



OCSC

O'CONNOR · SUTTON · CRONIN
MULTIDISCIPLINARY CONSULTING ENGINEERS

G467: N83 BRIDGE STREET DUNMORE

BAT SURVEY REPORT

For
Galway County Council

27 June 2025

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1 INTRODUCTION

1.1 BACKGROUND

This Bat Survey Report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their client, Galway County Council. The site is located in Dunmore, County Galway. The proposed project involves the demolition of several existing buildings east of Bridge Street to allow for the widening of the road. This route is designed to facilitate an upgrade of the junction of the N83 and the R360 at Sion Hill – Gater Street. The new junction will facilitate improved pedestrian facilities, improved visibility and better junction legibility. The site location and surrounding area is shown in Figure 1.1 and Figure 1.2.

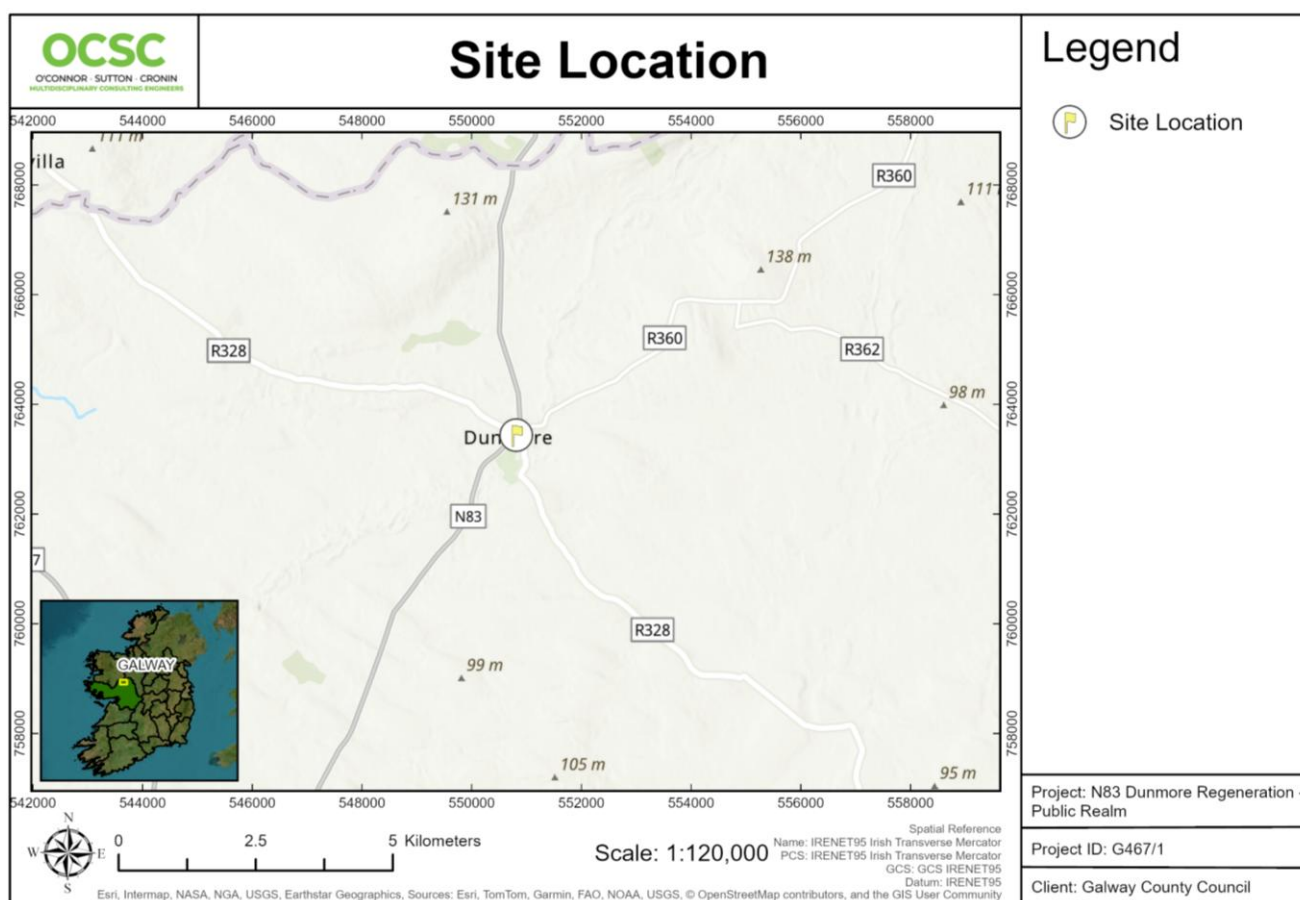


Figure 1.1: Regional Site Location (Source: OCSC, 2025)

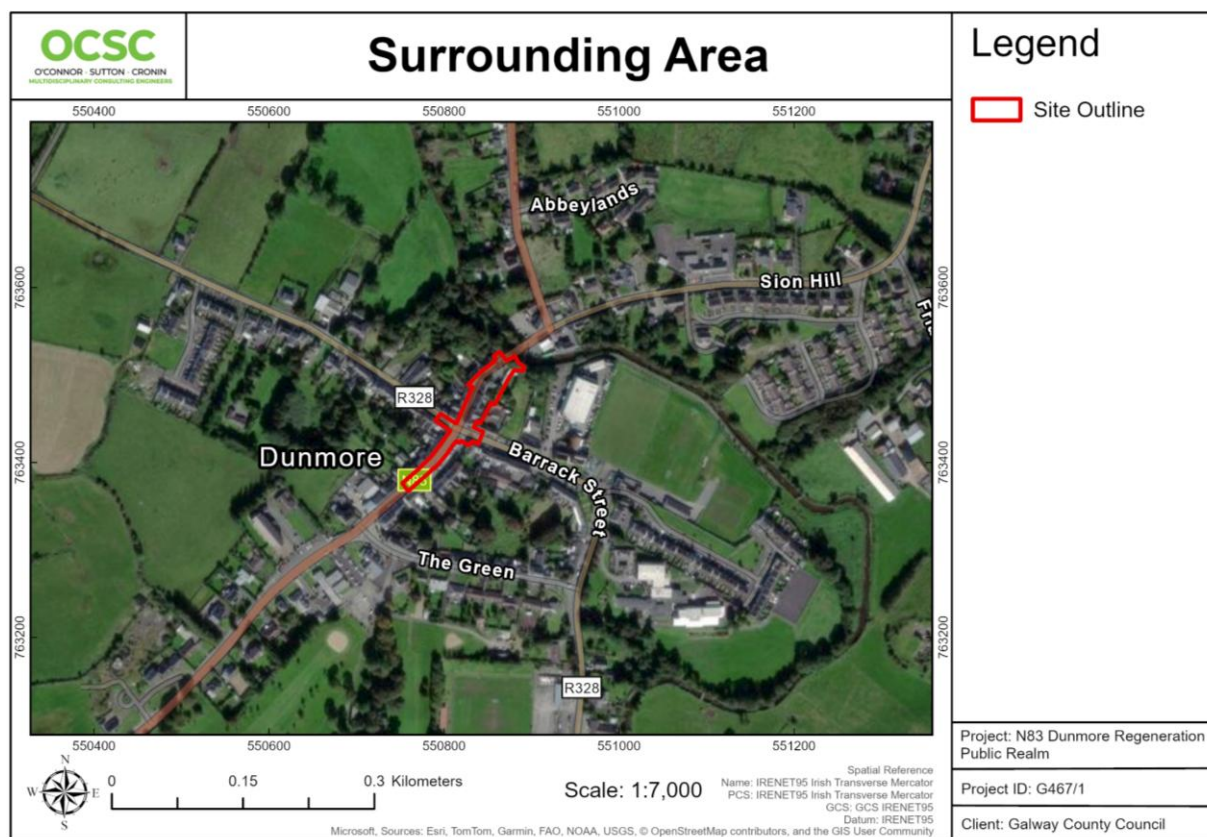


Figure 1.2: Surrounding land use (Source: OCSC: 2025)

1.2 RELEVANT LEGISLATION & BAT SPECIES STATUS IN IRELAND

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 also listed under Annex II. Across Europe, they are 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 of these conventions. Also, under existing legislation, the destruction, alteration, or evacuation of a known bat roost is a notifiable action, and a derogation licence has to be obtained from the National Parks and Wildlife Service before works can commence. Any works interfering with bats, and especially their roosts, may only be carried out under a licence to derogate from Regulation 23 of the Habitats Regulations 1997 and Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish law). The details with regard to appropriate assessments, the strict parameters within which derogation licences may be issued, and the procedures by which and the order in relation to the planning and development regulations such licences should be obtained, are set out in Circular

Letter NPWS 2/07 "Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 - strict protection of certain species/applications for derogation licences" issued on behalf of the Minister of the Environment, Heritage and Local Government on the 16th of May 2007.

Nine of the species found in Ireland are considered resident, and two are considered vagrant. Eight of the resident bat species and one of the vagrant bat species are vesper bats, which are characterised by having 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 to Ireland while the Brandt's bat has only been recorded once to date. The Brandt's bat is the only record confirmed by DNA testing; no other bat records have been genetically confirmed. The ninth resident species and the second vagrant species, the lesser horseshoe bat (*Rhinolophus hipposideros*) and the greater horseshoe bat (*Rhinolophus ferrumequinum*), respectively, belong to the Family *Rhinolophidae* and have a complex nose leaf structure on the face, distinguishing them from the vesper bats. The lesser horseshoe bat's current distribution is confined to the western seaboard counties of Mayo, Galway, Clare, Limerick, Kerry, and Cork. The greater horseshoe bat was only recorded for the first time in February 2013 in County Wexford.

Resident Irish bat species list and corresponding current status are presented in Table 1.1.

