# Preliminary Bat Roost Assessment

## Site: 59 Mellor Brow BB2 7EX

28th October 2022

CLIENT: Mr & Mrs Parkin

59 Mellor Brow BB2 7EX

**Prepared By:**
Carol Edmondson MSc MRSB
Ark Ecology
Whalley
BB7 9JQ

Date checked & released:

**31st October 2022**

## Summary

This report presents the results of a daylight potential bat roost assessment (PRA) undertaken on October 24th 2022 at 59 Mellor Brow BB2 7EX. The work has been commissioned in connection with a proposed planning application for an extension to the existing building.
The scope of the survey has primarily considered roosting and hibernating bats, breeding birds and barn owls.

The survey outcome shows no evidence of historic use by bats, and negligible roosting potential, but has identified that there is good value foraging habitat around the site for bats. Therefore, a precautionary approach should always be used when removing building materials due to the transient nature of bats. The site is not suitable for use by barn owls, and no evidence of their presence was found on the site.

**Recommendations - This is work you will need to commission to obtain planning permission or comply with legislation for other consent.**

| **Recommendations: Bats** |
|---|
| **No further surveys required**. However, due to the transient nature of bats, it is recommended that a "soft" strip method is employed and removal of any roofline materials i.e soffits etc. is carried out by hand.<br>**If bats are found during any stage of the development, work should stop immediately, and a suitably qualified ecologist should be contacted to seek further advice**.<br>**See also enhancements at 4.2** |
| **Recommendations: Birds** |
| Any scrub or tree removal should be undertaken outside the period 1st March to 31st August, or until all young birds have fledged. If this timeframe cannot be avoided, a close inspection of the scrub to be removed should be undertaken by a suitably qualified ecologist, immediately prior to clearance. **All active nests will need to be retained until the young have fledged.**<br>**See also enhancements at 4.2** |

For full justification of these recommendations, please go straight to section 4.0 Conclusions, Impacts and Recommendations. Otherwise, the full report starts below.

Contents

**1.0 Introduction and Context** ..... 4
1.1 Background ..... 4
1.2 Site Context ..... 4
1.3 Scope of the report ..... 4
**2.0 Methodology** ..... 5
2.1 Desk Study methodology ..... 5
2.2 Site Survey methodology ..... 5
2.3 Breeding birds and other incidental observations ..... 5
2.4 Suitability Assessment ..... 5
2.5 Limitations – evaluation of the methodology ..... 6
**3.0 Results and Evaluation** ..... 7
3.1 Desk Study Results ..... 7
3.2 Designated sites ..... 7
3.3 Priority Habitats ..... 7
3.4 Landscape ..... 7
3.5 Historical records ..... 8
3.6 Field Survey Results ..... 8
3.6.1 Building and potential roosting feature descriptions and photos ..... 9
3.6.2 Evidence of bats ..... 12
3.6.3 Breeding birds and other incidental observations ..... 12
**4.0 Conclusions, Impacts and Recommendations** ..... 12
4.1 Informative guidelines ..... 12
4.2 Evaluation ..... 12
**5.0 Bibliography** ..... 14
**Appendix 1: Survey Plan** ..... 15
**Appendix 2: Proposed Site Plan** ..... 15
**Appendix 3: Desk Study Information** ..... 16
**Appendix 4: Legislation and Planning Policy related to bats** ..... 16

## 1.0 Introduction and Context

### *1.1 Background*

The building surveyed at 59 Mellor Brow is a detached house built circa 1975. Ark Ecology were commissioned to undertake a Potential Roosting Features (PRF) survey to support a planning application for an extension to the property.

Hereafter within this report, the land encompassed by the red-line boundary of the planning application is termed '**the Site**' or '**the Application Site'**.

### *1.2 Site Context*

A bat survey has been deemed necessary due to the nature of the proposed works and location of the site. In addition, the presence or absence of Barn owl and nesting birds has been taken into consideration, along with other local wildlife.

### *1.3 Scope of the report*

This report provides a description of all features suitable for roosting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on constraints to the proposals as a result of roosting bats, and summarises the requirements for any further surveys, to inform subsequent mitigation proposals, achieve Planning or other statutory consent, and to comply with current wildlife legislation.

