

**Supporting Information for an Application for Derogation under Regulation 54  
& 54A of the European Communities (Birds and Natural Habitats) Regulations  
2011 to Undertake Bat Population Assessments in Killarney National Park, Co.  
Kerry**



**NPWS**

An tSeirbhís Páirceanna  
Náisiúnta agus Fiadhúlra  
National Parks and Wildlife  
Service

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## Introduction

This application for a Derogation Licence is required in order for the NPWS Regional staff (Conservation Rangers and District Conservation Officer) in Killarney National Park to monitor Bat populations including Lesser Horseshoe *Rhinolophus hipposideros* bat roosts.

These proposed bat surveys will help to fulfil the Department's monitoring requirements under Article 11 of the Habitats Directive and are necessary to underpin our Article 17 conservation status assessments. The data will be collected using the Lesser Horseshoe Bat Roost Monitoring application. This will require inputting the results of each of the counts and identifying any Pressures and Threats to each roost.

The Lesser Horseshoe Bat species action plan 2022 – 2026 (NPWS & VWT (2022) Lesser Horseshoe Bat Species Action Plan 2022- 2026. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland) Action 4.1h states: "4.1h ACTION: Continue monitoring winter and summer roosts annually and keep the national database up to date. WHO: NPWS, VWT, NPWS database contractor WHEN: Annually". This activity will assist in implementing the action plan in full.

- (a) A derogation licence is being sought to allow NPWS Conservation Rangers in Killarney National Park to undertake surveys of all bat species in order to monitor populations present.
- (b) The surveyors carrying out the proposed surveys are Mary Sheehan, Tim Cahalane, Jessica Burkitt and Tricia Beecher. Trainees included are Shonagh Gray, Calum Sweeney, Micheal McSweeney and Conor Rowlands.
- (c) Mary Sheehan BEng BSc HDipSc is a District Conservation Officer (DCO) for Killarney National Park. Mary has screened and reviewed appropriate assessments and environmental impact assessments prior to joining the NPWS. Mary has over 10 years' experience in bat surveying firstly as a volunteer for Bat Conservation Ireland assisting with Daubenton's (*Myotis daubentonii*) surveys and Batlas 2010, and later with the NPWS in roost monitoring, designing and implementing enhancement and maintenance proposals. She received on the job guidance and assistance from Mr Danny O'Keeffe, Dr Kathryn Freeman and Dr Daniel Buckley while undertaking the Lesser Horseshoe Bat Monitoring in Killarney National Park and the wider Kerry region. Mary completed CPD courses on Bats and Bat Conferences run by Bat Conservation Ireland as well as NPWS courses on bat identification, surveying in caves and a at the lesser horseshoe bat meetings.

Jessica Burkitt BSc is a Conservation Ranger working in Killarney National Park. Jessica has previously worked as an ecological consultant where she worked on a number of construction and windfarm projects involving bats and their roosts, implementing mitigation, compensation and enhancement proposals. Jessica has a lot of experience working as an ECoW overseeing contractors and ensuring works were carried out following best practice

guidelines. She has undertaken NPWS courses surveying in caves as well as attending lesser horseshoe bat meetings.

Tim Cahalane BSc is a Conservation Ranger working in Killarney National Park. He has undertaken course run by the NPWS on Bat identification and surveying in caves and has five years' experience in surveying with on the job guidance and assistance from Mr Danny O'Keeffe, Dr Kathryn Freeman and Mary Sheehan.

Tricia Beecher BSc MSc is a Conservation Ranger working in Killarney National Park and has undertaken NPWS courses surveying in caves as well as attending lesser horseshoe bat meetings. She has four years' experience in surveying with on the job guidance and assistance from conservation rangers in the Clare and Galway regions as well as Mary Sheehan and Jessica Burkitt in Killarney National Park.

Shonagh Gray BSc MSc is a Conservation Ranger working in Killarney National Park. She has over five years' experience in Daubenton (*Myotis daubentonii*) bat surveying. She is a trainee currently and was supervised last year by Jessica Burkitt.

Calum Sweeney BSc MSc is a Conservation Ranger working in Killarney National Park. He is a trainee currently and was supervised last year by Jessica Burkitt.

Micheal Mc Sweeney BSc MSc is a Conservation Ranger working in Killarney National Park. He has previous experience working with Clare Heardman and has built an artificial bat roost in Glengarriff Nature Reserve. He will be a trainee as he took up the role conservation ranger in Killarney National Park recently.