Table 1.1: Status of the Irish bat fauna (Terrestrial Mammals Red List for Ireland, 2019)

Species Common Name (Latin 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>)	Least concern	Near threatened	Least concern

1.3 BAT SURVEY AIMS

The aims of the study were to determine the following:

- If bat roosting is occurring or is likely to occur in the within the site.
- The diversity and relative abundance of bats present in the environs of the study area.

The purpose of this report is to assess and evaluate the importance of the existing habitat for bats. Where appropriate, avoidance or mitigation measures are suggested.

1.4 RELEVANT GUIDANCE DOCUMENTS

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

- National Roads Authority (2006) Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes
- Collins, J. (Editor) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). Bat Conservation Trust, London
- McAney, K. (2006) A conservation plan for Irish vesper bats, Irish Wildlife Manual No. 20 National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.
- 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.
- 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.

Impacts on bats can arise from activities that may result in:

- Physical disturbance of bat roosts e.g., destruction or renovation of buildings.
- Noise disturbance e.g., increased human presence, use of machinery, etc.
- Lighting disturbance.
- Loss of roosts e.g., destruction or renovation of buildings.
- Modifications of commuting or foraging habitats.
- Severance or fragmentation of commuting routes.
- Loss of foraging habitats.

It is recognised that any development will have an impact on the receiving environment, but the significance of the impact will depend on the value of the ecological features that would be affected. Such ecological features will be those that are considered to be important and potentially affected by the proposed development. The guidelines consulted recommend that the potential impacts of a proposed development on bats are assessed as early as possible in the design stage to determine any areas of conflict.

1.5 LIMITATIONS

This Bat Survey Report has been prepared for the sole use of Galway County Council ("the Client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a site visit, emergence surveys, and a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment was undertaken and described by OCSC in June 2025 and is based on the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

2 METHODOLOGY

2.1 DESKTOP REVIEW

A desktop review of relevant publicly available data was undertaken on the National Biodiversity Data Centre (NBDC) and National Parks & Wildlife Service (NPWS) websites. The NBDC database was reviewed for relevant data, specifically i) species records for the 2km square in which the study site is located (M56B) and ii) an indication of the relative importance of the wider landscape in which the study site is located based on Model of Bat Landscapes for Ireland (Lundy et al. 2011). In the latter, the index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats.

2.2 VISUAL ROOST SURVEY

A preliminary roost assessment was carried out to identify, from ground level in daylight, any Potential Roost Features (PRFs) within trees and buildings that had suitability to support roosting bats. A site visit was carried out on the 23rd of April and followed guidance set out in Collins (2023). The survey was non-destructive, and relevant Potential Roost Features (PRFs) were visually inspected to identify any evidence of bat roosting. Signs of bat use include bat droppings, feeding remains, and potential bat access points identified by characteristic staining and scratches, noise made by bats, etc. PRFs are described according to the scheme outlined in Table 2.1, below.

All visible areas were viewed from ground level with a view to identifying any access/egress points. Surveyors also used an endoscope and a thermal camera to investigate any openings. The survey was non-destructive. Results of the survey are included in Table 3.2.

Daytime visual assessments were carried out by Eoin Toomey, BA, Ecologist and Rebecca Duane, BSc, Ecologist to identify any bat roosting potential which may exist within the zone of influence of the proposed works. The site location is shown in Figure 1.1.

Table 2.1: Scheme for describing the potential suitability of features for bats.

Suitability	Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats, i.e. unlikely to be suitable for maternity or hibernation. A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type, only the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).

High	A structure or tree with one or potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat.
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2.3 BAT ACTIVITY SURVEY

Emergence surveys were carried out at the site by OSCS ecologists Eoin Toomey, Rebecca Duane and Eadaoin Butler. The surveys occurred on the 19th and 22nd of May, commencing 30 minutes before sunset at 21:07 and 21:12 respectively and continuing for two hours after sunset until 23:37 and 23:42 as per the guidance (The Bat conservation Trust 2024). The surveys followed Collins (2023) and were used to characterise bat activity in the area and to seek to identify any bat access or egress points. Temperature was 11°C and 10°C respectively. Visibility was good for both surveys. Recordings were made on handheld Echo Touch Meter 2 PRO full spectrum recorder. Weather conditions for both surveys are included in Table 2.2.

Table 2.2: Weather data for the survey dates.

Days	Sunset	Temperature	Wind speed	Cloud cover
19 th of May 2025	21:37	11°C	F2	2/8 oktas
22 nd of May 2025	21:42	10°C	F1	3/8 oktas

2.3.1 DATA ANALYSIS

Bat activity sonograms were analysed using Anabat Insight and Kaleidoscope Lite. Identifications were manually made by Eoin Toomey, BA, Ecologist.

2.4 EVALUATION AND IMPACT ASSESSMENT

Evaluation of ecological features follows the NRA (now TII) publication 'Guidelines for Assessment of Ecological Impacts of National Roads Schemes' (2009). Impact assessment follows the 'Guidelines on The Information to be Contained in Environmental Impact Assessment Reports' published by the EPA (2017). Reporting follows the Chartered Institute of Ecology and Environmental Management (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater, Coastal and Marine'.

2.5 SURVEY LIMITATIONS

The surveys occurred in late-May (Figure 2.2) and within the window for bat surveys. The survey occurred in suitable weather conditions at a time when bat activity was occurring elsewhere. Seasonality of the emergence survey is not considered to be a limiting factor in this instance. Seasonal bat activity is shown in Figure 2.1.

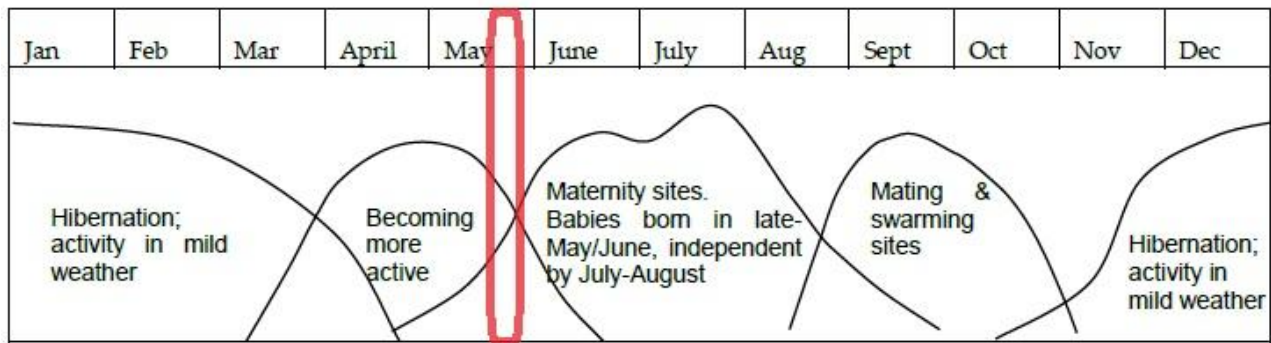


Figure 2.1: The bat year. Although there are species-specific differences, the bat year can be divided into the two major phases of breeding and hibernation, with other activities interspersed (Marnell, F., Kelleher, C. & Mullen, E. (2022)).

The site was fully accessible. Survey at height was not carried out and the survey was non-destructive.

3 RESULTS

The proposed project involves the demolition of several existing buildings east of Bridge Street and clearance of vegetation to allow for the widening of the road. This route is designed to facilitate an upgrade of the junction of the N83 and the R360 at Sion Hill – Gater Street. The new junction will facilitate improved pedestrian facilities, improved visibility and better junction legibility. The study site has moderate landscape connectivity for most Irish bat species (which tend to follow landscape features in flight) in the form of treelines, fields and the Sinking River which runs through the site. The site also has low levels of artificial light and moderate levels of noise pollution.

3.1 DESKTOP SURVEY

The NBDC holds no records of bat presence from within the 2km square (M56B) in which the proposed site is located.

The overall bat suitability index value (27) for the area, according to 'Model of Bat Landscapes for Ireland' (Lundy et al. 2011), suggests the landscape in which the proposed site is located is of moderate suitability for bats as shown in Figure 3.1. Species-specific scores are provided in Table 3.1 and Figures 3.2 to 3.10.

Table 3.1: Suitability of the study area for the bat species according to 'Model of Bat Landscapes for Ireland' (Lundy et al. 2011).

Species	Suitability Index
All Bats	27
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	41
Brown Long-eared bat (<i>Plecotus auritus</i>)	35
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	39
Lesser horseshoe bat (<i>Rhinolophus hipposideros</i>)	5
Lesser noctule (<i>Nyctalus leisleri</i>)	39
Whiskered bat (<i>Myotis mystacinus</i>)	14
Daubenton's bat (<i>Myotis daubentonii</i>)	31
Nathusius's pipistrelle (<i>Pipistrellus nathusii</i>)	3
Natterer's bat (<i>Myotis nattereri</i>)	36

