

2025

No. 9 Georges Place & Wash House, Kellys Avenue, Dun Laoghaire, Co. Dublin – Winter Bat Assessment



Soprano pipistrelle

Tina Aughney 2016

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Client: Dún Laoghaire-Rathdown County Council.

Project Name & Location: No. 9 Georges Place and Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin

Report Revision History (Report – New Format)

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23 rd January 2025	Draft 1	By email to Dún Laoghaire-Rathdown County Council

Purpose

This document has been prepared as a Report for Dún Laoghaire-Rathdown County Council. Only the most up to-date report should be consulted. All previous drafts/reports are deemed redundant in relation to the named site.

Bat Eco Service accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Carbon Footprint Policy

It is the policy of Bat Eco Services to provide documentation digitally in order to reduce carbon footprint. Printing of reports etc. is avoided, where possible.

Bat Record Submission Policy

It is the policy of Bat Eco Services to submit all bat records to Bat Conservation Ireland database one year post-surveying. This is to ensure that a high level bat database is available for future desktop reviews. This action will be automatically undertaken unless otherwise requested, where there is genuine justification.

Citation: Bat Eco Services (2024) No. 9 Georges Place and Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin – Winter Bat Assessment. Unpublished report prepared for Dún Laoghaire-Rathdown County Council.

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1. Introduction

Bat Eco Services was commissioned by Dún Laoghaire-Rathdown County Council to undertake a bat survey of No. 9 Georges Place and Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin.

The objective of the bat surveys was to document any bat usage evidence of the buildings and to inform survey requirements during the bat activity season. Bat Eco Services designed a bat survey approach, principally, with reference to Marnell *et al.* (2022) and Collins (2023).

1.1 Relevant Legislation & Bat Species Status

All Irish bat species are protected under the Wildlife Act (1976) and Wildlife Amendment Acts (2000 and 2010). Also, the EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive 1992), seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All Irish bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat *Rhinolophus hipposideros* is further listed under Annex II. Across Europe, they are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both these conventions.

Also, under existing legislation, the destruction, alteration or evacuation of a known bat roost is an offence. The most recent guidance document is “Guidance document on the strict protection of animal species of Community interest un the Habitats Directive (Brussels, 12.10.2021 C(2021) 7391 final”.

Regulation 51(2) of the 2011 Regulations provides –

“(2) Notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a licence granted by the Minister under *Regulation 54*, a person who in respect of the species referred to in *Part 1* of the *First Schedule*—
(a) deliberately captures or kills any specimen of these species in the wild, (b) deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
(c) deliberately takes or destroys eggs of those species from the wild,
(d) damages or destroys a breeding site or resting place of such an animal, or
(e) keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive, shall be guilty of an offence.”

The grant of planning permission does not permit the commission of any of the above acts or render the requirement for a derogation licence unnecessary in respect of any of those acts.

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

There are eleven recorded bat species in Ireland, nine of which are considered resident on the island. Eight resident bat species and one of the vagrant bat species are vesper bats and all vespertilionid bats have a tragus (cartilaginous structure inside the pinna of the ear). Vesper bats are distributed

throughout the island. Nathusius' pipistrelle *Pipistrellus nathusii* is a recent addition while the Brandt's bat has only been recorded once to-date (Only record confirmed by DNA testing, all other records has not been genetically confirmed). The ninth resident species is the lesser horseshoe bat *Rhinolophus hipposideros*, which belongs to the Rhinolophidea and has a complex nose leaf structure on the face, distinguishing it from the vesper bats. This species' current distribution is confined to the western seaboard counties of Mayo, Galway, Clare, Limerick, Kerry and Cork. The eleventh bat species, the greater horseshoe bat, was only recorded for the first time in February 2013 in County Wexford and is therefore considered to be a vagrant species. A total of 41 SACs have been designated for the Annex II species lesser horseshoe bat (1303), of which nine have also been selected for the Annex I habitat 'Caves not open to the public' (8310).

The following species list (Table 1) identifies the range of bat species (resident and vagrant) whose presence has been confirmed in Ireland along with their current status. According to the Bat Conservation Ireland databases, all nine resident bat species have been recorded in Co. Limerick.

Table 1a: Status of the Irish bat fauna (Marnell *et al.*, 2019 & NPWS, 2022).

