# Bat Survey: Former Magnet Premises, East Tyndall Street, Cardiff, CF24 5EA


Instructed by: Interstrand

Reported by: Ecological Services Ltd
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| Author | Date | Version |
|---|---|---|
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## 1.0 Background and Purpose

**1.1** The building being surveyed consists of the former Magnet premises which is situated within an urban environment along the residential and commercial street of East Tyndall Street in the city of Cardiff. The site is not currently in use and planning permission is sought to demolish the existing buildings and redevelop the site for residential use. It is proposed to construct a new four storey apartment block and some houses. This report will investigate if there is potential to disturb bats and will be used to assist in 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 property at other times of the year.

**1.3** The report is prepared and undertaken by Mr. Richard Watkins BSc., an experienced Natural Resources Wales licensed bat ecologist with 13 years experience, license number S0931358-1.

**1.4** A data search was undertaken with SEWBReC (0245-404) to provide information on local bat and bird species in the area. The data search did not identify any historic records of bats being present within the buildings. The nearest recorded roosts are approximately 935m from the property which is a record for an unidentified bat species day roost from 2005 and 1,105m from the property which is a record for a Pipistrelle Species *(Pipistrellus sp.)* day roost from 2017.

**1.5** There are various non roosting records for bats, the nearest being approximately 220m from the property which is a record for a Soprano Pipistrelle *(Pipistrellus pygmaeus)* live sighting; 360m from the property which is a record for an unidentified bat species live sighting and 450m from the property which is a record for a Pipistrelle Species live sighting.

**1.6** A small number of records for nesting birds were returned as part of the data search within 500m of the proposed development site. Species records include Herring Gull; Lesser Black Backed Gull and Swift.

**1.7** The property is not within 10km of a designated SAC or SSSI for bats.

## 2.0 Site Description

**2.1** The former Magnet premises consists of a substantial metal clad warehouse building which is single storey. Metal cladding tends to warm up too quickly and cool down too quickly to house a significant bat roost. Due to the height of the building and proximity to neighbouring properties, the roof type and material could not be visualised. It is thought likely to be a metal roof. There is a two storey office building attached to the main building which is metal clad and consists of a mono-pitched metal roof. There is also a small, single storey office building attached to the north eastern elevation of the main building which is metal clad with a flat, metal roof. There is no cavity wall in the building.

**2.2** The building dates back to in excess of 30 years and is situated in an urban environment. There are likely to be moderate amounts of ambient lighting within the vicinity of the site.

**2.3** The nearest significant watercourse is the River Taff, approximately 2km to the west of the site and Rhymney River, approximately 2km to the north east of the site at their nearest points.

**2.4** The site is situated within an urban environment along the residential and commercial street of East Tyndall Street in the city of Cardiff. The site is immediately situated within a commercial and residential area. Moorland Park lies approximately 300m to the south east of the site; Anderson Fields lie approximately 310m to the north west of the site and Splott Park lies approximately 615m to the north east of the site. However, there is limited connectivity from the site to these open spaces. There is relatively poor ecological connectivity for bats to the wider environment.

**2.5** The National Grid Reference of the site is approximately: **ST 2000 7638**

## 3.0 Report Constraints

**3.1** Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviours. The survey methods employed can provide evidence for the potential presence of bats 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.

**3.2** 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.

**3.3** 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. Natural Resources Wales will only accept survey data up to two years old from date of issue for licence applications, although some Local Planning Authorities will only accept survey data up to eighteen months old. 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.

**3.4 Due to the height of the building and the proximity of the building to neighbouring properties, the roof could not be visualised. Additionally, due to land ownership issues, we were not authorised access around the entirety of the building as the building sits directly on the boundary border, therefore, there were elements of the building that could not be assessed or surveyed.**

## 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; 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/uksi/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 a 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 boards, soffit, gable ends, porches, lead flashing, hanging tiles**,** ridge tiles**,** broken tiles**,** eaves**,** sash window frames**,** wood cladding**,** fascia boards**,** window sills 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 requirements 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 external scoping survey was undertaken on the **5th July 2024** 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.

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

- Staining around the entry of roosting point caused by oils secreted by the bat into its fur
- Scratching on surfaces caused by the bat in the acts of take off and landing
- Bat droppings on walls; floors; roof voids; window sills 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 Due to the age and condition of the building, there were a limited number of opportunities present for bats to access and use the building and due to the height of the building and the proximity of the building to neighbouring properties, the roof could not be visualised. Therefore, following the survey guidelines, although the visualised aspects of the building appeared to have low potential, the building was actually classed as having moderate potential for roosting bats to conform to survey guidelines. There was a large area of missing metal cladding to the south western elevation of the main building.**

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

**6.5 No evidence of nesting bird use of the building was observed during the scoping survey.**

**6.6 Examples of apertures allowing access to cavities in the building:**

## 7.0 Internal Scoping Survey

**7.1** The internal scoping survey was undertaken on the **5th July 2024** by Mr. Richard Watkins BSc., an experienced Natural Resources Wales licensed bat ecologist with 13 years experience, license number S0931358-1.

