



Bat Survey: 26 Courtland Terrace, Merthyr Tydfil, CF47
ODT



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1.0 The Brief: its background and purpose

1.1 26 Courtland Terrace, is an end terrace house split over multiple levels set in the urban environment of Merthyr Tydfil. The new owners wish to modernise the property and demolish the detached garage to create space for a new residential building. This report will investigate if there is potential to disturb bats and will be used to assist the planning process.

1.2. To support the planning application a bat report has been commissioned to investigate if bats use the current property in any capacity during the maternity season, and for any evidence suggesting that bats use the building at other times of the year.

1.3 The report is prepared and undertaken by Mr. Richard Watkins BSc., an ecologist with 12 years experience and Aislinn Harris a Natural Resources Wales licensed bat ecologist, license number S085699-1.

1.4 A desktop search has not identified any bats using the buildings as a roost. There are however records of a commuting Common Pipistrelle and a small day roost of Soprano Pipistrelles within 200m of the property. Due to the small nature of development no SSSI or SAC for bats will be impacted upon.

2.0 Site Description

2.1 26 Courtland Road is an end terraced house set in the urban town of Merthyr Tydfil. The roof is cement tile and the house is built over 4 floors. There is very little attic space as the roof space is used as a bedroom. The building is built into a steep banking so that there are two floors built below road level but are open to the rear. There is a detached double garage build adjacent to the property. This also has a cement tiled roof.

2.2 This buildings dates back in excess of 60 years and is located on a residential street.

2.4 The nearest significant watercourse is the river Taff approximately 471m to the west of the property.

2.5 There is both parkland and woodland within 69m of the building, with good ecological connectivity.

2.6 Grid Reference of the site is **SO 0521 0603**

3.0 Report Constraints

3.1 The report is solely concerned with bats in relation to this building. Trees and other buildings not mentioned directly have not been included in this report.

3.2 Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The survey methods employed can provide evidence for the potential presence of bat at the times when the site was visited. Although the methods follow best practice guidance and were carried out in such a way as to maximise the chances of detection, failure to detect the target species cannot be considered as definitive proof of their absence.

3.3 Even though bats are habitual creatures they can still move to new roosts if more suitable. Therefore this report cannot predict the status of the structure in regard to bat occupancy in the future. This report should be acted upon as

soon as practical and will be valid for 18 months from date of issue. If planning or building works are delayed, it is the responsibility of the client to discuss and gain approval from the *author* before work commences. Natural Resources Wales will only consider reports up to two years old.

3.4 Viewing conditions to the rear of the property was suboptimal due to the height of the building and steep banking.

3.5 Some bat species such as Pipistrelle's can fragment their maternity colonies earlier than other species of bats. The bat surveys were undertaken late in the survey window. To ensure that no bat roost is missed, any works to the roof or roof line of the building will be undertaken using a bat friendly soft strip methodology under direct supervision of a suitably qualified ecologist.

4.0 Legal Constraints

4.1 Bats, and any place a bat uses for breeding or shelter, either currently occupied or unoccupied are protected by European and British law, predominantly by **The Conservation of Habitats and Species Regulations 2017**, which are the principal means by which the Habitats Directive is transposed from European directive into law in England and Wales.

4.2 In summary this law states that it is an offence to:

- **Deliberately capture or kill a bat**
- **Deliberately disturb a bat**
- **Damage or destroy a breeding site or resting place of a bat**
- **Keep, transport, sell or exchange, or offer for sale or exchange a living or dead bat or any part of a bat**

4.3 'Deliberately' may also be interpreted, as not intending to injure or kill a bat but having done so due to being insufficiently informed and unaware of the consequences of the action.

4.4 For a more comprehensive description and exact wording of the legislation please refer to:

<http://www.legislation.gov.uk/ukxi/2010/490/contents/made>

4.5 Where there is a risk that a bat roost may be present, it is incumbent upon the owner to commission a specialist bat survey to identify bat roosts before any work commences. Maximum penalties for offences relating to disturbance to bats or their roosts can amount to imprisonment for a term not exceeding six months or fines of up to Level 5 on the standard scale under the Criminal Justice Act 1982/1991 (i.e. £5000 in April 2001) per roost or bat disturbed or killed, or to both.

4.6 If a bat roost is discovered no work that could affect the roost can be undertaken until Natural Resources Wales grants licence endorsing the work. A thorough method statement and adequate mitigation proposal will need to be submitted to support any licence application.

4.7 The Environment (Wales) Act 2016 puts an onus onto responsible bodies such as Local Planning Authorities to not only preserve but also to enhance biodiversity meaning that planning applications must offer an element of ecological gain as well as preserving any aspects of ecological importance.

5.0 General Information

5.1 Bats are unable to build roosts themselves but instead rely on both man made and naturally occurring features to provide suitable accommodation. Bats generally prefer older buildings built with traditional materials, as traditional building methods provide more opportunities for gaps and entrances to buildings. Traditional cut roofs are preferred to a roof with trusses. Bats also prefer to roost where the external roost area has access to sunlight during the day such as south facing roof elevations.

