

**BAT AND SWIFT SURVEYS AT DUNLO HILL
TERRACE, DOOLEY'S PUB AND ADJOINING
PROPERTY, BALLINASLOE, CO. GALWAY**

Received: 09/05/23



Report Prepared for

OBFA Architects,
1 Johnson Place,
Dublin 2

By

Caroline Shiel B.Sc., Ph.D.

Edenville,

Kinlough,

Co. Leitrim.

(087) 2851148

carolineshiel@outlook.com

October 2022

Received: 19/05/23

ABSTRACT

Structure: Dunlo Hill Terrace, Dooley's Pub + Adjoining 3 storey house

Grid Reference: 53.328278, -8.2237335

Bat species Present: No bats

Bird species present: No swifts

Proposed Works: Renovation to residential units

Impact on Bats: None

Bat Survey by: Caroline Shiel

Dates: 28/08/22 + 16/09/22 and 17/09/22

Received: 19/05/23

CONTENTS

1. INTRODUCTION.....4

2. AIMS OF BAT SURVEY.....4

3. STATEMENT OF AUTHORITY.....4

4. BATS IN IRELAND.....4

4.1 Bat species4

4.2 Legislation4

5. PROPERTY – Dunlo Hill Terrace, Dooley’s Pub + adjoining house.....6

6. PROPOSED WORKS.....6

7. SURVEY METHODOLOGY6

8. SURVEY CONSTRAINTS7

9. SURVEY RESULTS 7

9.1 Daytime survey 7

9.2 Bat detector surveys 8

10. POTENTIAL IMPACTS OF THE PROPOSED WORKS ON BATS9

11. RECOMMENDATIONS AND MITIGATION MEASURES9

12. BIBLIOGRAPHY10

13. PHOTOGRAPHS11

Received: 18/05/23

1. INTRODUCTION

I was contracted by OBFA Architects, 1 Johnson Place, Dublin to conduct a bat and swift survey of a terrace of 7 two storey cottages on Dunlo Hill, Dooley's pub and an adjoining 3 storey dwelling house in Ballinasloe Town, Co. Galway. The cottages are situated at the southern end of Dunlo Hill on R446, Dooley's Pub is on the corner of Dunlo Hill and Dunlo Street and a three storey house situated between Dooleys' pub and the Garda Station on Dunlo Street. There are numerous additional outbuildings to the rear of the properties. The buildings are currently unoccupied.

All properties and outbuildings were surveyed for roosting bats and nesting swifts on 28th August 2022 and 16th /17th September 2022.

2. AIMS OF BAT SURVEY

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

3. STATEMENT OF AUTHORITY

The bat surveys were conducted by Dr Caroline Shiel.

She has over 30 years' experience of bat surveys for academic and commercial purposes. She has a PhD in "*Diet, foraging and activity at the roosts of Leisler's bat*", awarded by NUI Galway. She is a founding member of Bat Conservation Ireland and is currently a director and vice-chair of the organisation. She is also a member of the Heritage Council's panel of bat experts.

She regularly carries out bat surveys throughout Ireland, particularly of masonry bridges and heritage buildings. She holds a five-year bat specialist's licence (Sections 22 & 23) from National Parks and Wildlife Service.

4. BATS IN IRELAND

4.1 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*, Long-eared 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.

Any/all of the nine species could potentially be recorded on site.

Received: 19/05/23

4.2 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 Lesser Horseshoe bat is also 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.

Received: 19/05/23

5. PROPERTY: Dunlo Hill Terrace, Dooley's Pub + Adjoining building
Irish Grid Reference: 53.328278, -8.2237335

The properties to be surveyed consist of a terrace of seven single storey cottages at the eastern end of Dunlo Hill. The easternmost cottage is attached to Dooley's pub. Dooley's pub is situated on the corner at the junction of Dunlo Hill and Dunlo Street. Dooleys pub is attached to a three storey building on Dunlo Street. There are also various outbuildings to the rear of the properties.

Dooley's pub is a protected structure on Galway County Council's Record of Protected Structures (Registration No. 2730).