**7.2** There was no internal attic space within the building. The building was open plan and open to the roof.

## 8.0 Emergence 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. All sound analysis was undertaken by Richard Watkins.

**8.2** The emergence surveys gave extra consideration to the features identified during the external scoping survey which could be utilised by bats.

**8.3** First Emergence Survey on **21st August 2024**

- Sunset: 20:22
- Weather: Dry and calm with full cloud cover
- Temperature: 15 degrees celsius
- Surveyors: Hannah Evans and Tyrone Evans

**No bats were observed emerging from the building.**

**8.4** Second Emergence Survey on **16th September 2024**

- Sunset: 19:24
- Weather: Dry and calm with approximately 70% cloud cover
- Temperature: 14 degrees celsius
- Surveyors: Ryan Offers and Mason Smith

**No bats were observed emerging from the building.**

**8.5** The weather conditions were dry and calm with little wind and no rain and therefore conducive for bat activity. The temperature was above 10 degrees celsius during the emergence surveys.

**8.6** The best viewing conditions were obtained.

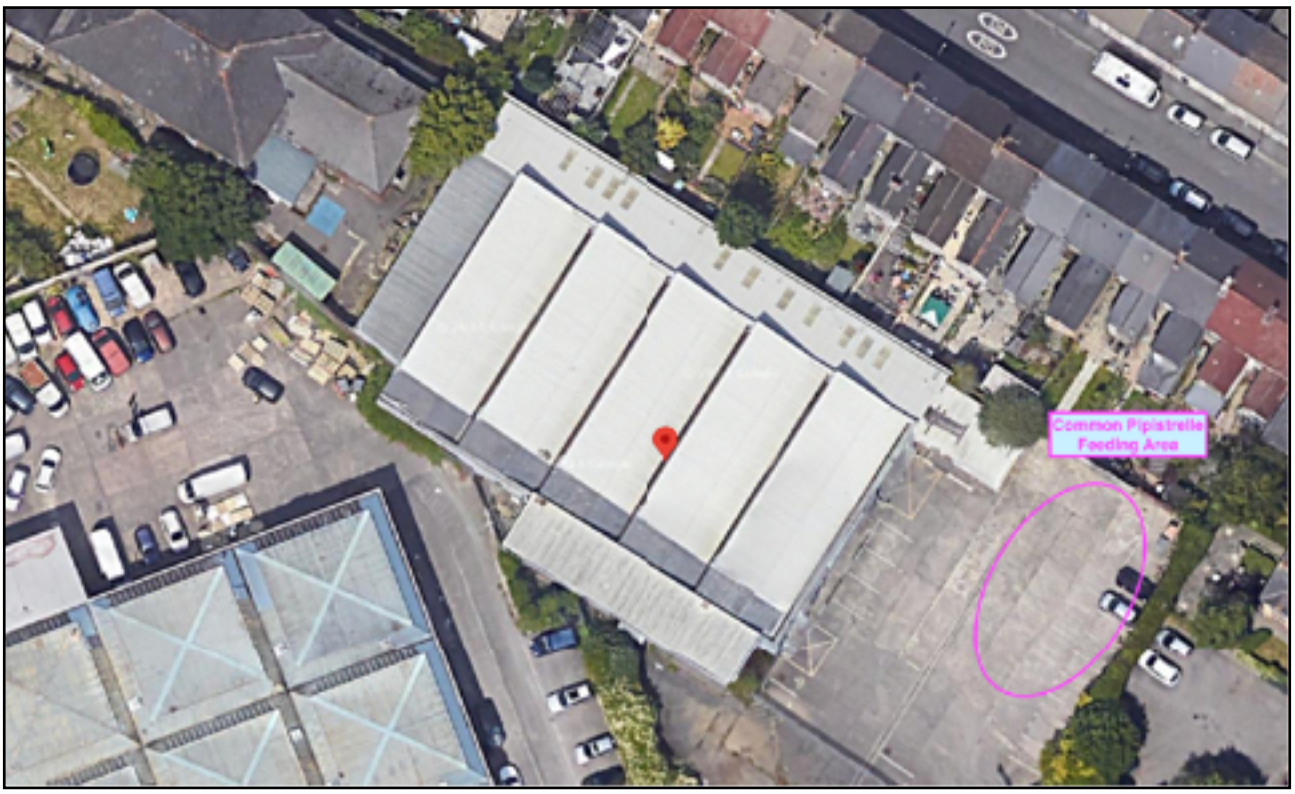
**8.7** Echo-meter Touch 2 Pro bat detectors were present to acoustically record any bat calls. Nightfox Night Vision Goggles with record features were also used alongside additional infrared spotlights. These were positioned with the surveyors.

