

Bat Survey 2025



Report on the current status of Chiroptera at Westport Estate for the purposes of monitoring the impacts of restoration works.

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Introduction

Objective

As part of the Failte Ireland funded 'Restoration and Interpretation of Westport Estate' project, bat surveys are required both as part of the pre-commencement procedures and for the purposes of supporting information for the application for a derogation license. The project will consist of architectural restoration of Westport House, the coach house and outbuildings, and the walled garden, alongside a redesign of the wider landscaping of the estate.

Surveys were carried out from January to March 2025, then from September to November 2025. A daytime inspection of all buildings listed for renovation alongside dusk surveys. Dusk surveys were carried out for 5 weeks and passive static detectors were placed at key points. The main objective was to record which bat species were actively using the estate and locate any potential roosts within buildings or trees. Previous surveys were carried out by MKO Planning and Environmental Consultants and these are included in this application. These surveys identified occasional use of some buildings on the estate and identified a number of trees with roosting potential. This report should be read in conjunction to these reports.

This report was informed by a desk study of previous surveys and guidelines, listed below:

- Bat Report – Restoration and Interpretation of Westport Estate. MKO Planning and Environmental Consultants. 2023
- Bat Survey Guidelines: Traditional Farm Buildings Scheme. The Heritage Council, Áras na hOidhreachta, Church Lane, Kilkenny (Aughney, T., Kelleher, C. & Mullen, D., 2008)).
- 'Bat Workers' Manual' (3 rd edn). JNCC, Peterborough (Mitchell-Jones, A.J. & McLeish, A.P. (eds) 2004).
- The Lesser Horseshoe Bat Conservation Handbook, Vincent Wildlife Trust (Schofield, HW., 2008).
- Bat Surveys for Professional Ecologists – Good Practice Guidelines (3 rd edn.) (Collins, 2016)
- Bat Roosts in Trees (Andrews, 2018)
- Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (NRA, 2006a)
- CIEEM (2013) Competencies for Species Surveys: Bats. Chartered Institute of Ecology and Environmental Management, Winchester.

- Guidelines for the Treatment of Bats during the Construction of National Road Schemes (NRA, 2006b)
- British Bat Calls: A Guide to Species Identification (Russ, 2012)
- Bat Mitigation Guidelines for Ireland – V2. Irish Wildlife Manuals, No. 134. (Marnell, Kelleher & Mullen 2022)
- Guidance Note 08/18: Bats and Artificial Lighting in the UK (ILP, 2018)
- The Status of EU Protected Habitats and Species in Ireland 2025. (NPWS, 2025).

Statement of Authority

Thomas Gorman (MSc. PhD(c)) has been a professional ecologist for over ten years and is experienced in bat surveys, wildlife surveying and restoration ecology. Áine Cogan and Hannah Sips are trained bat surveyors completing their undergraduate degree at University of Galway.

Background

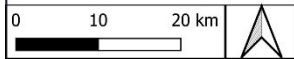
Westport Estate is an 18th Century estate covering over 450 acres between Westport town and Clew bay, containing Westport House, Westport Adventure, a restaurant and an adjacent hotel.



Map Created: 17/12/25
Created by: Thomas Gorman
Aerial Image: Google Satellite

Site Location

Westport Estate, Westport, Co. Mayo



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Westport Estate is privately owned by Inishoo Management Ltd. and contains Westport House and Westport Adventure. Full planning permission has been granted for the

restoration and interpretation of Westport Estate, following a full EIAs and NIS (Planning application 2360534 Mayo County Council).

The Restoration and Interpretation of Westport Estate will involve the renovation of historical buildings, the building of a museum to Grace O'Malley, the restoration of the formal gardens and the creation of three new gardens, named the Wild Realms, using locally sourced, native plants.