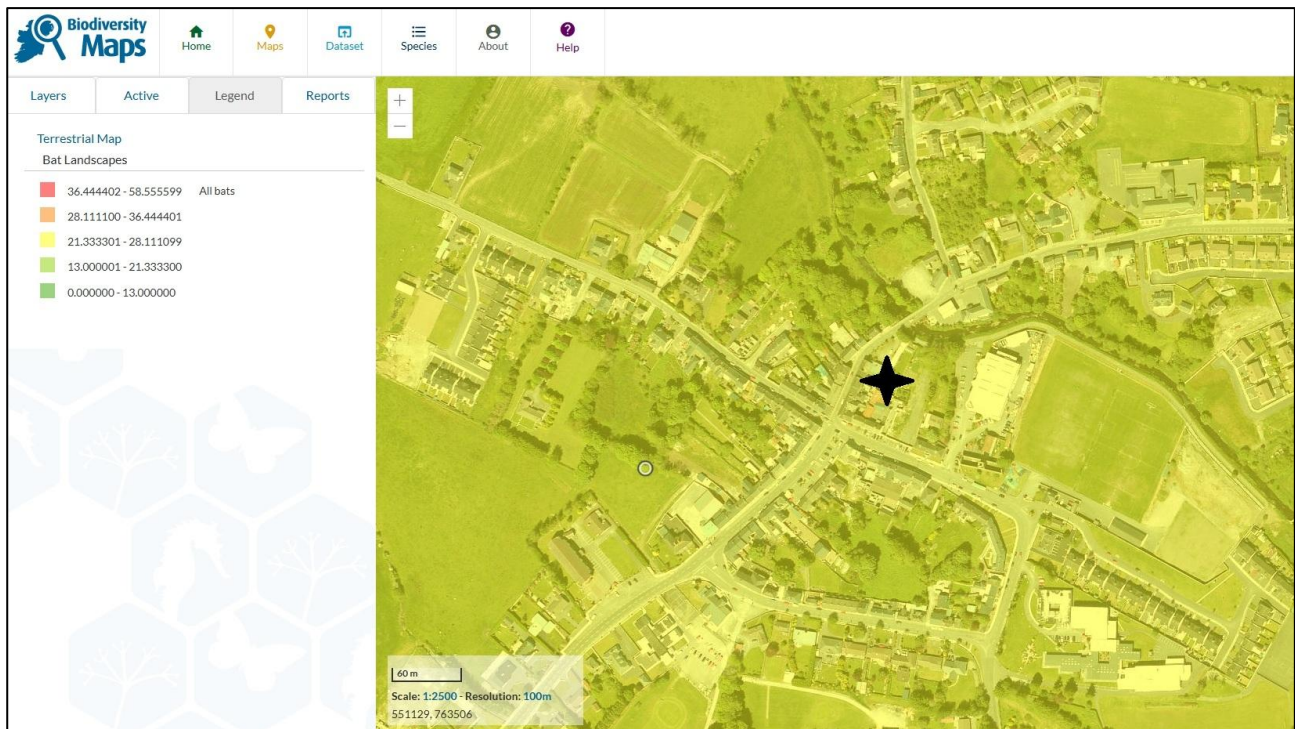


Figure 3.1: Suitability index for all bats in the site and surrounding areas, site location shown as black star (NBDC, 2025).

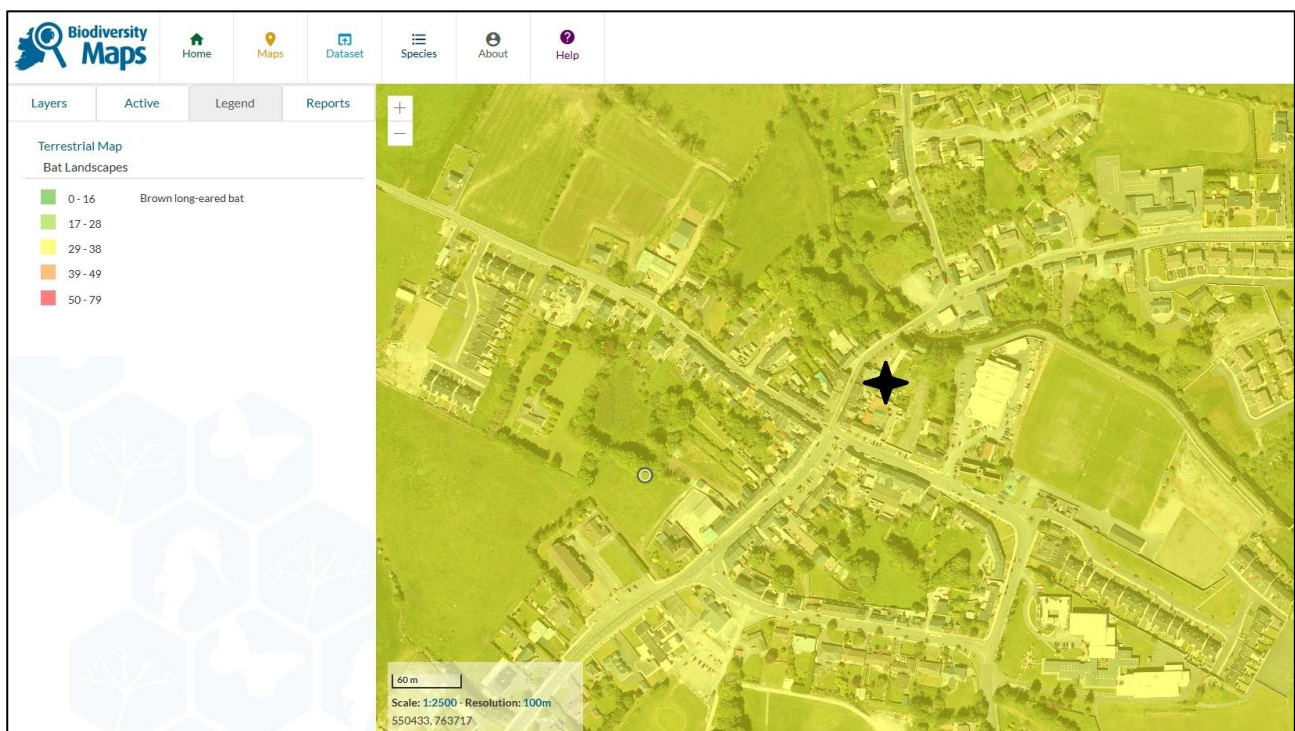


Figure 3.2: Suitability index for Brown long-eared bat in the site and surrounding areas site location shown as black star (NBDC, 2025).

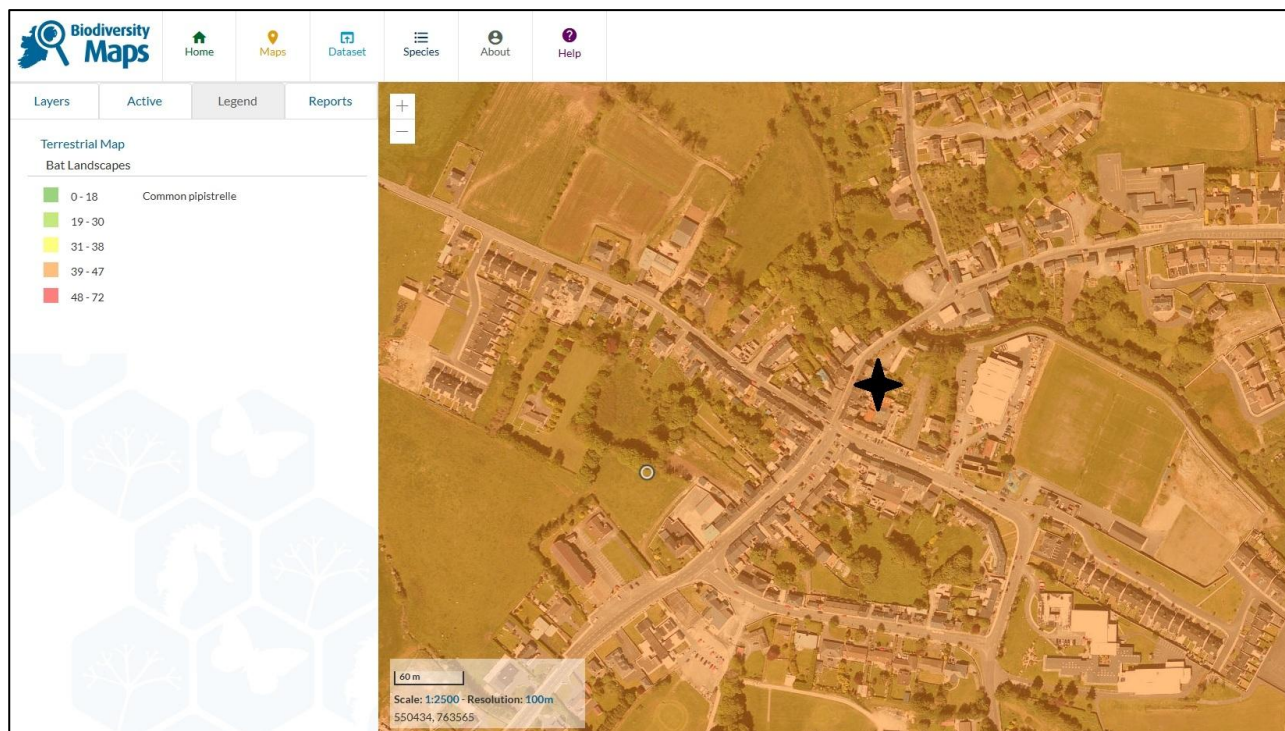


Figure 3.3: Suitability index for Common pipistrelle in the site and surrounding areas site location shown as black star (NBDC, 2025).