Description : *End of terrace, three storey house, c.1850 with chamfered corner. Pub front inserted c. 1960's.*



Figure 1 – Aerial photo showing location of Dunlo Hill Terrace, P. Dooley's Pub and adjoining building on Dunlo Street

6. PROPOSED WORKS

It is proposed to renovate the buildings on site to provide residential properties. Some of the outbuildings to the rear of the properties are in very poor structural repair and will be demolished.

7. SURVEY METHODOLOGY

The terraced houses on Dunlo Hill were numbered 1-7 from west to east for the purpose of this report. Dooley's Pub is Property 8 and the adjoining 3 storey building is Property 9.

Received: 19/05/23

Each of the nine individual properties were thoroughly searched for bats or signs of bats in the form of bat droppings, insect remains, staining. The buildings were searched using mainly a high powered torch. Crevices in stonework were search by means of an endoscope. It was possible to access the attic spaces of all seven properties in the terrace on Dunlo Hill. The attic space of Dooley's pub has been converted into bedrooms with vaulted ceilings. The attic space of the adjoining building on Dunlo Street has been converted into a workshop with exposed rafters.

The attic spaces, walls, window sills and floors were surveyed for signs of bats in the form of dead bats, bat droppings, culled insect fragments.

The bat surveys consisted of a daylight search of the properties on 28th August 2022, followed by a bat detector surveys at dusk. Additional bat detector surveys were conducted at dusk and dawn on 16th and 17th September 2022.

Dusk bat detector surveys were conducted from 20 mins before sunset until 2 hours after sunset on 28th August 2022 and on 16th September 2022. A dawn bat detector survey was conducted from 2 hours before sunrise until sunrise on 17th September 2022.

The bat detector surveys were conducted by two surveyors from outside the buildings, while periodically checking for bat activity in the buildings. Equipment used included a Pettersson D240X time expansion detector, Pettersson D200 and Echometer Pros plugged into mini i-pads.

8. SURVEY CONSTRAINTS

There were no constraints associated with these bat surveys. The surveys were conducted within the recommended time period for surveying bats in buildings which is May to end September. The weather was favourable on the nights and morning of the surveys.

Two surveyors conducted the bat detector surveys which gave adequate coverage of all buildings.

9. RESULTS

Overgrown vegetation to the rear of the properties had been cleared prior to the commencement of this survey. This facilitated access to the buildings on Dunlo Hill and also facilitated the bat detector surveys as it was possible to survey several properties simultaneously without vegetation obscuring sight lines.

Daylight Inspection

No bats or signs of bats were recorded in any of the nine buildings or in any of the outbuildings to the rear. A small number of butterfly wings were recorded on the floor of Property 3 which may be the feeding remains of a single Long-eared bat. No bat droppings were recorded. It was possible to access the attic spaces of all nine buildings. There were no accumulations of droppings anywhere in the buildings or outbuildings.

Many of the roofs of the cottages in the terrace are in poor structural repair with numerous missing slates. Holes in the roofs have allowed the ingress of water, leaving ceilings below in poor condition. The roof of P. Dooley's pub and the adjoining building are in good structural repair.

There are numerous small outbuildings to the rear of the terrace cottages. These buildings served as outdoor toilets. Two larger two storey stone outbuildings are situated to the rear of P. Dooley's pub. There is also a range of high stone outbuildings to the rear of the house on Dunlo Street. No evidence of bat usage was found in any of the outbuildings.

Dusk Bat Detector Surveys

The first dusk bat detector survey was conducted from 20 minutes before sunset until 2 hours after sunset on 28th August 2022.

Sunset = 20.34

Weather = clear, calm & dry

Temperature = 16 C

The dusk bat detector survey was conducted at the front of the buildings. One surveyor was positioned on Dunlo Hill outside the terrace of cottages. The second surveyor was positioned outside Dooley's pub and adjacent building on Dunlo Street. No bats emerged from any of the buildings. Two Leisler's bats were recorded commuting high overhead but these bats did not emerge from the properties under observation.