Development Plans

Mayo County Development Plan

The Mayo County Development Plan 2022-2028 lists the following objective in relation to the protection of bats:

EO 9: Recognise the importance, in terms of their natural heritage and biodiversity, of woodlands, tree lines, hedgerows, stonewalls, watercourses and associated riparian vegetation and the role they play in supporting bat populations and where possible developments will be encouraged to retain such features.

Failte Ireland Clew Bay Destination and Experience Development Plan

The Restoration and Interpretation of Westport Estate is one of the key objectives of the Failte Ireland Clew Bay Destination and Experience Development Plan, which seeks to make Clew Bay a 'must do destination'. Current tourism weaknesses identified in the plan include 'a lack of indoor, rainy-day attractions', 'a lack of off-season experiences', and 'a lack of destination awareness among international visitors'.

Ecological Survey

Existing Information

Status of species in Ireland 2025

Seven of the nine species of bat in Ireland were assessed as having overall favourable conservation status in the recently published Status of EU Protected Habitats and Species in Ireland 2025. The conservation status of the lesser horseshoe bat (*Rhinolophus hipposideros*) was designated as inadequate, while Nathusius' pipistrelle (*Pipistrellus nathusii*) was listed as unknown, due to their being no recorded maternity roosts or hibernating individuals being found.

A search of the National Biodiversity Record Centre database returned the species of bat listed in Table 1

Table 1: Chiroptera species recorded for grid square L98, National Biodiversity Records Centre

Grid	Species	Date	Database	Status
L98	Brown Long-eared Bat (Plecotus auritus)	30/08/2011	National Bat Database of Ireland	Annex IV
L98	Common Pipistrelle (Pipistrellus pipistrellus sensu stricto)	10/06/2018	National Bat Database of Ireland National Bat Database of Ireland	Annex IV
L98	Daubenton's Bat (Myotis daubentonii)	31/08/2021	National Bat Database of Ireland	Annex IV
L98	Leisler's Bat (Nyctalus leisleri)	22/05/2018	National Bat Database of Ireland	Annex IV
L98	Natterer's Bat (Myotis nattereri)	16/08/2016	National Bat Database of Ireland	Annex IV
L98	Pipistrelle (Pipistrellus pipistrellus sensu lato)	10/06/2018	National Bat Database of Ireland	Annex IV
L98	Soprano Pipistrelle (Pipistrellus pygmaeus)	07/09/2018	National Bat Database of Ireland	Annex IV

Bat surveys carried out by MKO first in 2018, then throughout 2022, 2023, and 2024. Soprano pipistrelles were the most common recorded (86% of records). Common pipistrelles, Leisler's bat, and Myotis spp. made up 4% of records each, with Nathusius' pipistrelle and brown long eared bat at 1%.

Static detectors recorded Lesser Horseshoe bats within the walled garden late at night, suggesting they are not roosting within the estate. The estate is outside of their known range, and no roosts are known within the area.

Objective of survey

The objective of the 2025 survey is to record recent bat activity and to establish if any roosts have been adopted since the last survey in 2024. The survey will include daytime inspections of buildings and dusk surveys.

Description of survey area

The survey area surrounds the main buildings of Westport Estate and is mainly a mixture of scattered trees and parkland, mixed broadleaved forest, and amenity grassland. The buildings and paths are lit into the evening during winter and security lighting is located around the house and coach house. A full habitat map is provided in Fig 1.



Figure 1: Habitat map of Westport Estate.

Survey Methodology

Daytime inspections of potential roosting places within buildings were inspected for bat activity. All accessible spaces, including attics and basements were investigated. Inspections were carried out using a torch and endoscope, where appropriate, to search for evidence of live or dead bats, or activity such as droppings, staining, noises, urine marks, fur oil stains, or feeding remains. Each wall within the walled garden was extensively surveyed in February 2025. Any potential crevice that may be utilised by bats was inspected with an endoscope.

Dusk surveys were carried out over three nights a week for six weeks in October and November. While late in the year for surveys, the warmer temperatures and clement weather saw continued bat activity.