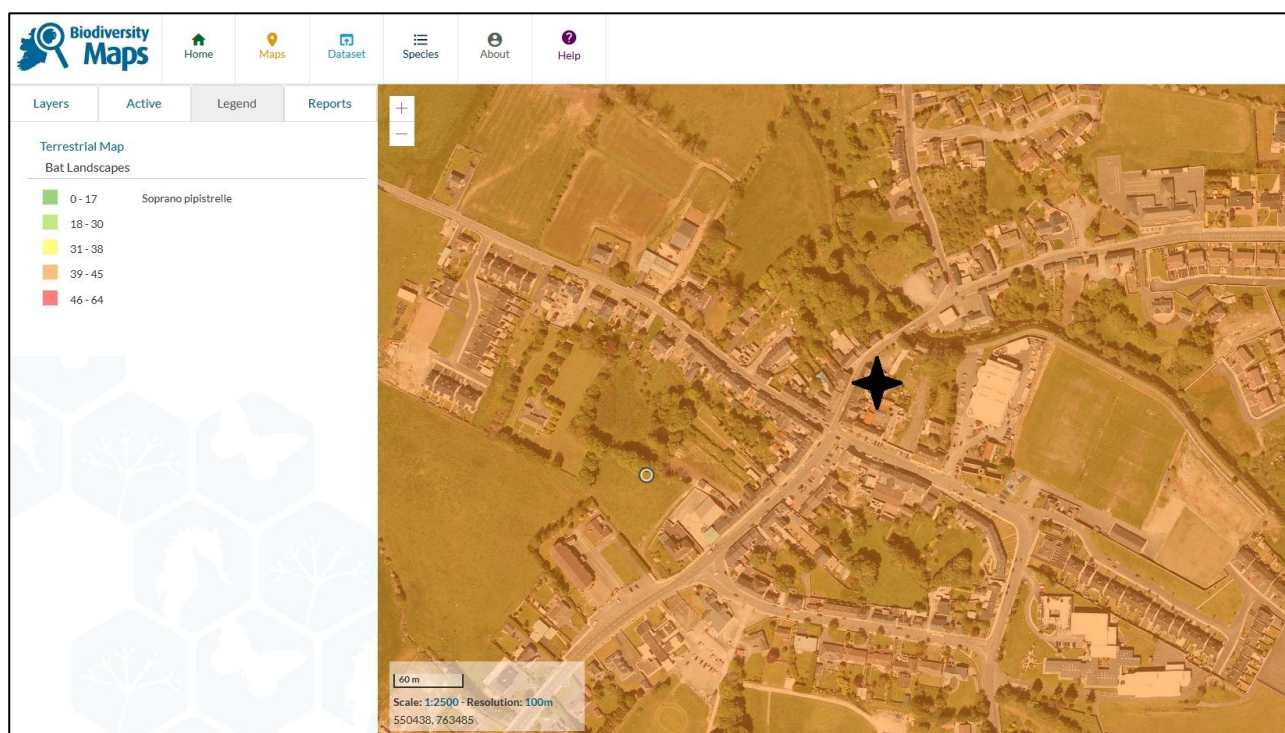


Figure 3.4: Suitability index for Soprano pipistrelle in the site and surrounding areas site location shown as black star (NBDC, 2025).

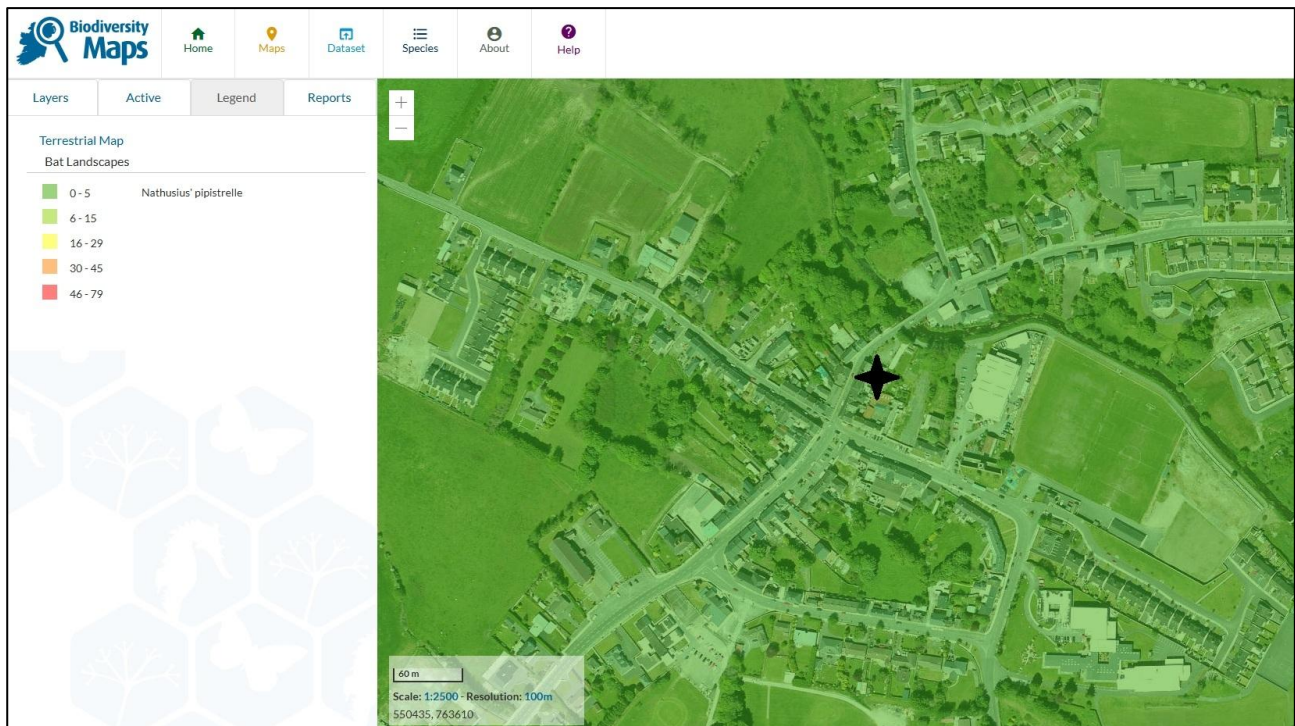


Figure 3.5: Suitability index for Nathusius' pipistrelle in the site and surrounding areas site location shown as black star (NBDC, 2025).

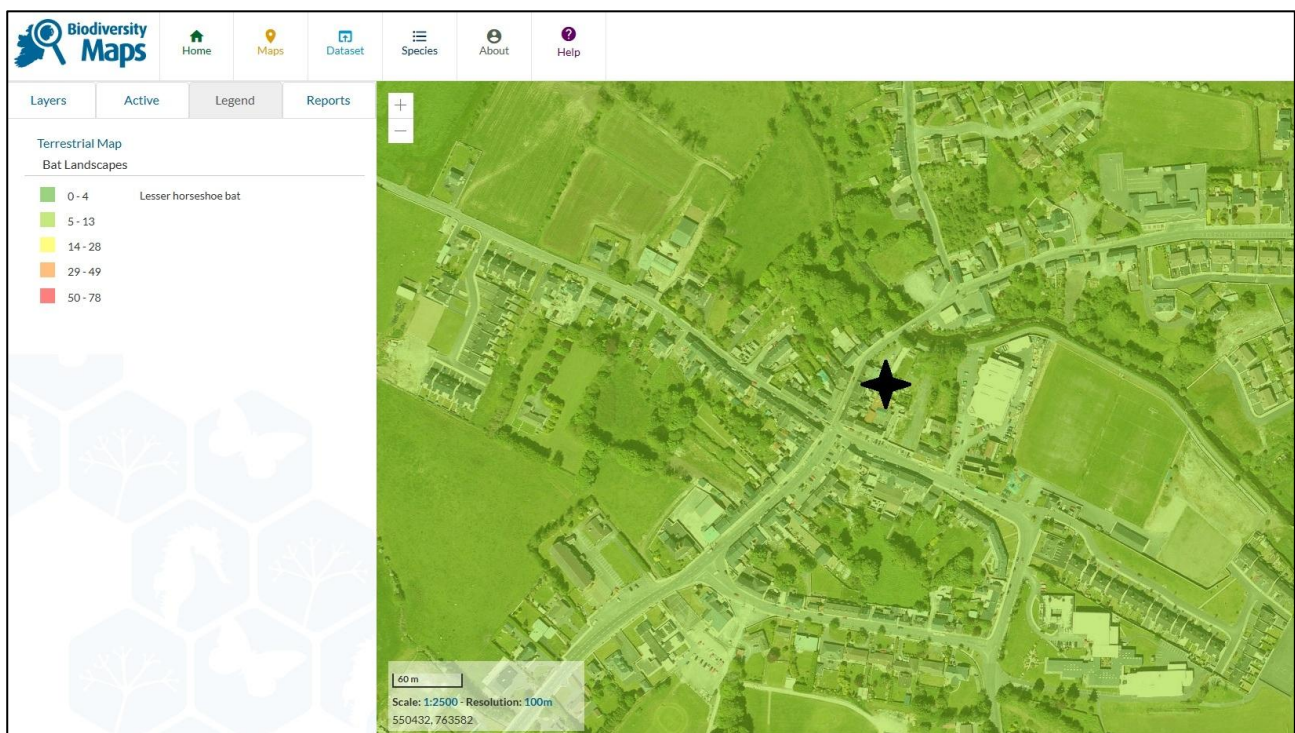


Figure 3.6: Suitability index for Lesser horseshoe bat in the site and surrounding areas site location shown as black star (NBDC, 2025).

