internal training.

Daniel Connell will follow a strict protocol outlined below to ensure the minimum disturbance:

#### **Protocols for the Protection of Bats During Works**

Bat Roost Survey Protocol to ensure minimisation of disturbance to bats (this does not cover health and safety risk assessments which are carried out)

#### **For unknown roosts**

- Check with owner/client re presence of bats.
- Survey for external signs of bats and roost entry points. If positive signs then treat as known /suspected roost.
- Entry to possible roost should be made cautiously especially if survey is carried out in the winter period when signs of bats may be difficult to find. Should signs of bats be noted then treat as a known/suspected roost.
- Use of endoscope is to treat crevice/tree cavity as suspected roost, with insertion being conducted in a slow manner

### **For known/suspected roosts Generic measures to include:**

- Avoid using roost illumination apart from torches
- Talking in low tone is preferred to whispering
- Bats seen in situ should be counted, photographed only if necessary and then left alone
- Handling of bats to confirm identification is only used as a last resort. This may be necessary for suspected Whiskered/Brandt's bat roosts
- Samples of droppings, dead bats etc may be removed to facilitate species identification
- Care to be taken to avoid cooling or warming effects as described below
- During potential hibernation season (November-March), only one person will be permitted to enter roost area. If any hibernating bats are seen to be showing signs of waking, then the roost survey will be abandoned immediately.
- During the breeding season, known breeding roosts will be avoided unless emergency work is required. This will only be conducted under a separate granted derogation licence associated with the works.

### **Photography in roosts**

The following protocols will be complied with to minimise the risk of injury or death to bats being photographed or filmed:

- Photography will not take place in nursery areas of roosts.
- Photography will be minimised in roosts and will comprise taking high-resolution photographs using a standard digital camera with flash at a minimum distance of 3 metres from the bats. This will allow images to be zoomed digitally rather than putting the flash close to bats
- No bats will be handled during photography
- Video footage may be taken of bats emerging from roosts or swarming around roosts and stills taken from this footage
- Use of endoscope is to treat crevice/tree cavity as suspected roost, with insertion being in a slow manner.
- Photograph will be taken if bat is present and best identifiable
- These measures will serve to minimise disturbance of bats in their roosts by taking photographs.

## **Section 4: Ecological Survey and site assessment**

*Not required As Application is to carry out Surveys*

## **Section 5: Evidence to support the Derogation Tests**

### **a. Test 1 - Reason for Derogation:**

#### **C: 1. 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:**

This derogation licence is being sought for conducting bat-related surveys in relation to ecological assessments for plans and projects and biodiversity studies. Some of these surveys require entry into known or suspected bat roosts at various times of the year to determine the presence or absence of bats and the status of the roost site. In conducting ecological assessments in relation to bats, it is important to identify and assess the use of a suspect roost and bat roosting features and to document this.

This derogation licence will be used for survey only, Daniel Connell would be considered a suitability trained and proficient ecologist and will maintain the welfare of the bat(s) and insure minimum level of disturbance as possible. The granting of the derogation will not be will not be detrimental to the maintenance of the population of any bat species.

Preference to identifying these elements would be conducted via non-intrusive methods such as ground visual assessment, manual/automated detectors during emergence/re-entry surveys and use of an IR camera. However, this may not be feasible in hard to view or difficult to access areas and may require close inspections of potential roost features in trees/ crevices or entry into a suspected bat roost. This can confirm if features are suitable for potential roosting bats and/or if there is evidence of bats, using torchlight and an endoscope in a careful and sensitive manner. This derogation licence would aim to inform potential mitigation measures and strategies. All surveys will follow UK and Ireland good practice guidelines as outlined by CIEEM, Bat Conservation Ireland, and Bat Conservation Trust.