Survey results

Building Inspections

No significant evidence of bat roosts or activity was found within any of the surveyed structures in Westport Estate. Two old droppings were discovered in the boiler room of Westport House, but the roof and cellars showed no evidence of recent activity. The walled garden survey revealed three hibernacula within crevices of the stone walls, which are occasionally occupied.



Figure 2: Stone archway hibernacula. Brown long eared bat recorded within.



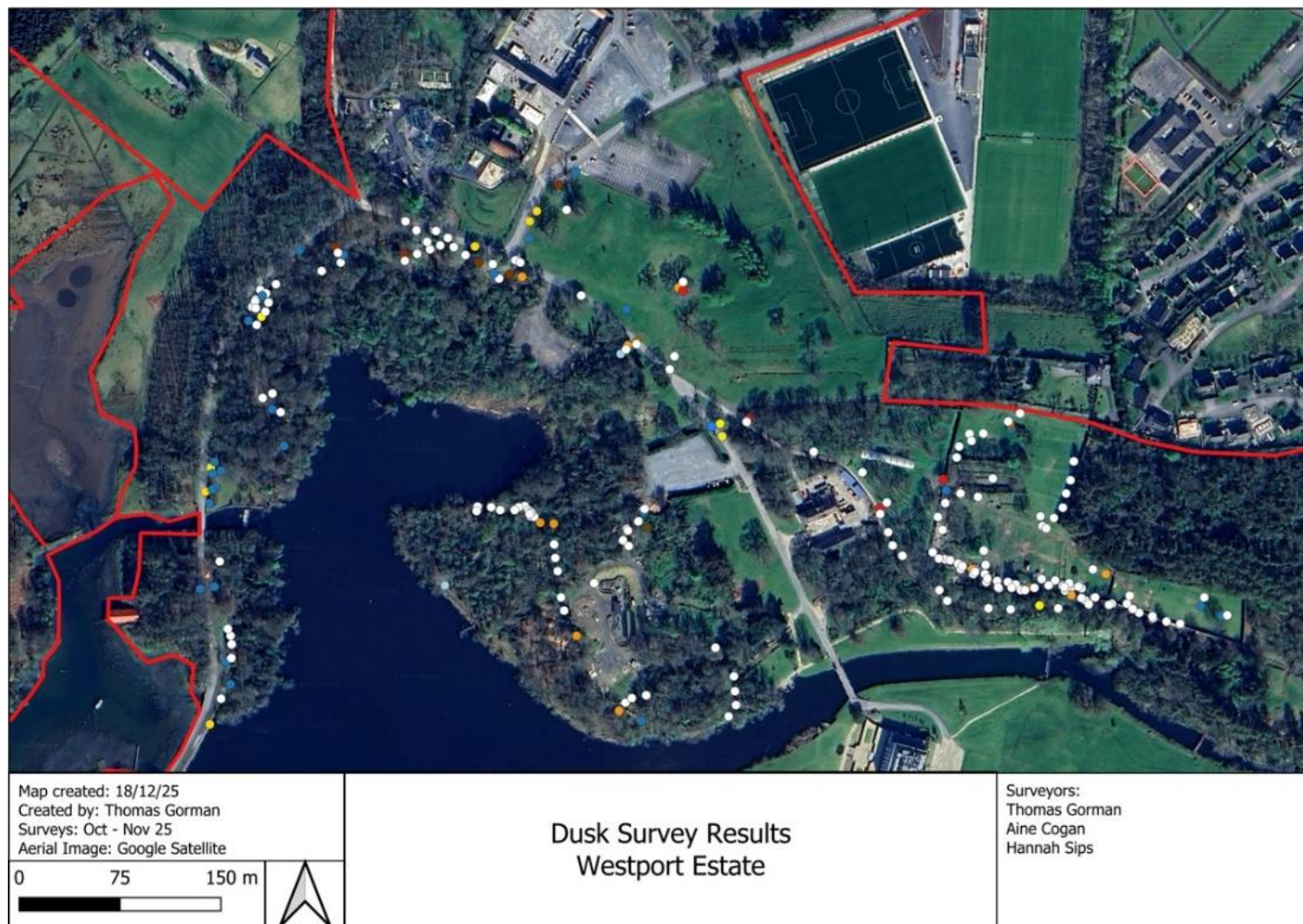
Figure 3: Ice house hibernacula. Natterer's bat recorded in crevice beside lintel.