5.2 Bats can utilise the following features on a building; end tiles, barge board, soffit, gable end, porch, lead flashing hanging tiles, ridge tiles, broken tiles, eaves, sash window frame, wood cladding, fascia board, window sill, and internal roof spaces and timbers. Although this list demonstrates the most popular roosting sites it is by no means definitive. Bats can use apertures as small as 10mm in diameter to gain access.

5.3 The U.K bat population is divided into two distinct families, Rhinolophidae and Vespertilionidae. In general, Rhinolophidae (Horseshoe) bats differ in their roosting requirement to Vespertilionidae (the remainder of UK bat species). Horseshoe bats prefer to roost in large areas such as internal attic spaces and hang in the open from the roof of the roost. They tend to roost in visible clusters to maintain the high temperatures that a maternity colony needs. Horseshoe bats also prefer free flight access and egress into the roosting area. Horseshoe bats tend to be more light averting to other UK bat species, and routinely fly around the internal roosting area to warm up before exiting. It is noted that Plecotus (Long Eared) bats share some of these preferences. Vesper bats are on the whole crevice dwelling bats who squeeze into small apertures to access the roost. These like Horseshoe bats will cluster in maternity colonies, but are normally hidden from view. Vesper bats with the exception of Long Eared bats do not require a large internal roost to fly around before exit. Long Eared bats although part of the vesper family are very light averting and will on occasions share the roosting patterns of both Horseshoe and crevice dwelling species.

6.0 External Scoping Survey

6.1 The scoping survey was undertaken on the **21st August 2020** and in conditions of good natural light. All external aspects of the building were comprehensively evaluated for roost potential. Evidence was also sought for any staining or droppings which could suggest bat occupation. Binoculars and endoscope were used when required.

6.2 The building was inspected for overt evidence of bat presence and occupation such as:

- Staining around entry or roosting point caused by oils secreted by the bat into its fur
- Scratching on surfaces caused by the bat in the act of take off and landing
- Bat droppings on walls, floors, roof voids, window cills or panes and barge boards
- Urine stains below a possible entrance site, within the entrance to a cavity or on timbers used for roosting
- Bats can produce chatter on warm evenings prior to leaving the roost. A heterodyne bat detector is used to help determine this
- Flies around the entrance or on the floor of possible roosts, which may be attracted to bat guano.

6.3 There is limited potential for bats to access and use both buildings

6.4 Gaps along the roofline and under cement tiles did offer moderate potential for bat access.

6.5 No droppings or evidence of bats were discovered on any external features.



7.0 Internal Inspection

7.1 The internal inspection was undertaken on **21st August 2020**.

7.2 The upper floor also occupies the internal roof space.

7.3 There were limited roof voids.

7.4 No bat droppings were discovered during the search of the attic space.

7.6 No night feeding perches were identified.

7.7 The building did not have an underground cellar, although the lower floors were built into a bank.

7.8 There was no external light visible from the internal attic space.



8.0 Emergence and Dawn Surveys

8.1 The emergence surveys were carried out during the maternity season and adhered to current best practice guidelines. These surveys were conducted from half an hour before sunset until two hours post sunset. The surveyors used are all experienced bat counters who have undergone sufficient training in basic bat ecology and bat activity. The Surveyors used were Tyrone Evans, Hannah Evans, Keith Watkins, Richard Watkins and Allen Harvey. All Sound analysis was undertaken by Richard Watkins.

8.2 Emergence Survey on the 21st August 2020.

No bats were observed exiting the buildings.

8.3 Emergence Survey on the 9th September 2020.

No bats were observed exiting the buildings.

8.4 The weather conditions were conducive for bat activity. The temperature was above 12 degrees celsius for all the surveys.

8.5 Best viewing conditions were obtained. The size and height of the building made viewing conditions a challenge on the rear elevation.

8.6 Anabat and Echometer Touch Pro bat detectors were present to acoustically record any bat calls.

8.7 Analysis of Sound recording on bat detectors.

Species of bats recorded in the area but not emerging from the building	
Common Pipistelle	<i>Pipistrellus pipistrellus</i>

8.8 During the exit survey there was a low number of passes by Common Pipistrelle bats to the rear of the property. No major commuter route was observed.

9.0 Concluding Remarks and Recommendations

9.1 No bats were observed using the buildings during the survey windows. Therefore it is suggested the impact of the proposed building works will be negligible on the local bat population.

9.2 A low number of Common Pipistrelle bats were observed passing the rear of the property from north to south during the course of the surveys. No significant bat commuter route was identified.

9.3 Some bat species such as Pipistrelle's can fragment their maternity colonies earlier than other species of bats. The bat surveys were undertaken late in the survey window. To ensure that no potential bat roost is missed, any works to the roof or roof line of the building will be undertaken using a bat friendly soft strip methodology under direct supervision of a suitably qualified ecologist.