Daniel is a trained bat ecologist, including internal and external building roost inspection, tree roost identification and inspection training, and endoscope training. He has prepared derogation licences for bats and their roosts, and overseen the discharge of licence obligations. While at Scott Cawley, Daniel experienced bat handling training under the guidance of Neil Middleton, as part of internal training

#### **C: 2. Where the reason is for “other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment”, summarise the nature of the public interest and how this outweighs the conservation interest of the species under strict protection.**

This derogation licence is being sought for conducting bat-related surveys in relation to ecological assessments for plans and projects and biodiversity studies. Some of these surveys require entry into known or suspected bat roosts at various times of the year to determine the presence or absence of bats and the status of the roost site. In conducting ecological assessments in relation to bats, it is important to identify and assess the use of a suspect roost and bat roosting features and to document this.

Preference to identifying these elements would be conducted via non-intrusive methods such as ground visual assessment, manual/automated detectors during emergence/re-entry surveys and use of an IR camera. However, this may not be feasible in hard to view or difficult to access areas and may require close inspections of potential roost features in trees/ crevices or entry into a suspected bat roost. This can confirm if features are suitable for potential roosting bats and/or if there is evidence of bats, using torchlight and an endoscope in a careful and sensitive manner. This derogation licence would aim to inform potential mitigation measures and strategies.

All surveys will follow UK and Ireland good practice guidelines as outlined by CIEEM, Bat Conservation Ireland, and Bat Conservation Trust.

Daniel Connell is a trained bat ecologist, including internal and external building roost inspection, tree roost identification and inspection training, and endoscope training. He has prepared derogation licences for bats and their roosts, and overseen the discharge of licence obligations. While at Scott Cawley, Daniel Connell experienced bat handling training under the guidance of Neil Middleton, as part of internal training.

He has conducted bat Surveys and worked as an Ecological Clerk of Works (ECoW) for large infrastructure projects within Ireland, as well as targeted species-specific and protect species surveys on behalf of private clients and ENGOS; from AA, NIS, EclA, and EIAR ecology reports for construction, infrastructure, forestry, solar, and windfarm projects, to conservation initiatives for national wildlife groups and individual clients.

*If Daniel Connell is unable to conduct these surveys to accurately and appropriately assess the presence/absence of bat species, ensure their protection, and be in a professional position to provide the level of detailed information, recommendations, and suitable mitigation measures to his clients on how to maintain/restore/enhance the favourable status of the respective roost/bat species, this will have financial implications for him as a Freelance Bat Specialist/Ecologist.*

Daniel Connell is requesting a licence to carry out the following activities restricted under the Wildlife Act and Birds and Natural Habitats Regulations 2011:

- To carry out bat roost surveys (Country-wide) including entry to known roosts to collect scientific data;
- To use endoscope to explore inaccessible locations in structures and trees;
- To capture bats by hand net, harp trap, by hand, and by mist net;
- To photograph bats within roosts for scientific and research purposes (Country-wide).

Daniel Connell has undertaken a variety of bat-related surveys in relation to environmental impact assessments for proposed developments. Some of these surveys require entry into known or suspected bat roosts at various times of year to determine the presence or absence of bats and the status of the roost site.

Often new bat roosts are only revealed during surveys and in the absence of a Licence the survey must be ceased, preventing collection of useful information. A licence is therefore requested to enter roosts as part of standard bat surveys.

**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, please summarise the objective(s) of the proposed activities making reference to those listed above and how the purpose of such activities overrides the interests of strict protection of the species.**

This derogation licence will be used for survey only, Daniel Connell would be considered a suitability trained and proficient ecologist and will maintain the welfare of the bat(s) and insure minimum level of disturbance as possible. The granting of the derogation will not be will not be detrimental to the maintenance of the population of any bat species.

This derogation licence is being sought for conducting bat-related surveys in relation to ecological assessments for plans and projects and biodiversity studies. Some of these surveys require entry into known or suspected bat roosts at various times of the year to determine the presence or absence of bats and the status of the roost site. In conducting ecological assessments in relation to bats, it is important to identify and assess the use of a suspect roost and bat roosting features and to document this.