**8.8** Analysis of sound recording on bat detectors:

| **Species of Bats Recorded in the Area:** | |
|---|---|
| Common Pipistrelle | *Pipistrellus pipistrellus* |

**8.9** During the first emergence survey, only a single Common Pipistrelle bat call was detected but the bat was not observed.

**8.10** During the second emergence survey, a small number of Common Pipistrelles were observed foraging around the site but did not emerge from the building.




**8.11 NVA Still Shot Examples:**

## 9.0 Concluding Remarks and Recommendations

**9.1 During the emergence surveys, no bats were observed emerging from the building.**

**9.2 Throughout the surveys, only a very low number of bat calls were recorded and no bats were observed using the building. Therefore it is suggested that the proposed building works will have a negligible impact on the local bat population.**

**9.3** The building does not offer significant hibernation potential for bats.

**9.4** No evidence of nesting bird use of the building was observed during the surveys.

**9.5 Due to the age and condition of the building, there were a limited number of opportunities present for bats to access and use the building and due to the height of the building and the proximity of the building to neighbouring properties, the roof could not be visualised. Therefore, following the survey guidelines, although the visualised aspects of the building appeared to have low potential, the building was actually classed as having moderate potential for roosting bats to conform to survey guidelines. Metal cladding tends to warm up too quickly and cool down too quickly to house a significant bat roost.**

**9.6** The site is located in an area with relatively poor ecological connectivity for bats to the wider environment.

**9.7** There was a security light present on the front of the building, however, the sides and rear offered darker corridors for bats to forage and commute.

**9.8 Due to the constraints listed in Section 3.4 of this report, it is proposed that a soft strip methodology be adopted on the areas of internal timber clad roof surfaces. The internal timber cladding will be soft stripped under direct supervision of a suitably qualified ecologist. If at anytime bats or evidence of bats are discovered then works must immediately stop and a European Protected Species Licence application be made to Natural Resources Wales. In this instance, no works will continue until a licence is issued sanctioning works ongoing. The results of the soft strip will be returned to the LPA ecologists for their records.**

**9.9 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 immediately stop and the bat worker summoned. If for any reason they cannot be contacted, advice must be sought from Natural Resources Wales, (Telephone Number 0300 065 3000). No works would recommence until a licence is issued by NRW sanctioning works going forward. The guidance note on finding bats found in the appendices must be followed.**

**9.10 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 Environment (Wales) Act 2016. The creation of a bat roost for crevice dwelling bats can be incorporated into the new build element at very little expense and with no impact to the owners of the building. It is recommended that new roosts be created for crevice dwelling species of bats in the new build scheme and this should be added to the plans prior to submission for planning approval. Any new enhancements must not be directly illuminated and a dark corridor must be established allowing undisturbed access for any bat away from the site.**

**9.11 A suitable external lighting plan must be implemented to reduce any disturbance to the bats feeding and commuting around the property.**

**9.12 Proposed detailed architectural drawings are not currently available. Once available, further advice must be sought from a suitably qualified ecologist in regard to the size, type and location of any proposed new roosting enhancements.**

**9.13 Once the new enhancements have been agreed between relevant parties, these must be added to the architectural drawings prior to submission of the Planning Application.**

**9.14 Any new enhancements must not be directly illuminated and a dark corridor must be established allowing undisturbed access for any bat away from the site.**