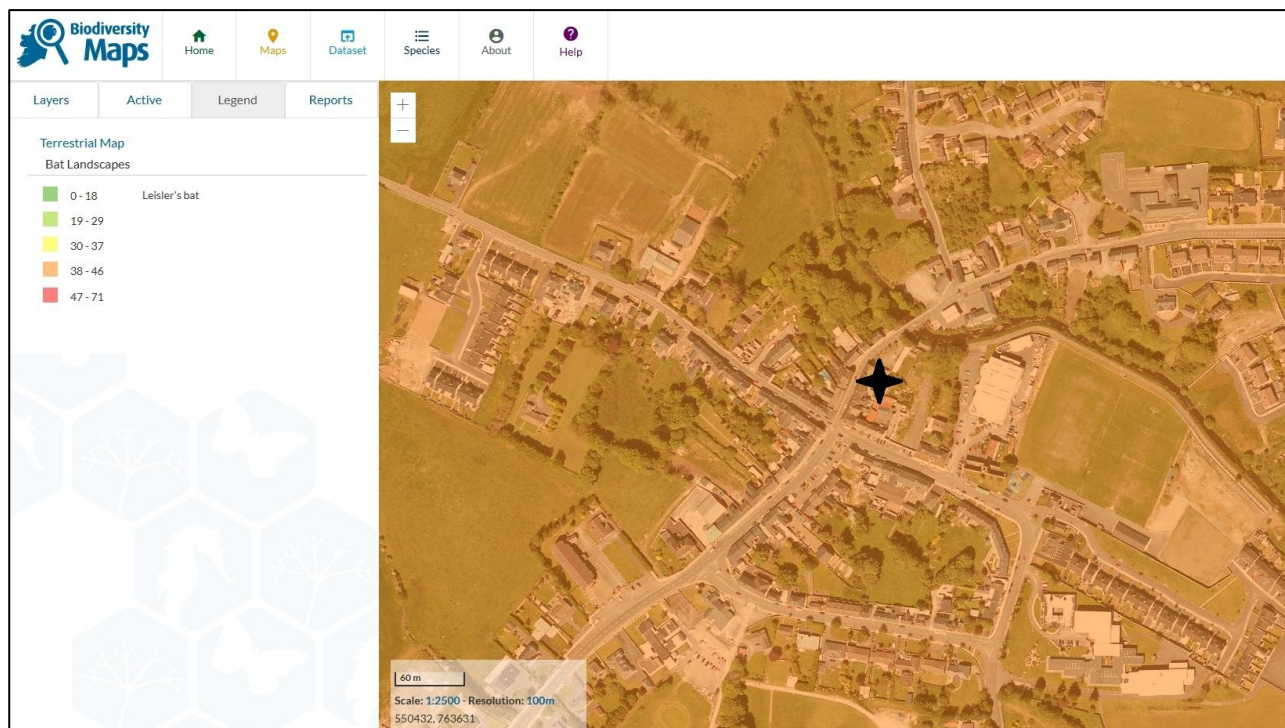


Figure 3.7: Suitability index for Leisler's bat in the site and surrounding areas site location shown as black star (NBDC, 2025).

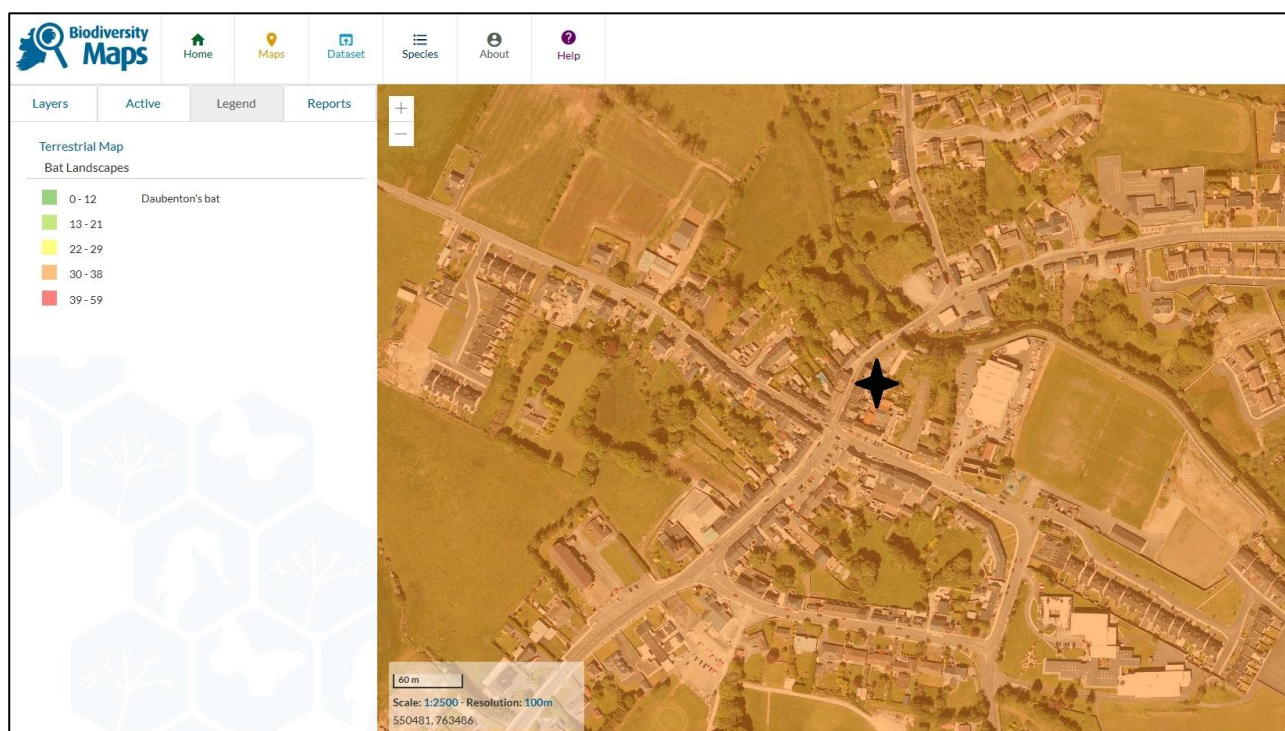


Figure 3.8: Suitability index for Daubenton's bat in the site and surrounding areas site location shown as black star (NBDC, 2025).

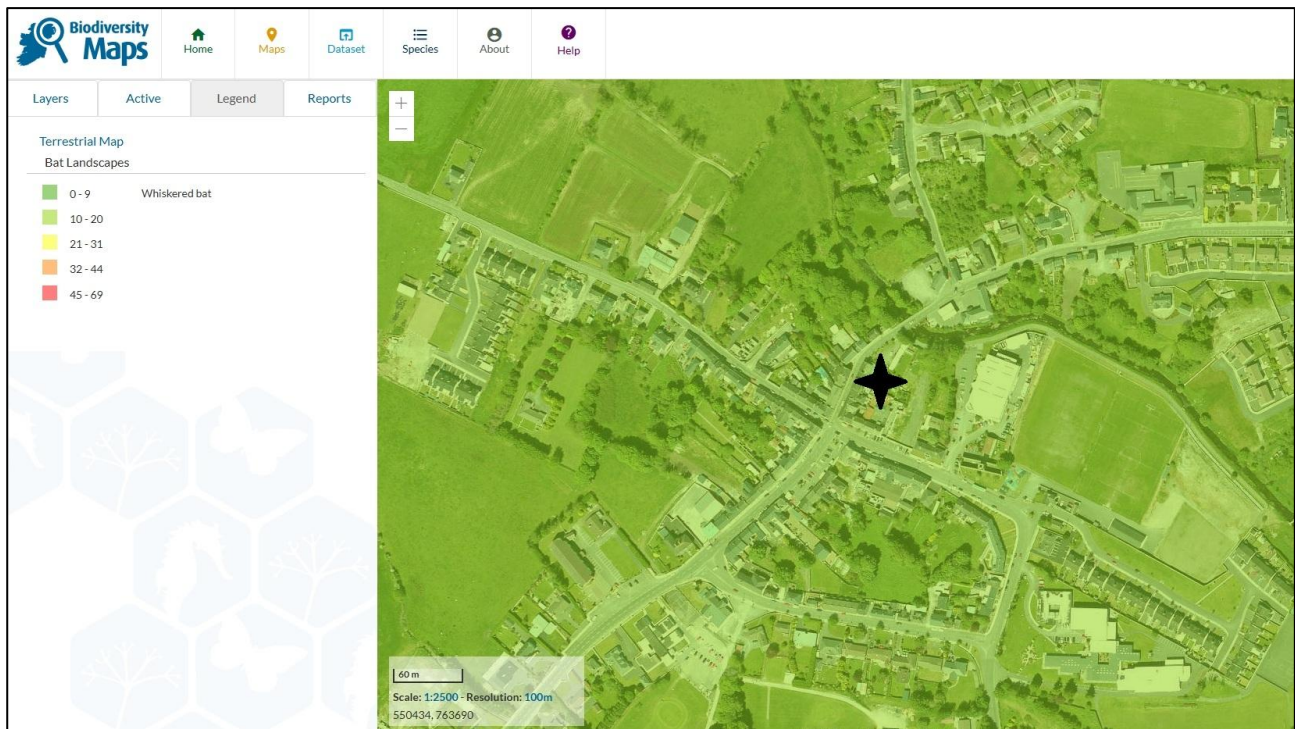


Figure 3.9: Suitability index for Whiskered bat in the site and surrounding areas site location shown as black star (NBDC, 2025).