Figure 4: Brick store. Pipistrelle recorded in crevice. Hibernacula damaged by falling tree during storm Eowyn.

Dusk Surveys

The dusk surveys recorded eight species of bat within the survey area.



Legend:

- Soprano Pipistrelle
- Common Pipistrelle
- Nathusius' Pipistrelle
- Leisler's Bat
- Natterer's Bat
- Brown Long Eared Bat
- Daubenton's Bat
- Whiskered Bat

Figure 5: Dusk surveys at Westport Estate



Map created: 18/12/25
Created by: Thomas Gorman
Aerial Image: Google Satellite

0 25 50 m



Identified Resting Places - Walled Garden

Resting Places

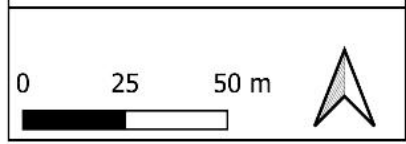
- 1: Archway - Long eared brown bat
- 2: Brick Store - Pipistrellus spp.
- 3: Ice House Arch: Natterer's Bat
- 4: Redwood tree: High PRF /



Survey Dates:
6/10/25, 22/10/25, 10/11/25, 15/11/25

Surveyors: AC, HS, TG

Map Created: 09/12/25



Bat Survey Results - Walled Garden and Coach House

Westport Estate 2025

- Species:
- Soprano Pipistrelle
 - Common Pipistrelle
 - Nathusius' Pipistrelle
 - Leisler's
 - Natterer's
 - Brown Long Eared
 - ▲ Resting places

Soprano pipistrelles accounted for 82% of the detections during dusk surveys. Leislers' bat accounted for 6%, while the remaining six species made up <5% each.

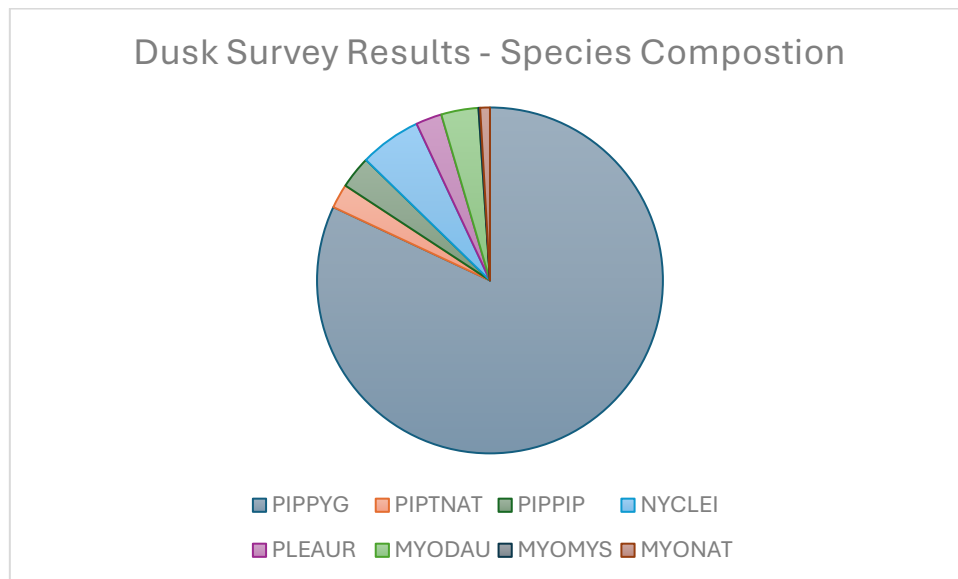


Figure 6: Percentage of each bat species recorded (n = 660)