Species: Common Name	Irish Status	European Status	Global Status
Resident Bat Species ^			
Daubenton's bat <i>Myotis daubentonii</i>	Least Concern	Least Concern	Least Concern
Whiskered bat <i>Myotis mystacinus</i>	Least Concern	Least Concern	Least Concern
Natterer's bat <i>Myotis nattereri</i>	Least Concern	Least Concern	Least Concern
Leisler's bat <i>Nyctalus leisleri</i>	Least Concern	Least Concern	Least Concern
Nathusius' pipistrelle <i>Pipistrellus nathusii</i>	Least Concern	Least Concern	Least Concern
Common pipistrelle <i>Pipistrellus pipistrellus</i>	Least Concern	Least Concern	Least Concern
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	Least Concern	Least Concern	Least Concern
Brown long-eared bat <i>Plecotus auritus</i>	Least Concern	Least Concern	Least Concern
Lesser horseshoe bat <i>Rhinolophus hipposideros</i>	Inadequate	Least Concern	Least Concern
Possible Vagrants ^			
Brandt's bat <i>Myotis brandtii</i>	Data deficient	Least Concern	Least Concern
Greater horseshoe bat <i>Rhinolophus ferrumequinum</i>	Data deficient	Near threatened	Near threatened

^ Roche *et al.*, 2014

1.1.1 NPWS Article 17 Reporting

NPWS (2019) provides details on the conservation status for each of Ireland's bat species along with distribution maps (See appendices for such maps). The following table summarises the conclusions of Article 17 assessment of conservation status at the end of the most recent reporting period. Additional information for each of the bat species provides some clarifying notes in relation to the conservation status conclusions. Such information, where appropriate to the current project, will be drawn on in the project assessment section.

Table 1b: NPWS Article 17 Conservation Status of Irish Bat Species (Adapted from NPWS, 2022).

	Range	Population	Habitat	Future Prospects	Conservation Status Assessment	Conservation Status Trend
Lesser horseshoe bat	Inadequate	Favourable	Inadequate	Inadequate	Inadequate	Deteriorating
Common pipistrelle	Favourable	Favourable	Favourable	Favourable	Favourable	Improving
Soprano pipistrelle	Favourable	Favourable	Favourable	Favourable	Favourable	Improving
Nathusius' pipistrelle	Unknown	Unknown	Favourable	Unknown	Unknown	Not applicable
Natterer's bat	Favourable	Favourable	Favourable	Favourable	Favourable	Stable
Daubenton's bat	Favourable	Favourable	Favourable	Favourable	Favourable	Improving
Whiskered bat	Favourable	Favourable	Favourable	Favourable	Favourable	Improving
Brown long-eared bat	Favourable	Favourable	Favourable	Favourable	Favourable	Improving
Leisler's bat	Favourable	Favourable	Favourable	Favourable	Favourable	Improving

1.1.2 Irish Bat Monitoring Programme – Population Trends

The Irish Bat Monitoring Programme provides information on monitoring schemes managed by Bat Conservation Ireland:

- Car-Based Bat Monitoring (All Ireland) – monitors common pipistrelle, soprano pipistrelle, Leisler's bats with limited information for Nathusius' pipistrelle and *Myotis* species.
- All Ireland Daubenton's Bat Waterway Monitoring
- Brown Long-eared Bat Roost Monitoring
- Lesser Horseshoe Bat Monitoring

This provides population trend data for seven bat species: common pipistrelle, soprano pipistrelle, Leisler's bat, Nathusius' pipistrelle, Daubenton's bat, brown long-eared bat and lesser horseshoe bat (some limited data for *Myotis* species). There is currently no systematic monitoring surveys for Natterer's bat and whiskered bat. Annual reporting is undertaken and the most recent report (Aughney *et al.*, 2023) is referenced for this report. In summary, the population trends for each bat species are as follows:

- Trends of the three common bat species (common pipistrelle, soprano pipistrelle and Leisler's bat) continued to increase in 2022, although the yearly estimates of common pipistrelle levelled out a little. Confidence intervals of these three bat species were all above their baseline indices indicating they each show a significantly increasing trend.
- Nathusius' pipistrelle trends are still unclear due to low encounter rates but decreased a little in 2022 compared to previous years.
- The yearly estimate for the *Myotis* spp. group steadied out a little but overall the smoothed trend for this group is still well below the baseline.
- Daubenton's bat numbers trend line appears to be fairly steady from year to year with error bars consistently encompassing the baseline.
- Brown long-eared bat shows a fluctuating trend around the baseline and is considered to be currently stable.