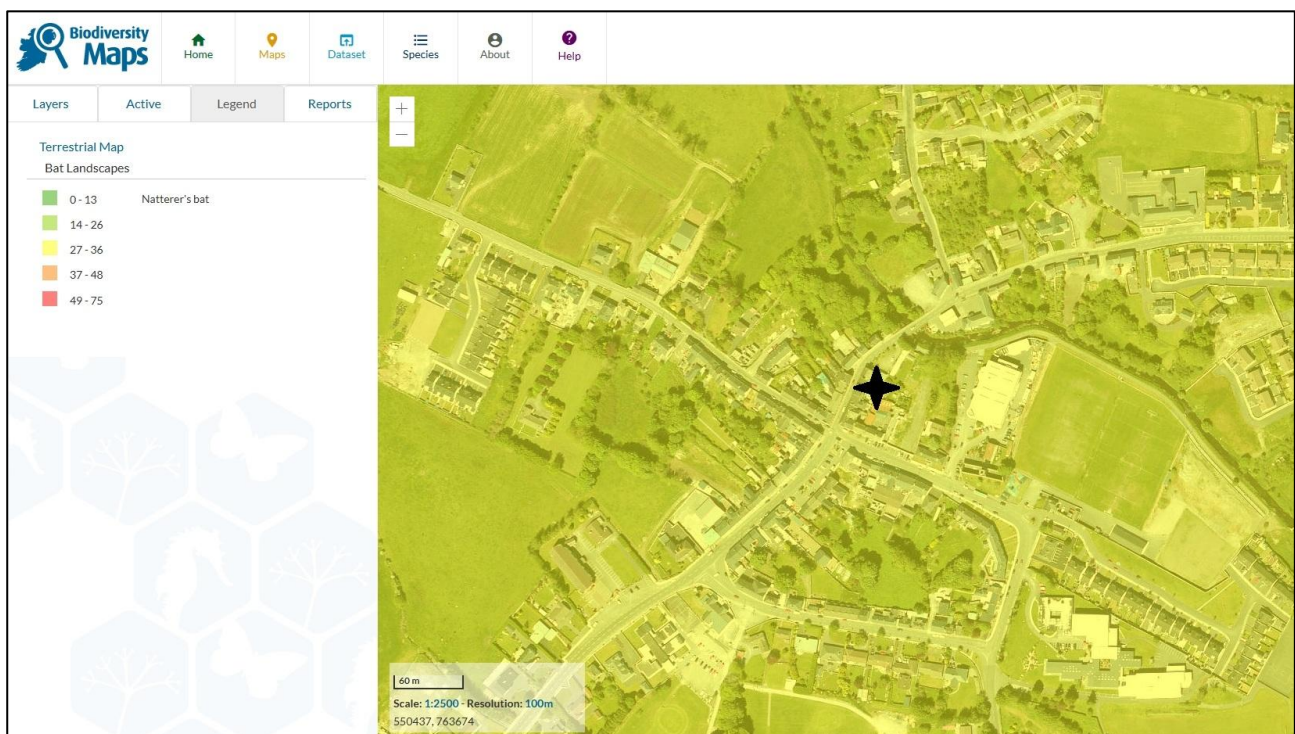


Figure 3.10: Suitability index for Natterer's bat in the site and surrounding areas site location shown as black star (NBDC, 2025).

3.2 PRELIMINARY ROOST ASSESSMENT

Daytime visual inspections were carried on the 23rd of April 2025 during suitable weather conditions. Wind speed was estimated at Force 2 – light breeze (Beaufort Wind Scale), temperature was 14°C, with good visibility and cloud cover of 3/8 oktas.

The inspection was carried out with the aim of identifying bat roosts by either the presence of bats or the presence of signs of past bat roosting. A detailed visual survey was carried out inspecting the buildings as well as the trees within the site boundary. All visible areas were viewed from ground level with a view to identifying any access/egress points and with the use of the Pulsar Thelos XL50 thermal camera and V5555 Qyteco endoscope to investigate any openings. The survey was non-destructive. Survey from height was not carried out.

Table 3.2: Features of interest identified on site.

Number	Structure	Feature locations and Descriptions	Suitability	Co-ordinates
1	Red derelict building	 Derelict building with a hole in the roof and several opening between slates.	Low	(550824, 763448)

2	Mature tree			Low	(550876, 763517)
Mature tree in the north east corner of the site.					

3	Derelict house		Low	(550854, 763488)
		Derelict house with open roof and dense vegetation		

During the PRA, no evidence of bats currently roosting at the study site was identified, nor evidence of historic roosting. No droppings, urine stains, or other signs of bat activity were found. All three features identified were determined to have low roosting potential. This included the mature tree in the northeast of the site, the derelict house towards the centre of the site and the red derelict building in the centre of the site.

3.3 BAT ACTIVITY SURVEY

No evidence of bat roosting was observed at any of the three features during the emergence (dusk) surveys carried out on the 19th and 22nd of May 2025, despite a high level of bat activity recorded during the surveys (516 occurrences). Of the nine species resident in Ireland, three species of bats were encountered during the surveys: Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*) and Lesser noctule (*Nyctalus leisleri*). These species are common and widespread in Ireland.

Two stationary surveyors were present one both nights, on the 19th one surveyor was positioned in the northeast of the site focusing on the mature tree and the second in the centre of the site focusing on the red derelict building. On the 22nd one both surveyors were positioned in the centre of the site focusing on the red derelict building and the derelict house respectively. Results of the data collected during the surveys is included in Table 3.3. The locations of all bat encounters are presented in Figure 3.11. Figures 3.12 to 3.14 indicate the encounters with individual species of bats. Sonograms for these species are included in Figures 3.15 to 3.17.

The maps used below are from Google Earth, and mapping is facilitated by the Echo Meter Touch 2 PRO App. supplied by Wildlife Acoustics.

Table 3.3: Results of the analysis of data from the dusk surveys.

Date	Time	Latitude	Longitude	Auto ID
19/05/2024	20:51	53.670451	-8.040676	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	20:55	53.670451	-8.040676	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	21:03	53.670451	-8.040676	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	21:03	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:03	53.619220	8.742600	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:04	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:05	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:06	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:07	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:08	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:11	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:13	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:16	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:17	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:17	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:18	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:20	53.670451	-8.040676	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:25	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:27	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:27	53.619107	-8.742468	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:29	53.618950	-8.742770	<i>Lesser noctule (Nyctalus leisleri)</i>

19/05/2024	21:29	53.619071	-8.742593	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:31	53.619195	-8.742528	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:33	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:35	53.619212	-8.742590	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:36	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:36	53.618540	-8.74328	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:37	53.618540	-8.743280	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	21:38	53.618540	-8.743280	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:44	53.619057	-8.742313	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:45	53.619046	-8.742233	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:46	53.618490	-8.743290	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:49	53.619140	-8.742252	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	21:52	53.619066	-8.742047	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:52	53.619068	-8.742075	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:52	53.619167	-8.742382	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:52	53.619085	-8.742176	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:53	53.619075	-8.742035	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:54	53.619090	-8.742270	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:54	53.619062	-8.742261	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:54	53.619147	-8.742318	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:55	53.619178	-8.742420	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:55	53.619165	-8.742398	<i>Lesser noctule (Nyctalus leisleri)</i>

19/05/2024	21:55	53.619168	-8.742364	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	21:55	53.619193	-8.742437	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:55	53.619259	-8.742600	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:59	53.619201	-8.742589	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	21:59	53.619194	-8.742654	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:00	53.619187	-8.742643	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:00	53.619176	-8.742611	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:00	53.619187	-8.742643	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:00	53.619187	-8.742643	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:01	53.619173	-8.742608	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:01	53.619173	-8.742608	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:02	53.619173	-8.742608	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:02	53.619183	-8.742586	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:02	53.619186	-8.742534	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:02	53.619184	-8.742567	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:03	53.619172	-8.742567	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:03	53.618530	-8.743320	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:04	53.619189	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:07	53.619194	-8.742586	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:07	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:07	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:07	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:07	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:07	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:07	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619194	-8.742587	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619190	-8.742581	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619189	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:08	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:09	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:09	53.619190	-8.742573	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:09	53.619195	-8.742564	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:09	53.618530	-8.743320	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:09	53.619192	-8.742556	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:09	53.619141	-8.742536	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:10	53.619166	-8.742550	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:10	53.619225	-8.742634	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:10	53.619174	-8.742553	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:10	53.619212	-8.742608	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:10	53.619212	-8.742608	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:11	53.618530	-8.743320	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:11	53.619212	-8.742608	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:11	53.619212	-8.742608	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:12	53.619221	-8.742623	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:12	53.619231	-8.742683	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:13	53.619196	-8.742637	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:13	53.619199	-8.742605	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:14	53.619196	-8.742589	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:14	53.619083	-8.742519	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:15	53.619214	-8.742604	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:15	53.619214	-8.742604	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:16	53.619219	-8.742479	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:16	53.618480	-8.743450	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:16	53.619207	-8.742602	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:17	53.619208	-8.742465	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:18	53.618480	-8.743450	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:18	53.618480	-8.743450	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:19	53.619342	8.742705	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:19	53.619440	-8.742727	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:19	53.619184	-8.742558	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:19	53.619292	-8.742667	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:20	53.619292	-8.742667	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:22	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:22	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:22	53.619000	-8.742760	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:22	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:22	53.618530	-8.743330	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:23	53.619264	-8.742526	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:24	53.619098	-8.742523	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:24	53.619285	-8.742427	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:24	53.619285	-8.742427	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:24	53.619285	-8.742427	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:25	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:25	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:25	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:25	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:26	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:26	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:26	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:26	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:26	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:26	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:27	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:27	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:27	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>

19/05/2024	22:27	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:28	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:28	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:28	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:28	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:28	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:29	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:29	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:29	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:29	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:29	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:29	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:30	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:30	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:30	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:30	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:30	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:30	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:31	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:31	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:31	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:31	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:31	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:31	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:32	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:32	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:32	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:32	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:32	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:33	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:34	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:35	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:38	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:39	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:39	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:39	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:39	53.619369	-8.742654	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:40	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:41	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:41	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:41	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:41	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:41	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:42	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:42	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:42	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:42	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:43	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:43	53.619205	-8.742479	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:43	53.619205	-8.742479	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:43	53.619291	-8.742137	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:44	53.619291	-8.742137	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:44	53.619291	-8.742137	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:44	53.619140	-8.741959	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:44	53.619140	-8.741959	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619140	-8.741959	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619280	-8.742778	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619280	-8.742778	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619100	-8.742331	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619100	-8.742331	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619090	-8.742209	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:45	53.619090	-8.742209	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:46	53.619061	-8.742453	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.619061	-8.742453	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.619061	-8.742453	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.619237	-8.742383	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.619237	-8.742383	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.619221	-8.742396	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.619221	-8.742396	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:46	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:47	53.619334	8.742497	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:47	53.619215	-8.742340	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:47	53.618794	-8.742301	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:47	53.618794	-8.742301	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:47	53.619317	-8.742442	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:47	53.619110	-8.742554	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:47	53.619217	-8.742312	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:48	53.619259	-8.742294	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:48	53.619259	-8.742294	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:48	53.619260	-8.742292	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:48	53.619060	-8.742416	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:49	53.619217	-8.742312	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:49	53.619217	-8.742312	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:49	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:50	53.619176	-8.742273	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:50	53.619176	-8.742273	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:51	53.619369	-8.742654	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:51	53.619193	-8.742361	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:51	53.619193	-8.742361	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:51	53.619050	-8.742191	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:51	53.619186	-8.742374	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:51	53.619186	-8.742374	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:52	53.619183	-8.742328	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:52	53.619183	-8.742328	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:52	53.619230	-8.742531	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:52	53.619230	-8.742531	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:52	53.619169	-8.742316	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:53	53.619124	-8.742078	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:53	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	22:53	53.619196	-8.742218	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:53	53.619196	-8.742218	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:53	53.619011	-8.741902	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:53	53.619011	-8.741902	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:54	53.619134	-8.742181	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:54	53.618995	-8.742182	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:54	53.618995	-8.742182	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	22:54	53.619139	-8.742292	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:55	53.619215	-8.742442	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:55	53.619066	-8.742214	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:55	53.619199	-8.742341	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:55	53.619236	-8.742360	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:55	53.619236	-8.742360	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:55	53.619071	-8.742250	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:56	53.619071	-8.742250	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:56	53.619091	-8.742085	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:56	53.619083	-8.742098	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:56	53.619083	-8.742098	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:56	53.619083	-8.742098	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:57	53.619073	-8.742174	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	22:57	53.619173	-8.742101	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	22:57	53.619154	-8.742127	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:02	53.619176	-8.742025	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:03	53.625366	-8.721278	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:04	53.619146	-8.742277	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:04	53.618992	-8.742321	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:05	53.619114	-8.742252	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:05	53.619114	-8.742252	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:05	53.619136	-8.742178	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