The aim of the assessment was to determine the presence or evaluate the likelihood of the presence of roosting bats or breeding birds, and to gain an understanding of how they could use the site. Due to the transient nature of bats, this report is not able to definitively ascertain the absence of bats, rather the absence of *evidence* of use by bats either prior to or at the time of the survey.

To achieve this, the following steps have been taken:

- A desk study has been carried out, including information from local wildlife groups & MAGiC
- A field survey has been undertaken, including an external survey and internal inspection where possible.
- An outline of likely impacts on any known roosts or nesting sites has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on Protected Species Mitigation Licensing if appropriate.

A survey plan is presented in Appendix 1, the proposed Project Plan is included in Appendix 2 (where available), desk study results are provided in the Appendix 3 and a summary of relevant legislation can be found in Appendix 4.

The assessment is informed by the Bat Conservation Trust publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2016).

## 2.0 Methodology

### *2.1 Desk Study methodology*

Prior to attending the Site, desk and internet based resources were used to obtain background information about known bat habitat and occurrences in an approx. 2km surrounding radius.

The resources used for the desk study were as follows:

- Google Earth Pro (http://earth.google.co.uk) for aerial photographs
- Multi-Agency Geographic Information for the Countryside (MAGIC) collaborative database website (http://magic.defra.gov.uk/MagicMap.aspx), for information on statutory designations.
- Local bat care group for local knowledge on known roosts.

### *2.2 Site Survey methodology*

All features that will be impacted by the project proposals were assessed for their bat roosting and/or commuting habitat. The surveyor systematically surveyed all features suitable and for signs of bat activity.

<u>For any surveyed buildings:</u>

A non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building for potential access/egress points, and for signs of bat use. An internal inspection of the building was also made, including areas of derelict or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope & torch. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

### *2.3 Breeding birds and other incidental observations*

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls *Tyto alba*.

### *2.4 Suitability Assessment*

All affected survey features on site were categorised according to the likelihood of bats being present, in line with best practice guidelines (Collins, J. (ed) 2016). The features that dictate the likelihood of roosting bats are summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

*Table 1: Features of a building that are correlated with use by bats*

| **Likelihood of bats being present** | **Feature of building and its context** |
|---|---|
| Higher | Buildings/structures with features of particular significance for roosting bats e.g., mines, caves, tunnels, icehouses and cellars.<br>Habitat on site and surrounding landscape of high quality for foraging bats e.g., broadleaved woodland, tree-lined watercourses and grazed parkland.<br>Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g., river and or stream valleys and hedgerows.<br>Site is proximate to known or likely roosts (based on historical data). |
| Lower | A small number of possible roost sites/features, used sporadically by more widespread species.<br>Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features.<br>Few features suitable for roosting, minor foraging or commuting. |

### *2.5 Limitations – evaluation of the methodology*

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on the site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study.

No specific limitations to the survey.

## 3.0 Results and Evaluation

### *3.1 Desk Study Results*

The site is located at National Grid Reference SD 64570 30970.

### *3.2 Designated sites*

The site is not within any designated areas, but within the Impact Risk Zone for Darwen River Section Site of Scientific interest (SSSI) which is located approx. 3100m southwest (outside the 2km study area). The proposal is not large enough to have an impact on any Sites of Scientific interest or other designated statutory sites.

### *3.3 Priority Habitats*

Ancient & semi-natural deciduous woodland is located at approx. 600m north at Hoolster wood and 1100 south at Jeffery Wood; Traditional Orchard and Woodpasture & Parkland also within the study area at 1300m south.

### *3.4 Landscape*

A review of the designated sites, aerial photographs (Figure 1), the Magic database (App. 3) and OS maps has been undertaken. Collated together, the site's relevance to bat habitat is described as being set in a semi-rural location with a surrounding landscape of pasture and meadows, the associated hedges and ditches making good quality commuting habitat for bats linked to the ancient & deciduous woodland in the wider landscape. This type of woodland is ideal roosting and foraging habitat for bats.