9.4 Following commencement of works; outside any ecologically supervised period and in the unlikely event that the contractor encounters any bats during any works, then work must stop and the bat worker summoned. If for any reason they cannot be contacted, advice must be sort from the Natural Resources Wales, (Telephone Number 0300 065 3000). The guidance note on finding bats found in the appendices must be followed.

9.5 There is potential to offer ecological gain for bats if the project proceeds. This would help satisfy the local planning authorities legal responsibility to preserve and enhance biodiversity under the Wales Environment (Wales) Act 2016 which has superseded the Natural Environment and Rural Communities Act 2006. The below enhancements will be incorporated into the development:

- 1 x Build-in Woodstone Bat Box to be installed on the north facing gable end,
- 1 x WoodStone Build-in Open Nest Box to be installed on the north facing gable end,
- 1 x WoodStone Build-in Open Nest Box to be installed on the west facing gable end,

The design and location of each bat and bird box must be shown on the proposed elevations for the development. Boxes will not be installed any lower than eaves level on the building.

9.6 If any external lighting is proposed it must conform to the following guidance - <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>.

Signed: *R Watkins* Date: October 2020

10.0 Appendix

Aerial site photo

Surveyor Positions

OS Map

Bat Method Statement

Guidance Note

Appendix 1 - Aerial Photos

The site in its wider environment showing relatively good connectivity to surrounding habitat.



Appendix 2 Surveyor Positions



Appendix 3 - OS Map National Grid Reference SO 0521 0603



Appendix 4 - Bat Method Statement

Legislation

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2010. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and obstruction of their roosting places.

Working Methodology

Roof removal work will take place during the Autumn and Spring months of the year. Spring is defined as 1st March - 1st May, when daily temperatures are consistently above 7°C. Autumn is defined as 1st September - 1st November, when daily temperatures are consistently above 7°C.

Although no evidence of the presence of bats was found during the bat surveys completed at site, it is very difficult to completely rule out occasional use of a building by bats. Section 9.3 of the bat survey report recommends the roof removal work is completed under ecological supervision as a precautionary measure. The roof removal work is anticipated to take 1 day.

- A suitably experienced and bat licenced ecologist will supervise the roof removal work. The ecologist will give a tool box talk to all contractors prior to works starting on the building.
- The tool box talk will include the location of suitable features where bats may be present, what to do if a bat is found and the legal protection afforded to bats.
- Contractors under direct supervision of the ecologist will remove roof tiles by hand lifting each tile up vertically, starting with the ridge tiles. The Contractor will then search the underside of the tile and also inspect the aperture on the roof where the tile was. Once no bats have been seen the contractor will hand down the tile and the process repeated. Once all the ridge tiles have been removed the same process will be applied to the slates starting from the top row.
- The removal of any existing slates and other roof materials will be by hand and taking care not to twist or bang. Check the underside of all tiles. Keep a careful watch for bats during this operation.
- Once all the slates are off any fascia, soffit or bargeboard and under-felt will be carefully removed.
- If bats are discovered at any point during the works all work will stop, the bat ecologist will house the bat in a temporary portable box and released at night on the same day.

Natural Resources Wales will be informed and a European protected Species Licence applied for to sanction the works. No further works will then be permitted until the license is issued should it be required.

- Any questions? Contractors please sign to acknowledge this document:

Name	Signature to acknowledge the above information

Supervising Ecologist -
Date -

Guidance Note (Important information in the unlikely event that bats are discovered)

Where any building or demolition work is to commence, all contractors should remain vigilant at all times during the course of the works, looking for signs that bats are present or that bats have formerly occupied the building. Whilst this survey has been undertaken and no visible evidence of bats found within the building, the possibility of a bat or bats being present cannot be absolutely ruled out. In the extremely unlikely event that bats are discovered during the works, then work must **stop** as soon as it is safe to do so, The bat worker must be contacted immediately and Natural Resources Wales informed in order for a licence to be granted to complete the works. No works will be permitted until such time a license is approved.

If in the unlikely event a roost is accidentally opened up, any loose bats should be returned to the roost and apertures closed to prevent their escape until they can be examined for injury by a bat worker. Dead bats should be retained. Bats are very fragile and should be handled by a professional, and unless absolutely necessary should not to be approached and disturbed. However, where a bat is clearly injured and distressed, the contractor should carefully collect them and place in a light proof box. Gloves must be worn when handling bats*

In the Event of a Bats being discovered the bat worker must be contacted immediately that it is safe to do so on 07866461726

If the bat worker is not available, Natural Resources Wales must be contacted on 0300 065 3000

*Bats can potentially carry European Bat Lyssa Virus (EBLV) which is a strain of rabies virus that is found in some bat species although extremely uncommon, a potential risk occurs; therefore, all bats must be handled with thick gloves.