Swifts

No swifts were recorded on site. By 28th August the vast majority swifts would have migrated back to Africa.

Dusk Bat Detector Survey

A second dusk bat detector survey was conducted on 16th September 2022 and ran from 20 mins before sunset until 2 hours after sunset.

Sunset = 19.49

Weather = Clear, calm & dry

Temperature = 13 C

This survey was conducted from the rear of the properties. One surveyor was positioned to the rear of the westernmost cottage on Dunlo Hill facing east so as to cover the rear of the entire terrace. The second surveyor was positioned to the rear of Dooley's and adjacent building. One Soprano pipistrelle was recorded briefly foraging to the rear of the terrace but did not emerge from any of the buildings. The bat came from over the wall at the rear of the properties.

Dawn Bat Detector Survey

A dawn bat detector survey was conducted from 2 hours before sunrise on 17th September 2022.

Sunrise = 07.13

Weather = Clear, calm and dry

Temperature = 10C

One surveyor was positioned at the front of the buildings and one surveyor to the rear of the property beside the outbuildings behind the house on Dunlo Street. No bat activity was detected during the dawn survey.

No bats were recorded emerging from or foraging in the vicinity of any of the buildings. This is to be expected. The properties are situated in a built-up area of Ballinasloe Town

with no green areas or trees in the vicinity of the property. Foraging conditions for bats are very poor in the locality of the property.

Received: 19/05/23

10. POTENTIAL IMPACTS OF THE PROPOSED WORKS ON BATS

The proposed renovation and conversion of these buildings will have no impact on bats.

11. RECOMMENDATIONS AND MITIGATION MEASURES

11.1 Derogation Licence

The proposed renovation and development will not require a derogation licence from the National Parks and Wildlife Service.

11.2 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.

Received: 19/05/23

12. 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.

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.

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

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

NPWS (2019) *The Status of EU Protected Habitats and Species in Ireland. Conservation status in Ireland of Habitats and Species listed on the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC*. Volume 1. Summary overview. Unpublished NPWS report. National Parks and Wildlife Service. Department of Environment, Heritage and Local Government, Dublin.

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.

Received: 19/05/23

13. PHOTOGRAPHS

North end of Dunlo Terrace – north facing gable



Photo 1 – western end of Dunlo Hill terrace – western gable and stone wall to rear



Photo 2 - Properties 1- 4 at western end of Dunlo Hill terrace

Received: 19/05/23



Photo 3 - Properties 3 - 7 in Dunlo Hill terrace – front elevation



Photo 4 - Property 4 – showing poor condition of roof. Wire slate guard in place to catch falling slates

Received: 19/05/23



Photo 5 - Roof of Property 5 with hole around chimney stack

Received: 19/05/23



Photo 6 - southern elevation of P. Dooleys pub which is attached to Dunlo Hill terrace



Photo 7 - Eastern elevation of Dooley's pub on corner and adjoining 3 storey property (Property No. 9)

Received: 19/05/23



Photo 8 - Dunlo terrace to rear of Dooleys Pub, Dooley's Pub and Adjoining 3 storey building



Photo 9 – access to rear of building via archway between Dooley's pub and Dunlo Hill terrace. Several swallows' nests were recorded on roof timbers



Photo 10 - Rear of Dooley's Pub and Property No. 9



Photo 11 - Stone outbuildings to rear of Dooley's pub

Received: 19/05/23



Photo 12 - Stone outbuildings to rear of Dooley's pub



Photo 13 - Rear of Dunlo Terrace looking west.