Evidence to support Derogation Tests

Test 1 – Reason for the Derogation

2c) ii

This derogation is required on a precautionary basis for beneficial cultural, economic and environmental reasons. No bat roosts have been located within structures listed for renovation, and renovations will be carried out with the assistance of a full-time ecologist and use bat-friendly construction methods, such as directed lighting and suitable roofing materials. The project will also turn amenity grasslands and sheep pasture to native meadows, alongside rejuvenating 55ha of mixed broadleaved forest to native woodland.

The restoration works planned at Westport Estate are primarily for the purposes of cultural conservation, public health and safety, habitat restoration, and the maintenance and provision of suitable habitat for Chiroptera and wider biodiversity.

Significant damage has been caused to the structures over time by damp and by weather and renovations are needed to prevent further damage to important cultural structures and artifacts. No bats have been recorded roosting within these areas. The derogation license is needed as a precautionary measure to ensure that the restoration works can proceed. As part of the planning conditions, a full time ecologist has been

employed for the duration of works to monitor bat activity before works take place in any structure.

Coach house and walled garden

The coach house and walled garden are both in a state of disrepair and will continue to degrade should no work go ahead. Structural works are required for public safety and the maintenance of heritage structures. Works are required in the coach house where bat activity has been detected, which are justified for architectural conservation reasons. The walls in the walled garden require repair due to deterioration over time and damaged sustained during storm Eowyn. Occasional day roosts have been identified within the walls and are at risk of collapse. In this regard, works are required for public safety, the maintenance of heritage structures, and the protection of roosts. A day roost within the wall garden has been struck by a fallen tree and is at risk of being destroyed.

Westport House

The vast majority of the works required within the house do not include areas with roosting potential. The cellar was identified as the most likely area of bat activity and the works there are limited to system upgrades. Two old bat droppings were recorded within the boiler house. This room will be checked again prior to renovations for bat activity.

Trees

The wider landscaping of the estate will require the felling of trees, either due to an arborist's recommendation for public safety, or for landscape design reasons. No roosts were identified within these trees and the derogation application is precautionary. The number of trees to be felled has been significantly reduced from the original designs.

Social / economic reasons

The Restoration and Interpretation of Westport House & Estate will provide a major boost to both tourism and employment in the Westport area. The project will include the opening of a new hotel 'The Grace', a new museum exhibiting Grace O'Malley and the history of Westport town, and the creation of three new gardens planted with locally sourced native plants designed by Mary Reynolds. This will attract tourists and improve the biodiversity value of areas of the estate that are currently dominated by non-native and invasive plants. It is estimated that the project will create 110 direct jobs at Westport Estate, growing to €13m of revenue and c 317,000 visitors per annum (50% international). Fáilte Ireland estimate that overseas tourists spend on average €677 each, while domestic tourists generate €228 each, and that every €1m of tourist expenditure supports 22 jobs in the tourism sector.

Test 2 – Absence of alternative solutions

There are no viable alternatives to the planned works. The repair works to the buildings and walls have been designed with specialist architecture in mind and if the works are not carried out, the stability of the structures will be compromised. There is high risk of further damage occurring. The walled garden and the roof of the house have both suffered recent storm damage.

In this case, the **'do nothing'** scenario would be the continued deterioration of the structures, leading to the loss of cultural heritage, a risk to public safety, and the loss of potential roosting sites.