- Lesser horseshoe bat continue to increase in 2022 for the summer counts while low winter counts caused a slight downward trend in 2022. But overall, this species has increased over the last 20 years of monitoring.

1.1.3 Assessment Parameters

Different parameters are considered for the overall assessment of the potential impact(s) of a proposed development on local bat populations. The overall impacts of the proposed project on local bat populations is assessed using the following criteria:

- Impact Quality using the parameters Positive, Neutral or Negative Impact (based on EPA, 2017)

Table 1c: Criteria for assessing impact quality based on EPA, 2017,

Quality of Effect	Criteria
Positive	A change which improves the quality of the environment (for example, by increasing species diversity; or the improving reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
Neutral	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
Negative	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).

- Impact Significance of potential impact parameters on specific bat species in relation to particular elements (e.g. roosting sites, foraging area and commuting routes) are assessed with reference to the following:
 - o Table 4 of Marnell *et al.* (2022) (Figure 1a);
 - o the known ecology and distribution of the bat species in Ireland;
 - o bat survey results including type of roosts (if any recorded), pattern of bat usage of the survey area, level of bat activity recorded etc.
 - o and bat specialist experience.
- Impact Significance of the proposed development on local bat populations maybe determine, where applicable, using the parameters listed in Table 2c (based on EPA, 2017).

Table 1d: Criteria for assessing significance of effects based on EPA, 2017,

Significance of Effects	Definition
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics

The following terms will be used, where possible and applicable, when quantifying the duration of the potential effects (selected from EPA, 2017):

- Temporary – effects lasting less than a year
- Short-term – effects lasting 1 to 7 years
- Medium term – effects lasting 7 to 15 years
- Long term – effects lasting 15 to 60 years
- Permanent – effects lasting over 60 years
- Reversible – effects that can be undone, for example through remediation or restoration.

1.2 Project Location & Description

1.2.1 Project Location

The buildings surveyed are located at of No. 9 Georges Place and Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin.