Received: 19/05/23



Photo 14 - Rear of Dunlo Terrace – westernmost section. Access to each unit was via the rear door



Photo 15 – Lean-to stone shed to rear of westernmost property in Dunlo Terrace. This building was considered to have potential as a bat roosting site

Received: 19/05/23



Photo 16 - Rear of Dunlo Terrace looking east



Photo 17 - Rear of Property 6 and 7 on Dunlo Hill Terrace

Received: 19/05/23



Photo 18 - Interior of Property 1 in Dunlo Hill Terrace



Photo 19 - Interior of Property 1 in Dunlo Hill Terrace

Received: 19/05/23



Photo 20 - Access to attic space of Property 1 via trapdoor in upstairs ceiling



Photo 21 - Hole in upstairs ceiling of Property 1 in Dunlo Terrace

Received: 19/05/23



Photo 22 - Attic space of Property 1



Photo 23 - Attic space of Property 1 showing original slates

Received: 19/05/23



Photo 24 - Kitchen of Property 2 on Dunlo Hill terrace



Photo 25 - Rear door of Property 3

Received: 19/05/23



Photo 26 - Upstairs bedroom in property 3



Photo 27 - Attic space of Property 3. No evidence of usage by bats

Received: 19/05/23



Photo 28 - Attic space of Property 3 showing bitumen lining on inside of slates



Photo 29 - Floor of Property 3 with some butterfly wings and a few droppings of Brown long-eared bat. Used as a feeding perch by a single bat

Received: 19/05/23



Photo 30 – downstairs room in Property 4



Photo 31 – stairs in Property 4

Received: 19/05/23



Photo 32 – upstairs bathroom in Property 4



Photo 33 - Attic of Property 4 with void in roof

Received: 19/05/23



Photo 34 - Rear door to property 5

Received: 19/05/23



Photo 35 – stairs in Property No 6



Photo 36 – damage caused by water egress in property No 6

Received: 19/05/23



Photo 37 – trap door to attic of Property 6



Photo 38 – damage to ceiling in Property 6

Received: 19/05/23



Photo 39 - Outdoor toilet outside property 6



Photo 40 – sitting room of Property 7

Received: 19/05/23



Photo 41 - Stairs in Property 7



Photo 42 - Sheds to rear of Property 5, 6 & 7

Received: 19/05/23



Photo 43 – stone shed to rear of Dooley’s pub



Photo 44 - stone shed to rear of Dooley’s pub. This shed was considered to have potential as a roosting site for bats

P. Dooley's Pub

Received: 19/05/23



Photo 45 – upstairs bedroom



Photo 46 – upstairs landing of rear section of building

Received: 19/05/23



Photo 47 – section of pub in P. Dooley’s



Photo 48 – stairs to attic rooms

Received: 19/05/23



Photo 49 – upstairs bedroom



Photo 50 – view of outbuildings to rear of adjoining property

Received: 19/05/23



Photo 51 – attic rooms in P. Dooley’s



Photo 52 – attic rooms in P. Dooley’s

Received: 19/05/23



Photo 53 – basement in P.Dooley's



Photo 54 – basement kitchen in P.Dooley's

Received: 19/05/23

Property No. 9 on Dunlo Street



Photo 55 – hallway of Property 9



Photo 56 – downstairs room

Received: 19/05/23



Photo 57 – bedroom with damaged ceiling



Photo 58 – stairs to attic space

Received: 19/05/23



Photo 59 – attic space being used as work space/ storage space



Photo 60 – exposed timbers in attic space – no evidence of bats

Received: 19/05/23

Outbuildings to rear of Property No. 9



Photo 61 – stone outbuildings to rear of Property 9. These buildings were considered to have the greatest potential for roosting bats but no bats were recorded



Photo 62 – exposed roof timbers in outbuilding

Received: 19/05/23



Photo 63 – lean-to building attached to stone outbuilding



Photo 64 – looking west towards rear boundary wall

Received: 19/05/23

Bat Detector Surveys



Photo 65 – dusk bat detector survey conducted to front of terrace on Dunlo Hill



Photo 66 – dusk bat detector survey conducted to south and east of Dooley's pub and adjoining building

Received: 19/05/23



Photo 67 – dusk survey conducted at stone outbuildings to rear of Property 9



Photo 68 – dawn survey conducted at stone outbuildings to rear of Dooley's and Property 9

Received: 19/05/23



Photo 69 – dawn survey conducted to rear of terrace on Dunlo Hill



Photo 70 – dusk survey conducted to rear of Dooley's pub