Conor Rowlands BSc is a Conservation Ranger working in Killarney National Park. He has previously worked as an ecological consultant and worked on projects involving bat surveys. He will be a trainee as he has just commenced as a conservation ranger.

## Background to proposed activity

The location for all surveys is within Killarney National Park, Killarney, Co. Kerry which is state owned land. There are a number of bat roosts and high value habitats associated with bats present within the National Park and the monitoring of both the species and habitats is important.

There are 13 lesser horseshoe *Rhinolophus hipposideros* roosts within Killarney National Park that are surveyed in the Winter and Summer months during the national lesser horseshoe roost monitoring scheme. There are also at least two buildings with Common Pipistrelle *Pipistrellus pipistrellus* and Soprano Pipistrelle *Pipistrellus pygmaeus* bats present that are surveyed every year.

As part of the winter surveys for lesser horseshoe bats, surveyors must enter into buildings and cave systems to undertake a count of the bats in situ. This requires accessing the roost wearing gloves, masks and a red light to limit disturbance and in accordance with the following methodology:

The methodology is described in Irish Bat Monitoring Programme 2018-2021 (Aughney, T., Roche, N. and Langton, S. (2022) Irish Bat Monitoring Programme 2018-2021.) Irish Wildlife Manuals, No. 137. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland. No suitable alternative exists as per Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations to monitor winter roosts annually.

The staff listed in the attached application are trained and experienced bat surveyors. Any inexperienced bat surveyors will be accompanied and supervised by an experienced bat surveyor. All applicants are familiar with the Department's Bat Mitigation Guidelines (2022) and the Department's guidance on the Strict Protection of Annex IV species. They will follow the NPWS roost survey protocol at all times.

Bat Roost Survey Protocol to ensure minimisation of disturbance to bats

For unknown roosts

- a. Check with owner/client re presence of bats.
- b. Check with Bat Conservation Ireland to determine roost records.
- c. Survey for external signs of bats and roost entry points. If positive signs then treat as known /suspected roost.
- d. 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.

For known/suspected roosts

- a. Generic measures to include:
  - i. Avoid using roost illumination apart from torches.
  - ii. Talking in low tone is preferred to whispering.
  - iii. Bats seen in situ should be counted where possible and then left alone.
  - iv. Handling of bats to confirm identification is only used as a last resort and is subject to separate licencing under the Wildlife Acts (S.23).
  - v. Samples of droppings, dead bats etc may be removed to facilitate species identification.
  - vi. Care to be taken to avoid cooling or warming effects as described below.

- b. During potential hibernation season (November-March), only one person should enter roost area. If any hibernating bats are seen to be showing signs of waking then the roost survey will be abandoned immediately.
- c. During the breeding season, known breeding roosts should be avoided unless emergency work is required.

In the Winter months, internal counts are the only way to carry out a count of this species and this requires access into buildings and cave systems within the Park. In the Summer month, the majority of the surveys carried out in Killarney National Park are emergence surveys and therefore disturbance is very limited at this time of year. These surveys can also inform enhancement proposals and/or maintenance of the roosts to ensure they remain in suitable condition for this species. For example ensuring all access points are predator proof and kept clear of obstructions and there are no leaks or holes where the bats are roosting.

In addition, bat activity surveys are conducted by walking transects within the Park and recording the different species foraging and commuting. This allows us to record a range of bat species and identify the important foraging and commuting routes and possible roosts/roosting features in trees. Surveys are conducted on waterways for presence/absence of Daubenton's bat *Myotis daubentonii*. Bat emergence surveys are conducted on known roosts of common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus* roosts within the Park also.

## Full details of proposed activity to be covered by the derogation

The derogation licence is being sought in order to allow NPWS Conservation Rangers to survey all bat species present within Killarney National Park. These surveys include the National Lesser Horseshoe bat monitoring scheme which takes place in both the Summer and Winter. The methodology is described in Irish Bat Monitoring Programme 2018-2021 (Aughney, T., Roche, N. and Langton, S. (2022).

Internal counts of bats are undertaken more so during the winter months where bats are roosting in cave systems and old buildings. However, some roosts are also checked internally in the Summer. The internal count involves one surveyor entering the roost and counting the bats in situ when they are torpid. Surveyors wear gloves, masks and use a head torch with red light to limit disturbance. The count is carried out as quickly as possible and if there is any movement by the bats during the count, the count is stopped and the surveyor will leave the roost immediately. During the summer, emergence counts are conducted on the majority of the roosts in Killarney National Park. This involves counting the bats as they leave the roost at sunset. This limits disturbance, especially when bats are giving birth and having their young. Surveyors do not access maternity roosts in the summer in Killarney National Park.