***Signed:*** *Richard Watkins* ***Date: October 2024***

**10.0 Appendix**

**Aerial Site Photographs**

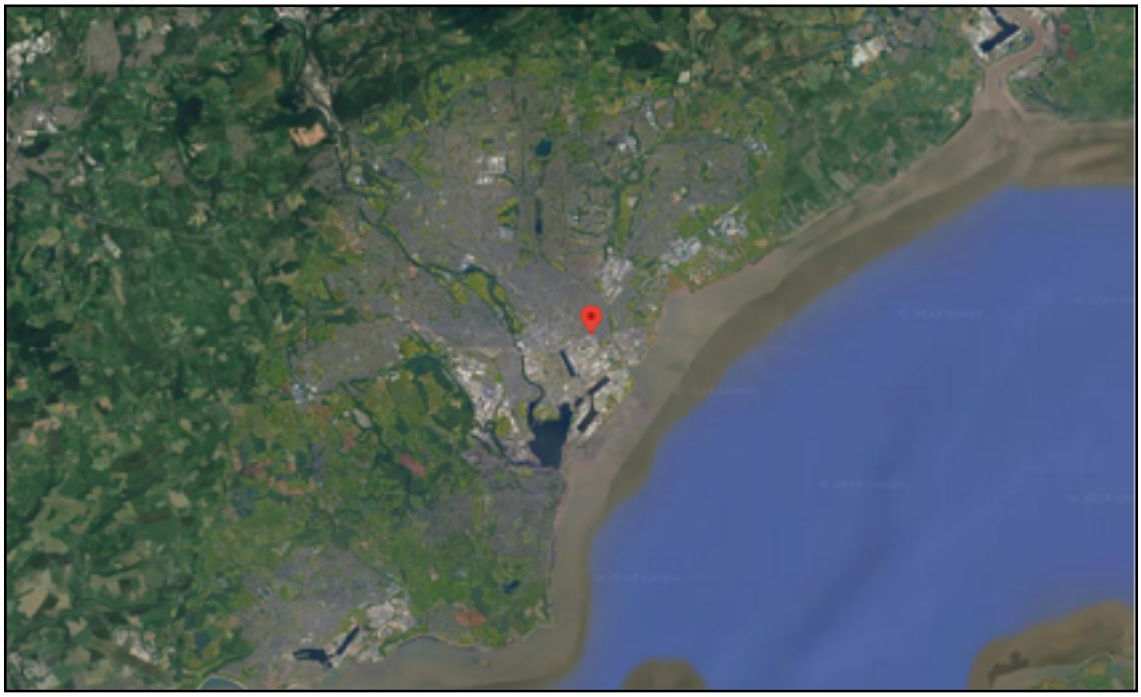
**OS Map**

**Surveyor & NVA Positions**

**Guidance Note**

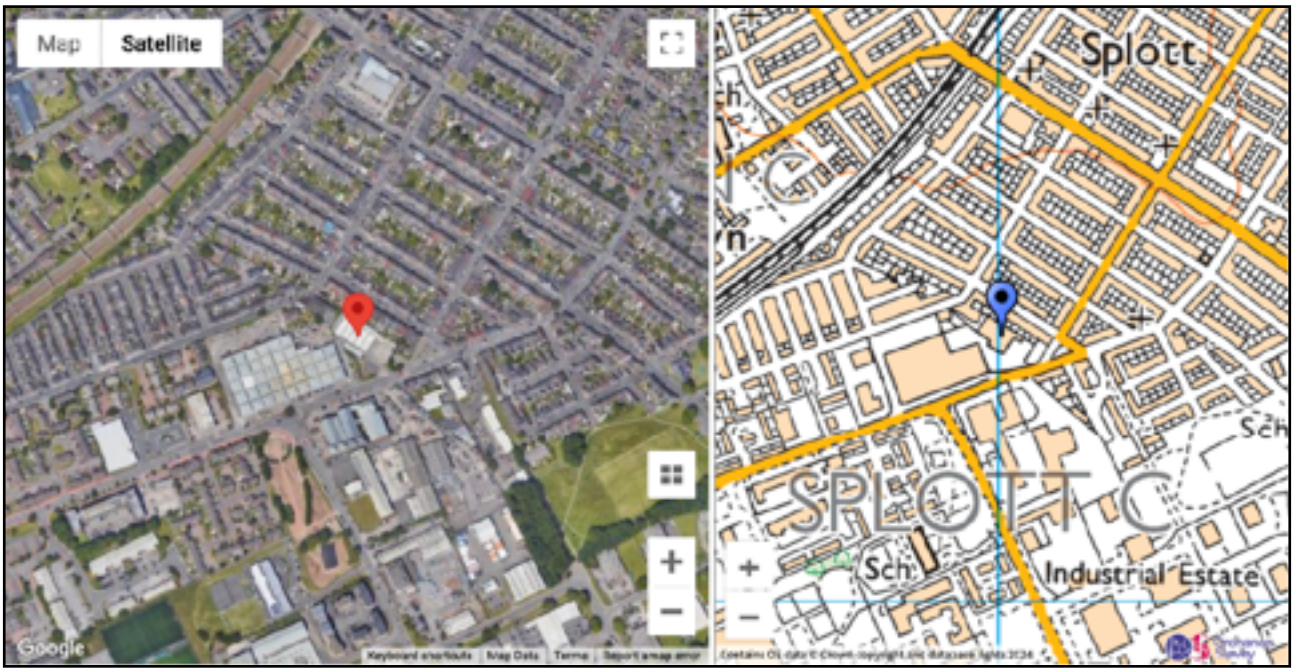
**Appendix 1 Aerial Site Photographs**

**The site in its immediate environment.**



**The site in its wider environment offering relatively poor ecological connectivity to the surrounding habitat.**

**Appendix 2 OS Map National Grid Reference ST 2000 7638**




**Appendix 3 Surveyor & NVA Positions**

**Appendix 4 Guidance Note**

## 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**

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*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.