19/05/2024	23:06	53.619082	8.742168	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:06	53.619126	-8.742333	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:09	53.619112	-8.742203	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:13	53.619160	-8.742191	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:14	53.618992	-8.742290	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:14	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:20	53.619113	-8.742054	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:20	53.619192	-8.742274	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:20	53.619192	-8.742274	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:20	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:20	53.619056	-8.742228	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:20	53.619056	-8.742228	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:21	53.619144	-8.742244	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:21	53.619152	-8.742366	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:21	53.619144	-8.742244	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:21	53.619043	-8.742247	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:21	53.619136	-8.742332	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:21	53.619136	-8.742332	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:21	53.619152	-8.742366	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:22	53.619260	-8.742446	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:22	53.619251	-8.742475	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:22	53.619111	-8.741890	<i>Lesser noctule (Nyctalus leisleri)</i>

19/05/2024	23:22	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:22	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:23	53.619177	-8.742427	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:23	53.619177	-8.742427	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:23	53.619177	-8.742427	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:23	53.619121	-8.742320	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:24	53.619095	-8.742347	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
19/05/2024	23:24	53.619116	-8.742114	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:24	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:24	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:24	53.619116	-8.742114	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:24	53.619202	-8.742766	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:24	53.619202	-8.742766	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:24	53.619202	-8.742766	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:25	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:25	53.619095	-8.742347	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:25	53.619027	-8.742151	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:25	53.618963	-8.742421	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:25	53.619238	-8.742619	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:26	53.619238	-8.742619	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:26	53.619104	-8.742243	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:26	53.619104	-8.742243	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>

19/05/2024	23:26	53.619122	-8.742556	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:26	53.619122	-8.742556	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:26	53.619097	-8.742106	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:27	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:27	53.619097	-8.742106	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:27	53.619099	-8.742367	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:27	53.619165	-8.742285	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:27	53.619232	-8.742254	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:28	53.619075	-8.742063	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:28	53.619169	-8.742236	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:28	53.619169	-8.742236	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:29	53.627780	-8.752063	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:29	53.627780	-8.752063	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:29	53.619206	-8.742408	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
19/05/2024	23:29	53.618530	-8.743330	<i>Lesser noctule (Nyctalus leisleri)</i>
19/05/2024	23:29	53.619171	-8.742418	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	20:58	53.618950	-8.742620	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:12	53.619041	-8.742574	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:14	53.619061	-8.742551	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:18	53.618950	-8.742770	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:18	53.619049	-8.742580	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:18	53.619050	-8.742582	<i>Lesser noctule (Nyctalus leisleri)</i>

22/05/2024	21:45	53.619107	-8.742698	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:49	53.619046	-8.742612	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	21:52	53.618970	-8.742730	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	22:01	53.619076	-8.742490	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:06	53.619123	-8.742567	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:07	53.619114	-8.742597	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:08	53.619113	-8.742586	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:09	53.619120	-8.742555	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:11	53.619113	-8.742539	<i>Lesser noctule (Nyctalus leisleri)</i>
22/05/2024	22:12	53.619095	-8.742526	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:12	53.619091	-8.742523	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:14	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:14	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:14	53.619082	-8.742517	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:15	53.619087	-8.742526	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:17	53.619086	-8.742520	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:17	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:18	53.619082	-8.742522	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:20	53.619091	-8.742519	<i>Lesser Noctule (Nyctalus leisleri)</i>
22/05/2024	22:20	53.619091	-8.742519	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:21	53.619095	-8.742522	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:21	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

22/05/2024	22:21	53.619095	-8.742522	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:23	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:23	53.619096	-8.742521	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:24	53.619096	-8.742522	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:24	53.619098	-8.742522	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:24	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:26	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:26	53.619097	-8.742527	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:27	53.619097	-8.742531	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:28	53.619097	-8.742531	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:28	53.619098	-8.742532	<i>Lesser Noctule (Nyctalus leisleri)</i>
22/05/2024	22:29	53.619098	-8.742532	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:30	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:30	53.619097	-8.742533	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:41	53.619084	-8.742551	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:42	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:42	53.619083	-8.742552	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:43	53.619140	-8.742610	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:43	53.619140	-8.742610	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:43	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:45	53.619102	-8.742558	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:46	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>

22/05/2024	22:47	53.619110	-8.742554	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:47	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:47	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:47	53.619110	-8.742554	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:48	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:48	53.619112	-8.742558	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:49	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:49	53.619109	-8.742561	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:49	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:49	53.619109	-8.742561	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	22:52	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:52	53.619033	-8.742564	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:52	53.619033	-8.742564	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	22:59	53.619097	-8.742572	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:00	53.619095	-8.742572	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:00	53.619095	-8.742572	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:00	53.619096	-8.742572	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:00	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:00	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:03	53.619091	-8.742577	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:04	53.619090	-8.742572	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:04	53.619090	-8.742570	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>

22/05/2024	23:04	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:04	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:04	53.619091	-8.742567	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:04	53.619091	-8.742567	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:04	53.619090	-8.742567	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:05	53.619090	-8.742567	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:05	53.619090	-8.742565	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:05	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:06	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:06	53.619084	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:07	53.619084	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:07	53.619084	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:08	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:08	53.619086	-8.742566	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:09	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:09	53.619087	-8.742569	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:11	53.619000	-8.742760	<i>Lesser Noctule (Nyctalus leisleri)</i>
22/05/2024	23:12	53.619087	-8.742564	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:12	53.619087	-8.742564	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:13	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:13	53.619088	-8.742563	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:14	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

22/05/2024	23:14	53.619088	-8.742563	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:14	53.619088	-8.742563	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:14	53.619089	-8.742562	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:14	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:14	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:14	53.619089	-8.742752	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:15	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:15	53.619092	-8.742562	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:15	53.619092	-8.742562	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:16	53.619096	-8.742560	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:16	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619097	-8.742559	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619096	-8.742560	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619096	-8.742560	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619096	-8.742560	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619096	-8.742560	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:16	53.619096	-8.742560	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:17	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:17	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:17	53.619095	-8.742561	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:18	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:18	53.619094	-8.742563	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>

22/05/2024	23:18	53.619094	-8.742563	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:18	53.619094	-8.742562	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:19	53.619095	-8.742562	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:19	53.619095	-8.742562	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:19	53.619095	-8.742562	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:19	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:19	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:19	53.619095	-8.742563	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:20	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:21	53.619093	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:21	53.619094	-8.742564	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:21	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:21	53.619094	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:21	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:21	53.619093	-8.742565	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:21	53.619093	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:22	53.619094	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:24	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:24	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:24	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:24	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:24	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

22/05/2024	23:25	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619092	-8.742564	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619092	-8.742564	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619000	-8.742760	<i>Lesser Noctule (Nyctalus leisleri)</i>
22/05/2024	23:25	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:25	53.619092	-8.742565	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:26	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:26	53.619092	-8.742563	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:26	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:26	53.619093	-8.742563	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:26	53.619093	-8.742563	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:27	53.619090	-8.742560	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:27	53.619093	-8.742561	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:27	53.619093	-8.742561	<i>Lesser Noctule (Nyctalus leisleri)</i>
22/05/2024	23:29	53.619093	-8.742559	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:29	53.619000	-8.742760	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:29	53.619093	-8.742559	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:30	53.619090	-8.742560	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:31	53.619000	-8.742760	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>

22/05/2024	23:31	53.619090	-8.742561	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:31	53.619090	-8.742560	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:31	53.619090	-8.742561	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:31	53.619090	-8.742561	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>
22/05/2024	23:32	53.619090	-8.742561	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:32	53.619089	-8.742561	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:33	53.619120	-8.742610	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:34	53.619210	-8.742580	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:34	53.619260	-8.742460	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:35	53.619060	-8.743010	<i>Soprano Pipistrelle (Pipistrellus pygmaeus)</i>
22/05/2024	23:36	53.618810	-8.743160	<i>Common Pipistrelle (Pipistrellus pipistrellus)</i>

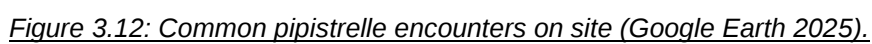
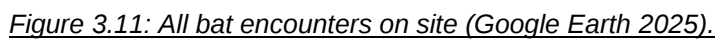




Figure 3.13: Soprano pipistrelle encounters on site (Google Earth 2025).



Figure 3.14: Lesser noctule encounters on site (Google Earth 2025).