Preference to identifying these elements would be conducted via non-intrusive methods such as ground visual assessment, manual/automated detectors during emergence/re-entry surveys and use of an IR camera. However, this may not be feasible in hard to view or difficult to access areas and may require close inspections of potential roost features in trees/ crevices or entry into a suspected bat roost. This can confirm if features are suitable for potential roosting bats and/or if there is evidence of bats, using torchlight and an endoscope in a careful and sensitive manner. This derogation licence would aim to inform potential mitigation measures and strategies. All surveys will follow UK and Ireland good practice guidelines as outlined by CIEEM, Bat Conservation Ireland and Bat Conservation Trust.

Daniel is a trained bat ecologist, including internal and external building roost inspection, tree roost identification and inspection training, and endoscope training. He has prepared derogation licences for bats and their roosts, and overseen the discharge of licence obligations. While at Scott Cawley, Daniel experienced bat handling training under the guidance of Neil Middleton, as part of internal training.

He has conducted bat Surveys and worked as an Ecological Clerk of Works (ECoW) for large infrastructure projects within Ireland, as well as targeted species-specific and protect species surveys on behalf of private clients and ENGOS; from AA, NIS, EclA, and EIAR ecology reports for construction, infrastructure, forestry, solar, and windfarm projects, to conservation initiatives for national wildlife groups and individual clients.

## **b. Test 2 - Absence of Alternative Solutions**

### Do-Nothing:

Alternative solutions were considered, and none are available in this instance.

In the absence of this derogation licence, as bats are a protected species, Daniel Connell would be unable to carry-out his role as a freelance Bat Specialist in line with best practices, e.g. those detailed in 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition)', Collins (2023).

This license will enable Daniel Connell to carry out Internal preliminary roost assessments, seasonal bat surveys, and preconstruction checks of trees and buildings using an endoscope and internal inspection to verify the presence of bats in a suspected roost.

Daniel Connell can then use this information to advise his clients on projects during the planning stages, for instance to alter elements of the design to prevent impact to bat roosts, or in cases where the project cannot be altered, to recommend appropriate mitigation to reduce the impact to bats such as lighting design, etc.

He can also use this license to monitor bat boxes which have been erected as mitigation for projects to determine if they are being used and if the mitigation is effective, including the handling bats in case of emergence transfer to alternative bat boxes, should any damage have occurred to an existing bat box.

*Additionally, if Daniel Connell is unable to conduct these surveys to accurately and appropriately assess the presence/absence of bat species, ensure their protection, and be in a professional position to provide the level of detailed information, recommendations, and suitable mitigation measures to his clients on how to maintain/restore/enhance the favourable status of the respective roost/bat species, this will have financial implications for him as a Freelance Bat Specialist/Ecologist.*

### Emergence Surveys/External Observations:

Daniel Connell has considered other methods of surveying, such as emergence surveys/external observations, but the results of these surveys are proven not to be as conclusive as internal surveys in determining the presence or absence of bats, nor the accurate size and classification (maternity, satellite, day/night, summer/winter, etc.) of the roost, especially if the potential roost features are difficult to see, and potential ingress and egress points are obscured or unsafe to access externally.

In relation to trees, Collins (2023) guidance states that "Emergence surveys are only recommended for trees in a limited number of circumstances. This includes where bat presence is already known (for example because a radio-tagged bat has returned to a roost or a roost has been identified through inspection surveys during the daytime before the survey) and roost characterisation is necessary. These surveys may also be required where a feature cannot be safely accessed for inspection (e.g. dead tree) or may be damaged by close inspection (e.g. lifted bark) – these are circumstances where emergence surveys might be the only option.". Therefore, when assessing trees, it is recommended to use tree climbing and inspect potential roost features with an endoscope to determine presence/likely absence of bats in trees.

In relation to buildings, internal inspection is important for determining what type of roost and the number of individuals using the building. If it is possible to examine all internal areas (including voids

and crevices) thoroughly and no evidence of bats is found, then Collins (2023) states further surveys are not needed. If the internal inspection cannot conclusively rule out the absence of bats, then supporting emergence surveys are recommended based on the suitability of the building to support roosting bats based on the results of the internal inspection.

Internal inspection is the most robust method of determining the presence/likely absence of bats. In the absence of this pertinent information, there is a risk that both suspected and known bat roosts in trees/buildings could eventually fall into an advanced state of dereliction and be lost entirely as roosting structures for bat species.