As well as the lesser horseshoe bat surveys, we also undertake emergence surveys on buildings with roosts of common pipistrelle and soprano pipistrelle bats.

## Evidence to support the Derogation Tests

### Test 1 - Reason for Derogation:

The reason for the derogation falls into reason 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.”

Conducting regular population assessments and roost audits allow us to stay informed on the health of the bats in Killarney National Park and suitability of the roosts present. It allows us to monitor and report any works required on any of the roosts, especially maintenance works where there may be a risk to the bats present. The results from all bat surveys conducted in the Park are reported on every year, both in winter and summer, allowing us to plot a trend for each of the roosts and identify any issues or fluctuations in numbers. This is invaluable information and allows us to act quickly when required. The monitoring of the roosts also allows us to understand what roosts/habitats the bats are using regularly and/or intermittently helps us gain more of an understanding of their movements at different times in the year/season. In addition, lesser horseshoe bats are a Qualifying Interest for Killarney National Park and therefore the habitats and roosts associated with the species must be protected and managed to ensure the longevity of the species and their protected roosts.

These proposed bat surveys will help to fulfil the Department’s monitoring requirements under Article 11 of the Habitats Directive and are necessary to underpin our Article 17 conservation status assessments and the Lesser Horseshoe Bat species action plan 2022 – 2026 (NPWS & VWT (2022)..

### Test 2 - Absence of Alternative Solutions

Alternative Scenario-Do nothing:

The Department’s monitoring requirements under Article 11 of the Habitats Directive necessary to underpin Article 17 conservation status assessments would not be met. Also, actions in the Lesser Horseshoe Bat Species Action Plan 2022-2026 could not be fulfilled.

If the survey work is not completed within the Park each year, NPWS will not be informed on the health, success and/or failure of roosts and populations of bats. The survey results allow us to ensure that roosts are maintained and remain suitable to support a range of different bat species. Known lesser horseshoe roosts within the Park are monitored throughout the year and if any works are required, this can be implemented immediately ensuring bats and their roosts remain safe. The results of the bat surveys conducted can inform enhancement proposals for existing roosts and/or the creation of new roosts/roosting features. The monitoring of bat species within Killarney National Park is integral to ensure that habitats are protected and roosts are maintained to a high standard. In addition, recording the numbers of different bat species within the Park allows us to understand the suitability of roosts and habitats and to implement mitigation or enhancement plans where required to ensure the longevity of these species.

Alternative Scenario- Only carry out emergence surveys:

Cannot rely on data from emergence surveys in winter especially if bats are in torpor and do not emerge. Also, there are roosts used only in winter (hibernacula) that are important to assess and monitor. The Department's monitoring requirements under Article 11 of the Habitats Directive necessary to underpin Article 17 conservation status assessments would not be fully met. Also, actions in the Lesser Horseshoe Bat Species Action Plan 2022-2026 could not be completely fulfilled.

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

Conducting monitoring assessments of bat species and their roosts will not negatively affect this species as long the correct procedure is followed. In addition to following the methodology is described in Irish Bat Monitoring Programme 2018-2021 (Aughney, T., Roche, N. and Langton, S. (2022) outlined earlier, surveyors will also wear the appropriate PPE including masks and gloves and ensuring to use a head torch with a red light, which limits disturbance to the roosting bats. Only one surveyor is to access the roost at a time.

The guidance and PPE outlined has been followed and used during all bat roost assessments in Killarney National Park and to date, there has been no observed or recorded decline in populations.

### **Monitoring the impacts of the derogation**

Monitoring of roosts and bat populations will be conducted in Killarney National Park throughout the year and Rangers will ensure to report on any issues or damage observed to buildings and/or habitats. A report with details for each roost will be submitted to Management at the end of the year outlining the surveys completed and any works that are/were required on any of the roosts. As there are results from previous years, comparisons can be made and reduction in numbers or even increases in numbers can be identified allowing us to try to understand why this may have happened. Consistent monitoring is hugely important in this regard. The positive impact on the roosts and bat species following monitoring and maintenance/enhancement will be indicated by stabilisation of bat numbers and a trend over time of increasing numbers of bats using the different roosts within the Park.