Bat Survey of Site of Proposed Library & Residential Units, Dromahair, Co. Leitrim



Report Prepared for Sweeney Architects

By Caroline Shiel B.Sc., Ph.D.

Edenville,
Kinlough,
Co. Leitrim.
(071) 9842330
(087) 2851148
carolineshiel@outlook.com

June 2021

ABSTRACT

Owner: Leitrim County Council

Structure: Old Hotel Building + dance hall

Grid Reference: 580314, 881276

Bat species Present: No bats recorded internally. No bats recorded emerging or

returning to structure

Bird species present: Swallow

Proposed Works: Demolition of building

Impact on Bats: None

No. of Habitats Present: 2 - BL3 (Buildings & Artificial Surfaces),

Bat Survey by: Caroline Shiel

Date: 27th May 2021 & 7th/8th June 2021

CONTENTS

SUMMARY4
AIMS OF BAT SURVEY4
INTRODUCTION4
3.1 Bat species4
3.2 Legislation
PROPERTY – Derelict Hotel, Main Street, Dromahair6
SURVEY METHODOLOGY6
SURVEY CONSTRAINTS7
SURVEY RESULTS7
7.1 Daytime survey 7
7.2 Bat detector survey7
POTENTIAL IMPACTS OF THE PROPOSED WORKS ON BATS7
RECOMMENDATIONS 8
BIBLIOGRAPHY9
PHOTOGRAPHS10

1. SUMMARY

I was contracted by Sweeney Architects to conduct a bat survey of the site for a proposed new library building on the R288 main street in Dromahair, Co. Leitrim. A derelict hotel building, with dance hall to the rear, currently stands on the site. The existing buildings on site will be demolished.

The buildings were surveyed internally and externally for bats on 27th May 2021. Bat detector surveys were conducted on 7th/8th June 2021.

2. AIMS OF BAT SURVEY

- (a) To determine the importance of the building for bats.
- (b) To assess the impact of the proposed demolition works on bats using the site.
- (c) To make recommendations in order to reduce the impact of renovation works on bats using the site.

3. INTRODUCTION

3.1 Bat Species

Bats belong to the Order Chiroptera and to date nine species are recorded as resident in Ireland. These nine species are divided into two families – Family Vespertilionidae which contain nine of our Irish species (Daubenton's bat *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, Whiskered bat *Myotis mystacinus*, Leisler's bat *Nyctalus leisleri*, Longeared bat *Plecotus auritus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Common Pipistrelle *Pipistrellus pipistrellus* and Nathusius Pipistrelle *Pipistrellus nathusii*) and one species in the family Rhinolophidae –the Lesser Horseshoe bat *Rhinolophus hipposideros*. Brandt's bat *Myotis brandii* has only been recorded once in Ireland from a site in Co. Wicklow and is classified as a vagrant. In 2013 a single male Greater horseshoe bat *Rhinolophus ferrumequinum* was recorded in Co. Wexford. This bat was also considered to be a vagrant.

3.2 Legislation

The serious decline in bat populations both in Ireland and across Europe has led to conservation measures and appropriate legislation being drawn up and implemented in an attempt to stabilise population numbers. It is estimated that bat populations across Europe have decreased by up to 60% in the last 30 years. As they are highly specialised animals, bats serve as biological indicators and are often amongst the first animal species to show signs of population change due to the activities of man. Destruction of roosts and foraging areas, coupled with the widespread use of pesticides, are the key reasons for the decline in numbers of bats in Ireland. Efforts should be made to retain known bat colonies and methods to lessen disturbance to these animals should be incorporated into any development. Bats' dependency on insects has left them vulnerable to habitat destruction, land drainage, agricultural intensification and increased use of pesticides. Their reliance on buildings has also made them vulnerable to building repairs and the use of chemicals for timber treatment. Roosting or hibernation sites in caves, mines, trees and disused buildings are also often lost to development.

Irish Legislation

Wildlife Act 1976 – In the Republic of Ireland, under Schedule 5 of the Wildlife Act 1976 all bats and their roosts are protected by law. It is an offence to disturb either without the appropriate licence. This Act was further strengthened by the Wildlife Amendment Act 2000.

E.U.Legislation

Under the Habitats Directive 1992 (EEC 92/43), each member state of the E.U. was requested to identify habitats of national importance and priority species of flora and fauna. These habitats are now designated as Special Areas of Conservation (SAC). In Ireland, all bat species, except one are classified as Annex IV species under the Habitats Directive. Annex IV species are species in need of strict protection. The exception is the Lesser Horseshoe bat which is an Annex II species (Priority Species). Annex II species are species requiring the designation of Special Areas of Conservation specifically for their protection. All species of bat in Ireland are strictly protected under the Habitats Directive to include deliberate disturbance of these species, particularly during the periods of breeding, rearing and hibernation. It also specifies deterioration or destruction of breeding or resting places.

International Legislation

Ireland has ratified two international wildlife laws pertaining to bats

- (a) The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention, 1982) part of this convention stipulates that all bat species and their habitats are to be conserved.
- (b) The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, Enacted 1983). This was instigated to protect migrant species across all European boundaries.

4. PROPERTY: Derelict Hotel Building. Main street Dromahair, Co. Leitrim Grid Reference: G80352 31257

This property is situated on the eastern side of the R288 main street through Dromahair village, Co. Leitrim. The main hotel building stands on the roadside with a large dance hall to the rear. There is a two-storey, flat-roofed extension to the southern side of the hotel building. There are also several kitchen extensions and sheds to the rear.

The main hotel building is two storey with a slate roof and brick chimneys. The large dance hall to the rear is roofed with asbestos sheeting.