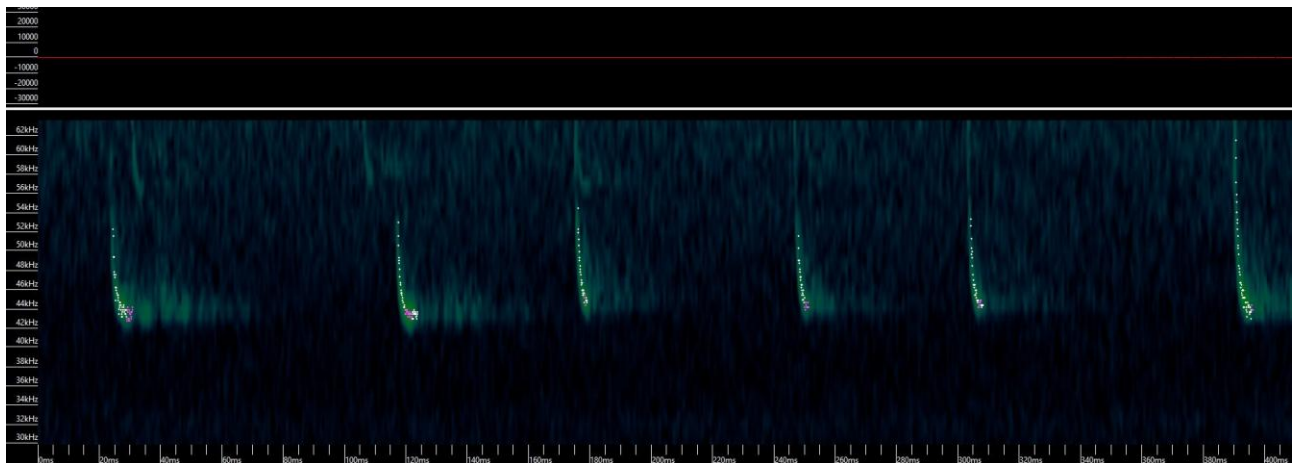


Figure 3.15: Common pipistrelle sonogram (Echo Meter Touch PRO 2).

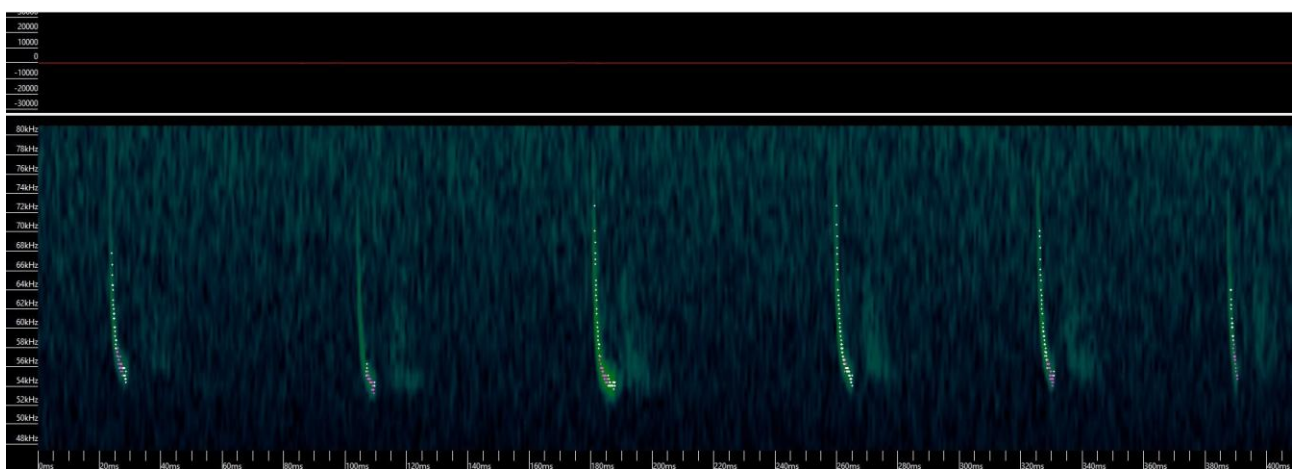


Figure 3.16: Soprano pipistrelle sonogram (Echo Meter Touch PRO 2).

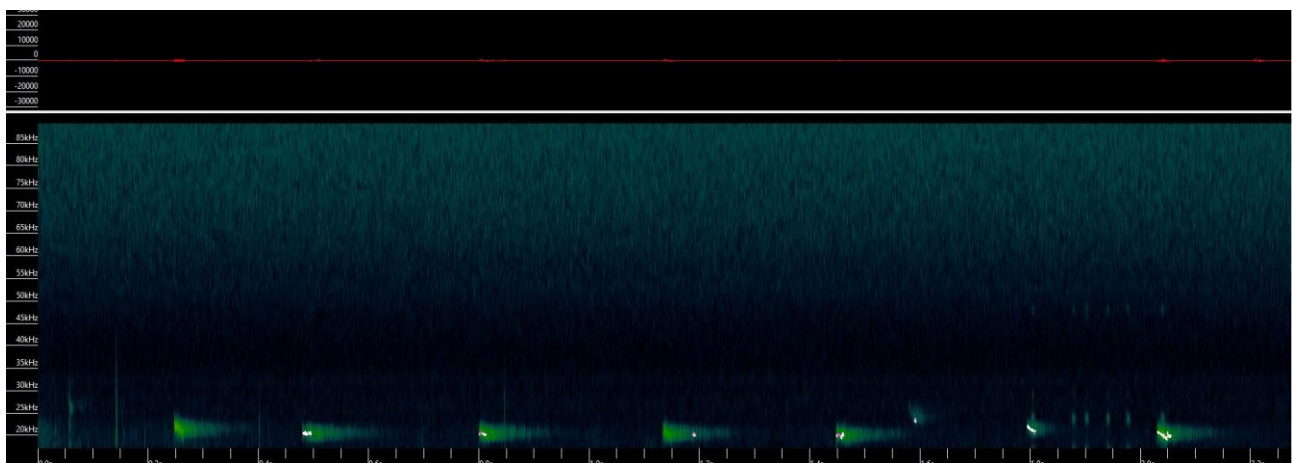


Figure 3.17: Lesser noctule sonogram (Echo Meter Touch PRO 2).

4 IMPACT ASSESSMENT AND MITIGATION

The following bat species have been recorded during this bat survey: Common pipistrelle, Soprano pipistrelle and Lesser noctule. This represents three of the nine resident bat species known to Ireland. All bat species recorded during this Bat Survey are Annex IV species under the EU Habitats Directive and all have a Favourable Status in Ireland.

Bats may use old stone buildings as roosts, roosting in attics or cracks in stonework. Such suitable roosts were identified during the suitability assessment; however, no signs of bats roosting within the buildings were observed during the assessment. Bats may also use mature trees with tree holes, etc. as roosting sites all year round. Such suitable roosts were identified during the suitability assessment; however, no signs of bats roosting within trees was observed during the assessment. The bats were mainly seen foraging along the Sinking River and in the treelines and woodland on either side the river towards the north of the site. However, no bats were observed emerging from or re-entering the buildings or treelines during the surveys.

As the proposed works are related to the demolition of buildings within the site boundary, removal of vegetation and the widening of the N83, there is a low risk of impact to the bat species present on site.

The main impacts of the proposed development on bat fauna are summarised as follows:

- Bats will often use old stone buildings as roosting sites. Although no roosts were identified, there is potential for roosting within the area which will be removed. This is considered a Low-Moderate, Negative Impact.
- Bats may use mature trees with tree holes, etc. as roosting sites all year round. Although no roosts were identified, there is potential for roosting within the area which will be removed. This is considered a Low-Moderate, Negative Impact.

4.1 MITIGATION MEASURES

The following mitigation measures are recommended to reduce the potential impact of the proposed development on local bat populations:

- Consider construction of bat boxes to compensate for the loss of potential roosts.
- In the event that bats are found on the proposed development site during enabling or construction works, works should immediately cease in that area, and the local NPWS conservation ranger should be contacted. The bats should be removed by hand by a suitably qualified licensed surveyor.
- Construction works will be limited to daylight hours to avoid negative effects on bats. The use of construction lighting will be limited to an absolute minimum. In general, artificial light creates a barrier for commuting bats so lighting should be avoided where possible. If any external lighting is required, it must be sensitive to the presence of bats commuting in the area. Directional lighting (i.e., lighting

which is cowled away from sensitive habitats with no light spillage, in line with best practice) shall be used.

- For the removal of any trees, a soft felling technique should be implemented, where possible, to allow any bats adequate opportunity to escape the affected tree. Trees should be gently pushed over rather than cut down, with the possibility of needing to excavate and sever roots in some cases. In order to ensure the optimum warning for any roosting bats that may be present, an affected tree should be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The trees will then be pushed to the ground slowly and should remain in place for a period of 48 hours to allow bats to escape and relocate to nearby trees.
- A toolbox talk should be provided to construction staff setting out the actions to take if bats are discovered during works. In that event, works should stop immediately, and the advice of an Ecologist should be sought.

5 SURVEY CONCLUSIONS

This report provides information on the bat usage on the Dunmore site and in the surrounding area. Three bat species were recorded during the bat surveys: Common pipistrelle, Soprano pipistrelle and Lesser noctule. A high level of bat activity was recorded across all three species. Based on the evidence collected during the surveys, it is deemed that the bat populations recorded within the survey area are of Local Importance. In the absence of mitigation, the proposed development will likely have a Low-Moderate, negative impact on local bat populations. A number of mitigation measures have been provided and incorporated into the design of the proposed development. Strict adherence to these will reduce the overall impact to a Negligible-Low level.

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7 VERIFICATION

This report was compiled by Eoin Toomey, BA, Ecologist; reviewed by Eadaoin Butler BSc, Ecologist; and approved by Eleanor Burke, BSc, MSc, DAS, MEnvSc, CSci, OCSC Director (Environmental).



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