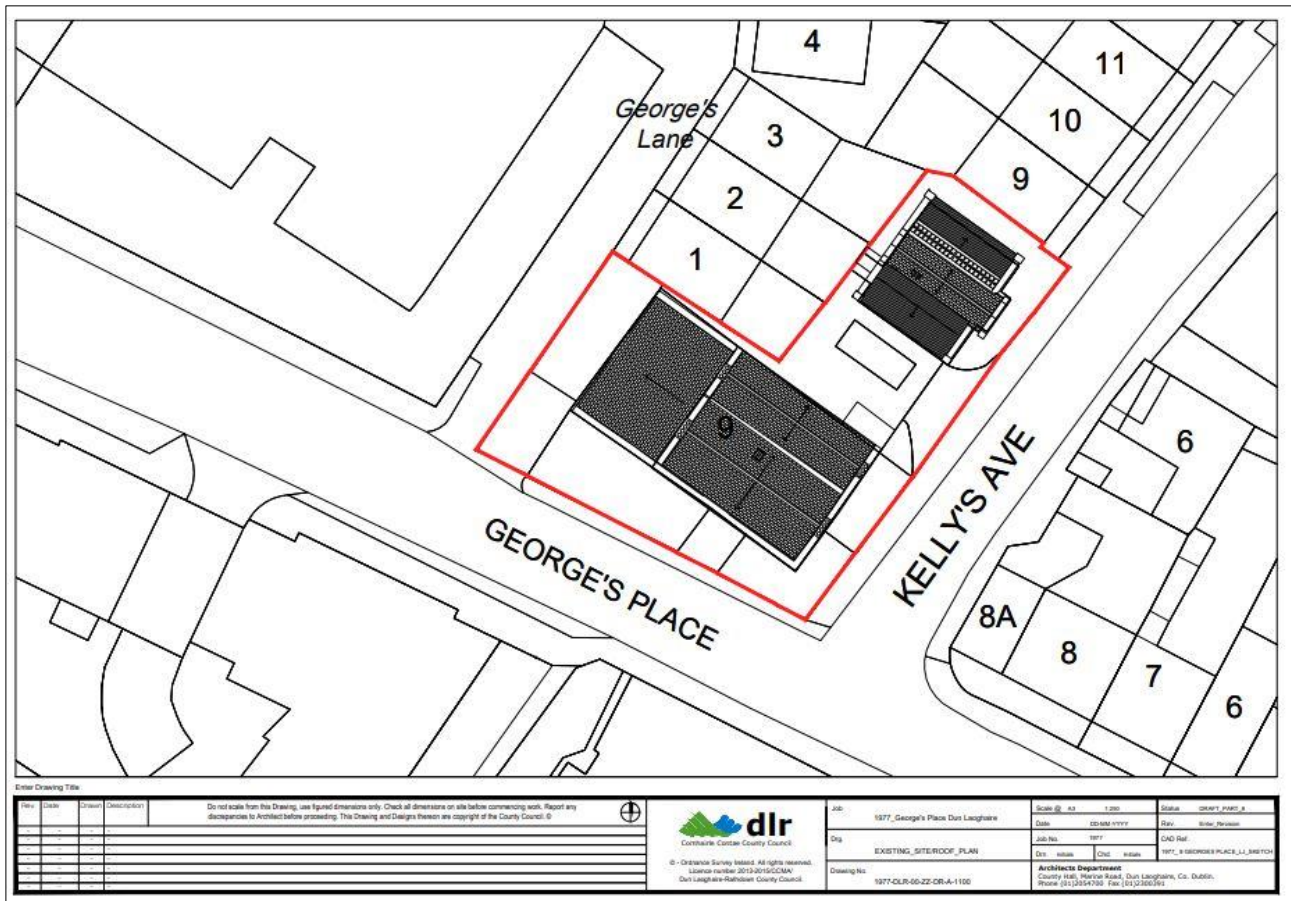


Figure 1a: Site location map (Project site is outlined in Red) Source: DLR Co. Co.

1.2.2 Project Description

The proposed development comprises of:

- Full retrofit and refurbishment of no. 9 George's Place (Floor Area: 484 sqm) to include revised internal layout to accommodate new use and full thermal efficiency upgrading to best conservation practice.
- Demolition of existing two-storey lean to extension to no. 9 George's Place (Floor area: approx. 83 sqm).
- Construction of new multi-storey extension to replace existing lean-to extension to provide universal access to no. 9 George's Place, new lift and stairwell, to accommodate new use and provide viewing platform. (11.8 x 7m footprint approx. 330 sqm).
- Full retrofit and refurbishment of former Wash House, Kelly's Avenue (Floor Area: 161 sqm) to include revised internal layout to accommodate new use and full thermal efficiency upgrading to best conservation practice.
- Construction of new 2-storey extension to Wash House to accommodate lift for Universal Access.
- The external courtyard between the two buildings will be designed and landscaped to facilitate access and circulation between the two buildings. (Courtyard 10.6m x 10m: 106 sqm)

2. Methodology

2.1 Guidance Document

This report will draw on guidelines already available in Europe and will use the following documents:

- Collins, J. (Editor) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition). Bat Conservation Trust, London
- 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 (Version 1: Kelleher & Marnell, 2006).
- The status of EU protected habitats and species in Ireland: Conservation status in Ireland of habitats and species listed in the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government.
- Bat Conservation Trust (2023) *Bats and artificial lighting at night*. Guidance Note GN08/23. BCT, London & Institution of Lighting Professionals (ILP), Warwickshire.
- Guidance document on the strict protection of animal species of Community interest un the Habitats Directive (Brussels, 12.10.2021 C(2021) 7391 final.
- EPA (2022) *Guidelines on the information to be contained in Environmental Impact Assessment Reports*.

Collins (2023) was the principal document used to provide guidance in relation to bat survey effort required. Marnell *et al.* (2022) is referred to for guidance in relation to survey guidance (timing and survey design), derogation licences and mitigation measures.

2.2 Daytime Inspections

2.2.1 Buildings

The buildings located at of No. 9 Georges Place and Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin were inspected during the daytime on 20th January 2025. Evidence of bat usage is in the form of actual bats (visible or audible), bat droppings, urine staining, grease marks (oily secretions from glands present) and claw marks. In addition, the presence of bat fly pupae (bat parasite) also indicated that bat usage of a crevice, for example, has occurred in the past. Inspections were undertaken visually with the aid of a strong torch beam (LED Lenser P14.2) and endoscope (General DC5660A Wet / Dry Scope).