### **c. Test 3 - Impact of a derogation on Conservation Status**

This license is not specific to any location and will support Daniel Connell's work as an ecologist and its intended aim is to allow Daniel to contribute to maintaining/enhancing the Favourable Conservation Status of All Bat Species in Ireland.

This derogation licence will be used for survey only, Daniel Connell would be considered a suitability trained and proficient ecologist and will maintain the welfare of the bat(s) and insure minimum level of disturbance as possible.

The granting of the derogation will not be will not be detrimental to the maintenance of the population of any bat species

Daniel Connell will follow a strict protocol outlined below to ensure the minimum disturbance:

#### **Protocols for the Protection of Bats During Works**

Bat Roost Survey Protocol to ensure minimisation of disturbance to bats (this does not cover health and safety risk assessments which are carried out)

##### **For unknown roosts**

- Check with owner/client re presence of bats.
- Survey for external signs of bats and roost entry points. If positive signs then treat as known /suspected roost.
- Entry to possible roost should be made cautiously especially if survey is carried out in the winter period when signs of bats may be difficult to find. Should signs of bats be noted then treat as a known/suspected roost.
- Use of endoscope is to treat crevice/tree cavity as suspected roost, with insertion being conducted in a slow manner

### **For known/suspected roosts Generic measures to include:**

- Avoid using roost illumination apart from torches
- Talking in low tone is preferred to whispering
- Bats seen in situ should be counted, photographed only if necessary and then left alone
- Handling of bats to confirm identification is only used as a last resort. This may be necessary for suspected Whiskered/Brandt's bat roosts
- Samples of droppings, dead bats etc may be removed to facilitate species identification
- Care to be taken to avoid cooling or warming effects as described below
- During potential hibernation season (November-March), only one person will be permitted to enter roost area. If any hibernating bats are seen to be showing signs of waking, then the roost survey will be abandoned immediately.
- During the breeding season, known breeding roosts will be avoided unless emergency work is required. This will only be conducted under a separate granted derogation licence associated with the works.

### **Photography in roosts**

The following protocols will be complied with to minimise the risk of injury or death to bats being photographed or filmed:

- Photography will not take place in nursery areas of roosts.
- Photography will be minimised in roosts and will comprise taking high-resolution photographs using a standard digital camera with flash at a minimum distance of 3 metres from the bats. This will allow images to be zoomed digitally rather than putting the flash close to bats
- No bats will be handled during photography
- Video footage may be taken of bats emerging from roosts or swarming around roosts and stills taken from this footage
- Use of endoscope is to treat crevice/tree cavity as suspected roost, with insertion being in a slow manner.
- Photograph will be taken if bat is present and best identifiable
- These measures will serve to minimise disturbance of bats in their roosts by taking photographs.

## **Section 6: Monitoring the impacts of the derogations**

***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.***

This derogation licence is being sought for conducting bat-related surveys in relation to ecological assessments for plans and projects and biodiversity studies. Some of these surveys require entry into known or suspected bat roosts at various times of the year to determine the presence or absence of bats and the status of the roost site. In conducting ecological assessments in relation to bats, it is important to identify and assess the use of a suspect roost and bat roosting features and to document this.

**This derogation licence will be used for survey only.** Daniel Connell would be considered a suitability trained and proficient ecologist and will maintain the welfare of the bat(s) and insure minimum level of disturbance as possible. The granting of the derogation will not be will not be detrimental to the maintenance of the population of any bat species.

Daniel Connell will follow a strict protocol, as outlined above, to ensure the minimum disturbance and that the conditions of the derogation licence are implemented correctly.

Monitoring of species will occur as standard, as and where any projects have been commissioned where this is a requirement.

***Applicants should provide details of proposed reports to be submitted to the NPWS including the results of monitoring***

Daniel Connell ensures that Annual Returns from any Derogation Licences granted and any Bat Reports submitted to clients concerning Bat Activity, Roosting, Bat Box Schemes, and/or the results of monitoring, as appropriate, are submitted routinely to the NPWS at the end of every Full Season.