While no roosts were identified within trees, tree felling has been significantly reduced from the original plans to accommodate the potential roosting habitat they provide (>300 trees down to 201). The trees marked for removal have been done so primarily on the advice of an arborist for health and safety, or where ash dieback has set in. Standing deadwood will be valued where it is not an apparent risk to public safety. The design of the gardens and wider estate restoration have incorporated as much of the existing vegetation as is possible. In addition, the planned project will see the planting of thousands of native trees within the gardens and estate, and the slow conversion of non-native mixed broadleaved forest to native forest. During the restoration works, if any disturbance to bats is likely, alternative artificial boxes will be erected, and all areas will be surveyed by an ecologist prior to works commencing.

The walled garden is the location of one of the three 'Wild Realms', which are a core part of the tourism project underway at Westport Estate. The structural integrity of the walls is therefore of immediate public safety concern. The south wall also runs alongside a path that will be open to the public and connects Westport Town to Westport Quay. This section of wall is in disrepair and suffered further damage during storm Eowyn. In addition to this, one of the outbuildings where a day roost has been identified has been stricken by a fallen tree. The **'do nothing'** approach for the walled garden would likely see the collapse of section of the walls and outbuildings in the near future, leading to the loss of both the roost and the historical value of the building.

The Coach House will have an attached extension for the Grace O'Malley Museum. The **'do nothing'** approach would lead to the continued degradation of the coach house, which would impact tourism value, risk the loss of cultural heritage, and be of

public safety concern. While bats have only occasionally used the attic space of the coach house, continued degradation would likely lead to the space becoming unsuitable.

Test 3 – Impact of derogation on favourable status

We are applying for this license in the interests of protecting Chiroptera in the locality. We are adopting mitigation measures for any disturbances to bats that may occur during the planned works. Primarily, pre-commencement surveys will be conducted by recently appointed full-time project ecologist before any planned works. The following mitigation measures will also be applied:

- Construction work on the roofs of the coach house and Westport House will not occur during the bat maternity season (May-Aug), nor will work be carried out on wintering areas, such as the outbuildings in the walled garden and the cellar of the house, between November and April
- Bat boxes will be erected to accommodate any disturbance caused during construction
- The continued degradation of the roof structures is likely to diminish the potential of roosting areas. Roof restoration will be sympathetic to bats in their design, creating better value roosting areas
- Bat-friendly construction materials will be used
- Water tanks within roofs will remain covered
- The creation of new habitat with roosting potential
- Erecting new bat boxes on the new buildings
- Suitable lighting arrangements will be made to ensure that bats are not disturbed during construction

Further consideration to the favourable conservation of bats is adopted in the wider estate designs, such as lighting being directed away from trees and water bodies, and the enhancement of existing linear features and the expansion and conversion of non-native forest to native forest. There is also a large-scale operation underway to remove invasive species such as Japanese knotweed, rhododendron, laurel, and bamboo, replacing these areas with native forest. The planned landscaping features will create large areas of wildflower meadow, planted with native, local seed, alongside the creation of hedges and woodland. This will increase foraging and roosting opportunities across the wider estate.

Woodlands within the estate grounds are dominated by sycamore and beech and are of an advanced age structure with little regeneration occurring. As part of the wider restoration of the estate, approximately 1500 native trees are to be planted within these woods early 2026. Amenity grasslands and sheep pasture have been sown with yellow rattle seed and appropriate cutting regimes drawn up to begin moving them to species rich meadow.

It is not anticipated that the planned works will negatively impact the favourable conservation status of Chiroptera at Westport Estate. Upon completion of the works, it is predicted that the end product of this project will be of significantly higher biodiversity value than the current state.

Monitoring the Impact of Derogation

Throughout the restoration, a full-time ecologist will be required to assess structures before any works commence. Trees will be monitored for roosts before cutting and where bat activity is detected, sufficient provision to protect bats will be applied.

NPWS will be provided with monitoring schedules and photographic evidence of surveys prior to and post restoration. A derogation license returns form will be returned in December 2026 listing any impacts upon Chiroptera.

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