Buildings were assessed to determine their suitability as a bat roost and described using the parameters Negligible, Low, Moderate or High suitability in view of Table 2a presented below. This table is also used to determine the level and timing of surveys for buildings with reference to the surrounding habitat.

Table 2a: Building Bat Roost Classification System & Survey Effort (Adapted from Collins, 2016 and Marnell *et al.*, 2022).

Suitability Category	Description (examples of criteria)	Survey Effort (Timings)
Negligible	Building have no potential as a roost site Urban setting, heavily disturbed, building material unsuitable, building in poor condition etc.	No surveys required.
Low	Building has a low potential as a roost site. No evidence of bat usage (e.g. droppings)	One dusk or dawn survey.
Moderate	Building with some suitable voids / crevices for roosting bats. Some evidence of bat usage Suitable foraging and commuting habitat present.	At least one survey in May to August, minimum of two surveys (one dusk and one dawn).
High	Building with many features deemed suitable for roosting bats. Evidence of bat usage. Largely undisturbed setting, rural, suitable foraging and commuting habitat, suitable roof void and building material.	At least two surveys in May to August, with a minimum of three surveys (at least one dusk survey and one dawn survey).

2.3 Desktop Review

2.3.1 Bat Conservation Ireland Database

Bat Conservation Ireland acts as the central depository for bat records for the Republic of Ireland. Its' bat database is comprised of >100,000 bat records. The database primarily contains bat records from the following datasets:

- Irish Bat Monitoring Programme
- BATLAS 2020 & 2010
- BCIREland surveys
- Ad Hoc Bat Records submitted by ecologists, bat groups etc.

An important caveat to note is that the BCIREland dataset relies on bat surveyors to submit their bat records in order to populate the database. Therefore it is important to state that the absence of information does not necessarily imply that there are no bats or bat roosts present in the search area.

A 1km data search was completed for the Irish Grid Reference: O24051128796.

3. Winter Bat Survey Results

The following are the bat survey results.

3.1 Building Surveys – Daytime Inspection

During the daytime inspection of buildings located within the proposed development site, the internal spaces of building safe to access were inspected as well as the external surfaces. No evidence of bat usage was recorded within the buildings (i.e. no bat droppings, insect remains etc.). Two *Pipistrellus* species bat droppings were noted on the external gable window of 9 Georges Place (Plate 1).

Table 3: Results of daytime inspection of buildings within the survey area.

Building No.	Description	Proposed Works	Bat Value
9 Georges Place	<p>Rendered, two-storey over basement, four-bay building built in 1831 as a hotel building (484 sqm).</p> <p>Slate roof with small roof space (limited access, roof felt and roof timbers in good conditions).</p> <p>External cracks in walls.</p> <p>Basement with numerous windows and therefore not dark.</p>	To be renovated into digital hub	<p>Low</p> <p>No bat evidence of usage internally. Dropping on external window = bats in area, but not necessarily using the building.</p> <p>No tall vegetation in immediate vicinity but close to coastal area that may provide foraging.</p> <p>Timber facia, lead flashing around chimneys are suitable access points into a small roof spaces.</p> <p>External cracks in walls may provide limited roosting features.</p> <p>Urban area = increased public lighting which impacts negatively on bat usage.</p>
Wash House	<p>2-storey red brick building, renovated ground floor into exhibition space. Upstairs remains as open space (3 connected spaces).</p> <p>Large louver window with steel mesh externally.</p> <p>Side vents (open) along upper levels.</p>	To be renovated into digital hub	<p>Low</p> <p>No bat evidence of usage internally. No tall vegetation in immediate vicinity but close to coastal area that may provide foraging.</p> <p>Side vents are open and would allow bats access into the building.</p> <p>Little dark spaces internally to provide roosting space for bats.</p> <p>Urban area = increased public lighting which impacts negatively on bat usage.</p>

A Low value was assigned to both buildings and this means that only one survey is required. However due to the size of the structures and due to the tight space within the survey site, it is determined that two dusk surveys and possibly a dawn survey will be necessary to provide accurate information on the potential bat usage of the buildings during the bat activity season (May to August).