All buildings are derelict and in poor structural repair.



Figure 1 – Aerial photo showing location of the site.

5. SURVEY METHODOLOGY

Daylight Inspection

The buildings were inspected both internally and externally for bats or signs of bats on 27th May 2021 during daylight hours.

The building was systematically searched for signs of bats in the form of live bats, bat droppings, urine stains, culled insect fragments or dead bats. The walls of the building were examined for evidence of bats using a high powered torch (Maglite Rechargeable System), paying particular attention to gaps in the facias and slates. Window sills and floors were inspected for possible accumulations of droppings.

Access to the attic was via a trap-door in the ceiling of an upstairs corridor. It was not possible to access the attic itself so the survey was confined to the area in the immediate vicinity of the trap door.

Bat detector surveys had been planned for the evening of 27th May 2021 but had to be cancelled due to persistent rain.

Bat Detector Survey

A dusk bat detector survey was conducted on 7thJune 2021 from approximately 20 mins before sunset (Sunset 22.03) and ran for 2 hours. A dawn bat detector survey was conducted on 8th June 2021 from approximately 1.5 hours before sunrise (Sunrise = 05.01).

6. SURVEY CONSTRAINTS

This survey was conducted within the recommended time period for surveying bats in buildings which is May to end August. Weather was favourable for the bat detector surveys.

7. SURVEY RESULTS

7.1 Daylight survey

The buildings were surveyed internally and externally for bats on 27th June 2021. No bats were recorded in the buildings. No bat droppings were found in any of the buildings. There were feeding signs of a Brown long-eared bat on the upstairs corridor close to the open fire escape door. Several discarded wings of tortoiseshell butterflies were recorded. This bat is not roosting in the building. It was using the roof of corridor as a feeding perch.

A single swallow's nest was recorded on a light fitting on the upstairs landing. The nest does not appear to be active this year. An active jackdaw's nest was recorded in a section of broken facia at the northern front corner of the hotel building.

7.2 Bat Detector Surveys

A dusk bat detector survey was conducted at dusk on 7^{th} June 2021 and ran for 2 hours. Weather = Overcast, calm & dry. Temp = 16 C. The survey commenced approximately 20 mins before sunset (Sunset = 22.03) and was conducted by two surveyors, one positioned to the rear of the building and one at the front of the building. No bats were recorded emerging from any of the buildings. No bats were recorded foraging in the vicinity of the building.

A dawn bat detector was conducted the following morning. (Sunrise = 05.01), Overcast, calm & dry. Temperature = 12C

Again, the dawn survey was conducted by two surveyors. No bats were recorded returning to any of the buildings.

8. POTENTIAL IMPACTS OF THE PROPOSED WORKS ON BATS

The proposed demolition works will have no impact on bats.

9. RECOMMENDATIONS

9.1 Derogation Licence

This work will not require a derogation licence from the National Parks and Wildlife Service.

9.2 Procedure if Bats are found

If any bats are found during the course of this work, work must stop immediately and the local NPWS conservation ranger or other bat specialist contacted. If bats need to be removed they may only be handled by a licenced bat worker.

10. BIBLIOGRAPHY

Bern Convention (1982) Convention on the Conservation of European Wildlife and Natural Habitats.

Bonn Convention (1979) Convention on the Conservation of Migratory Species of Wild Animals. In particular: The Agreement on the Conservation of Populations of European Bats.

Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition) The Bat Conservation Trust, London

Corbett, G. B. and Harris, S. (1991) Handbook of British Mammals. 3rd Edition, Blackwell Scientific, Publications.

Council of the European Communities (1992). EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora

Fairley, J. (2001) A basket of weasels. Published Privately, Belfast.

Fossitt, J. (2000) A Guide to Habitats in Ireland. Kilkenny: The Heritage Council.

Hayden, T. and Harrington, R. (2000) Exploring Irish Mammals. Town House, Dublin.

Hutson, A. M. (1993) Bats in Houses. The Bat Conservation Trust.

Kelleher, C. & Marnell, F. (2006) Bat Mitigation Guidelines for Ireland. *Irish Wildlife Manuals*, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland

Marnell, F., Looney, D. and Lawton, C. (2019). Ireland Red List No 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Dublin, Ireland

O' Sullivan, P. (1994) Bats in Ireland. Special Zoological Supplement, The Irish Naturalists' Journal.

Racey, P.A. and Swift, S.M. 1986 The residual effects of remedial timber treatment on bats. *Biol. Cons.* **35**: 205-214.

Russ, J. (1999) The Bat of Britain and Ireland – Echolocation calls, sound analysis and species identification. Alana Ecology Ltd.

Wildlife Act 1976 pp 1-209. Dublin: Government Publications.

Wildlife Amendment Act 2000. Dublin: Government Publications.

PHOTOGRAPHS



Photo 1 – front elevation of derelict hotel building



Photo 2 – southern elevation of building showing fire escape from second storey bedrooms



Photo 3 – Rear elevation showing original hotel building with pitched roof and large flat roofed extension to south. The position of the dance hall is indicated



Photo 4 – rear of original hotel building



Photo 5 – northern elevation of dance hall and hotel building



Photo 6 – northern gable of hotel building. Position of Jackdaw's nest is indicated



Photo 7 – dance hall building with asbestos roof



Photo 8 – kitchen to rear of hotel



Photo 9 – lounge room on ground storey



Photo 10 – corridor outside upstairs bedrooms



Photo 11 – feeding signs of Brown long-eared bat – tortoiseshell butterfly wings on floor upstairs



Photo 12 - feeding signs of Brown long-eared bat – tortoiseshell butterfly wings on floor upstairs



Photo 13 – access to attic via trap door on upstairs landing