Plate 1: Bat droppings on window pane (external), No. 9 Georges Place, Kellys Avenue, Dún Laoghaire, Co. Dublin.



Plate 2: Gable and Front view of No. 9 Georges Place, Kellys Avenue, Dún Laoghaire, Co. Dublin.



Plate 3: Rear view of No. 9 Georges Place, Kellys Avenue, Dún Laoghaire, Co. Dublin.



Plate 4: Attic of No. 9 Georges Place, Kellys Avenue, Dún Laoghaire, Co. Dublin.



Plate 5: External view of Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin.



Plate 6: Internal roof room of Wash House, Kellys Avenue, Dún Laoghaire, Co. Dublin depicting side vents (open) and louver window (steel mesh externally).

3.2 Desktop Review

3.2.1 Bat Conservation Ireland Database

There are no roosts located within 1km of the survey site.

There are bat detector records for the following bat species: Leisler's bat, common pipistrelle and *Pipistrellus* species. The location of these records are presented on the map below. The majority of these bat encounters are records of Leisler's bats.

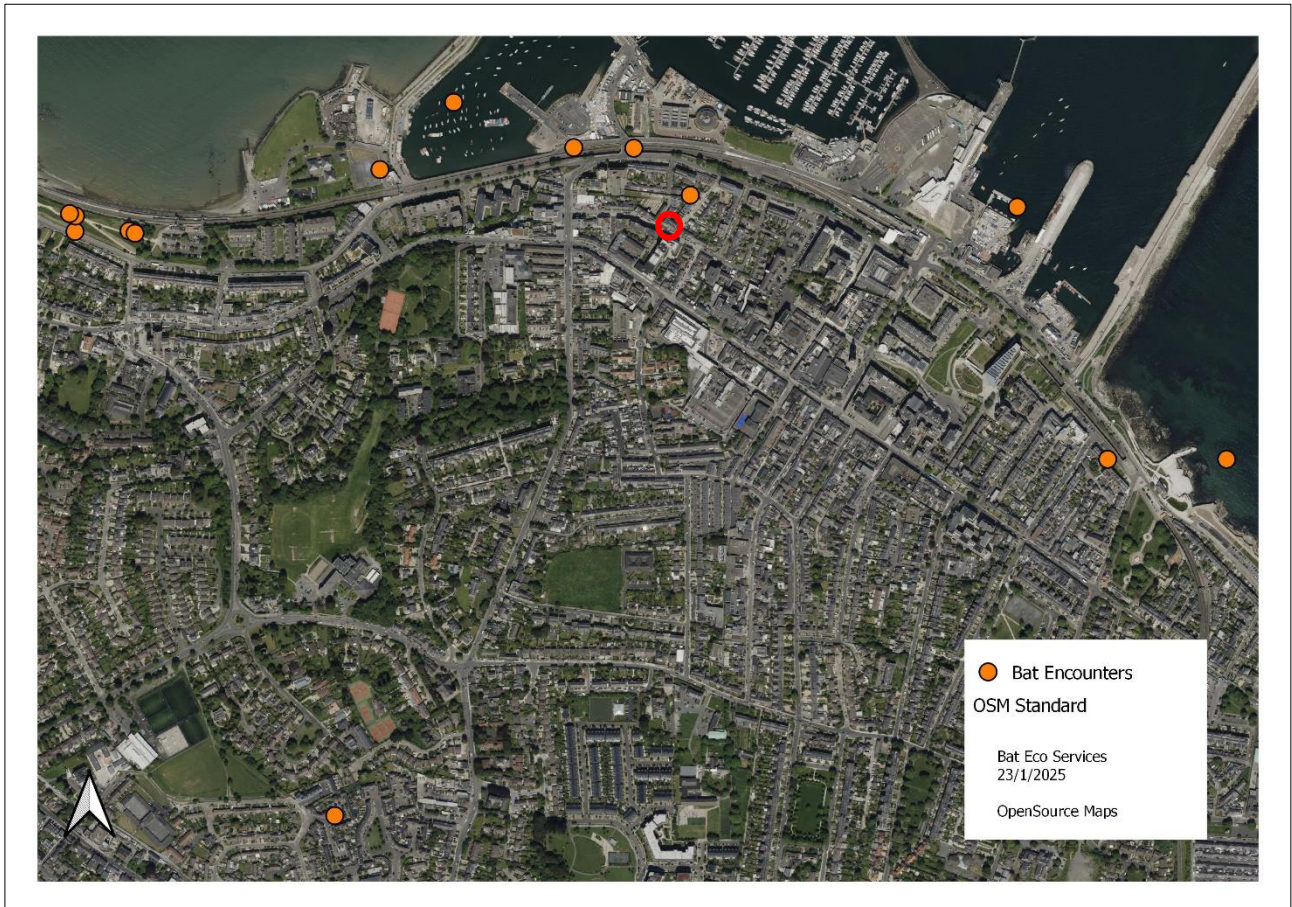


Figure 2: bat encounters held on the Bat Conservation Ireland database in a 1km radius of project area: Kellys Avenue, Dún Laoghaire, Co. Dublin (Red circle)

4. Significance of Survey Area

In consideration of the results, this section describes the significance of the survey area in respect of the bat species recorded. It assigns ecological values to the species recorded in the context of the study area and identified bat roosts, commuting routes and foraging habitats that will require protection. However, this section will be more accurately completed once a summer bat survey is undertaken.

4.1 Ecological Valuation of Bat Species Recorded in the Study Area

This is based on winter inspection and Bat Conservation Ireland database records.

The winter bat survey and desktop study confirmed the following:

- Two bat species commute/forage through the survey site;

The following ecological values have been assigned to the individual bat species recorded in the study area. Both of these bat species are common Irish bat species and are frequently recorded in urban areas as they are tolerant (Leisler's bat) or semi-tolerant (common pipistrelle) of street lighting.

Table 5: Ecological valuation of bat species recorded in the study area during the surveys completed (CIEEM, 2016).

Ecological Value	Species
Local	Leisler's bat
Local	Common pipistrelle

Leisler's bat

- o Leisler's bat is an Annex IV bat species under the EU Habitats Directive. The status of this bat species is listed as Least Concern. The national Leisler's bat population is considered to be significantly increasing (Aughney *et al.*, 2021).
- o The modelled Core Area for Leisler's bats is a relatively large area that covers much of the island of Ireland (52,820km²). The Bat Conservation Ireland Irish Landscape Model indicated that the Leisler's bat habitat preference has been difficult to define in Ireland. Habitat modelling for Ireland shows an association with riparian habitats and woodlands (Roche *et al.*, 2014). The landscape model emphasised that this is a species that cannot be defined by habitats preference at a local scale compared to other Irish bat species but that it is a landscape species and has a habitat preference at a scale of 20.5km.

The overall trend for the national population of common pipistrelle in Article 17 reporting (NPWS, 2019) is as follows:

- Range = Favourable
- Population = Favourable
- Habitat for species = Favourable
- Overall Assessment of Conservation Status = Favourable
- Overall trend in Conservation Status = Improving

Common pipistrelle

- Common pipistrelle is an Annex IV bat species under the EU Habitats Directive. The status of this bat species is listed as Least Concern. The national common pipistrelle population is considered to be significantly increasing (Aughney *et al.*, 2021).
- The modelled Core Area for common pipistrelle is a relatively large area that covers much of the island of Ireland (56,485km²). The Bat Conservation Ireland Irish Landscape Model indicated that the common pipistrelle selects areas with broadleaf woodland, riparian habitats and low density urbanization (<30%) (Roche *et al.*, 2014).

The overall trend for the national population of common pipistrelle in Article 17 reporting (NPWS, 2019) is as follows:

- Range = Favourable
- Population = Favourable
- Habitat for species = Favourable
- Overall Assessment of Conservation Status = Favourable
- Overall trend in Conservation Status = Improving

5. Impact Assessment & Mitigation

It is not possible to make a full assessment of the potential impact of the proposed project on local bat populations without a summer bat survey.

A Low value was assigned to both buildings and this means that only one survey is required. However due to the size of the structures and due to the tight space within the survey site, it is determined that two dusk surveys and possibly a dawn survey will be necessary to provide accurate information on the potential bat usage of the buildings during the bat activity season (May to August). These surveys will be completed by a 2 person survey team and Night Vision Aids (thermal imagery filming). These will be coupled with static surveillance (i.e. deployment of full spectrum bat detectors inside the buildings to determine potential bat usage for a period of 1 week). All surveys will be completed according Collins (2023).

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