Figure 1: Aerial photo of site, showing surrounding landscape structure

### *3.5 Historical records*

A search of the magic database shows one granted European Protected Species Mitigation Licences (EPSMLs) within a 2km radius of the survey site for the damage and destruction of a resting site for common and soprano pipistrelle *Pipistrellus pipistrellus, P.pygmaeus* and whiskered *Myotis mystacinus* bat species.

Local bat care records show records of common and soprano pipistrelle maternity roosts within 1km of the Site.

### *3.6 Field Survey Results*

The survey was undertaken on 24/10/2022 by Carol Edmondson (Natural England bat licence number: **2015-12195** CLS-CLS), an MSc qualified ecologist with 9 years' experience in specific bat habitat surveying.
There was one survey building on the site which is illustrated in the map in Appendix 1. The environmental variables recorded at the time of the survey are shown in Table 2.

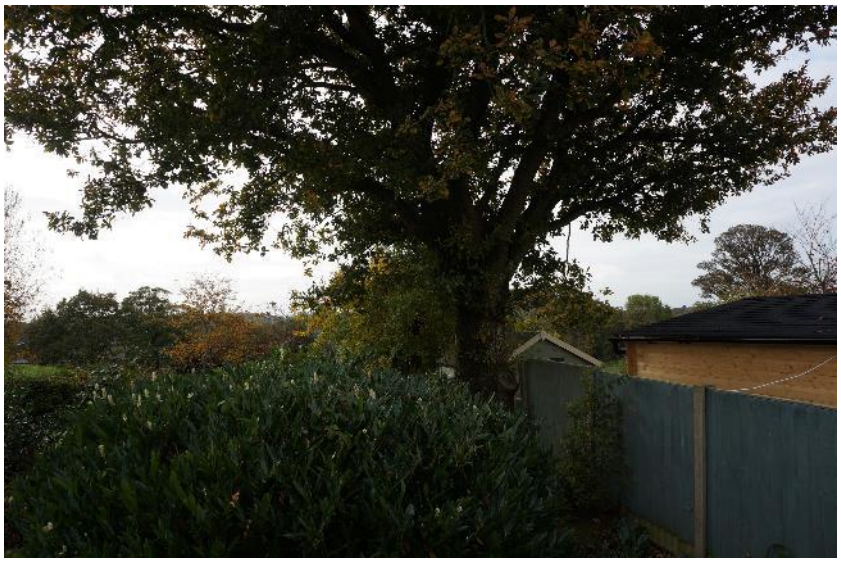
*Table 2: Environmental variables during the survey*

| Date: 24.10.22 | |
|---|---|
| Temperature | 12°C |
| Cloud Cover | 60% |
| Wind | 4 km/h |
| Rain | n/a |

### *3.6.1 Building and potential roosting feature descriptions and photos*

| | |
|---|---|
| The Site building is two storey, brick-built, detached house, integral garage, with an offset dual-pitched roof, the dropped eaves making the north (front) elevation single storey height. All windows and doors are uPVC and close fitting.<br><br>The dual-pitched roof is clad with cement-fibre Marley style tiles, the ridge running west to east, with no chimney. |  <br>Photo 1: North (front) elevation of 59 Mellor Brow. |
| Roofline materials & window frames were uPVC and in a good state of repair, with no gaps or cracks.<br>The soffits and barge boards were tight to the brickwork with no gaps behind suitable for bats to access. |  <br>Photo 2: East and North elevations showing uPVC roofline, door and window materials, and the dropped eaves to the front. |

| | |
|---|---|
| The south (rear) elevation of the property is full height with uPVC doors and windows, again close fitting with no gaps in the frames to the brickwork, wall plate or cavity.<br><br>The roof tiles were mostly moss covered, with no lifted or cracked tiles offering crevice dwelling bats access to roost. |  <br>Photo 3: South elevation. |
| There was one gap above the first floor far southwest window at the top left corner. This gap could potentially be suitable for bats to use as a roost, but there were no field signs of bats either on the wall just below or on the windowsill. |  <br>Photo 4: Close up of roof tiles and dormer window. |

| | |
|---|---|
| Internally there was a loft in the roof space, which will be impacted by the proposals.<br><br>The roof materials were in a good state of repair, with no tears in the roof membrane or rotting timber.<br>Daylight was visible at the north eaves indicating gaps to the exterior under the tile ends. However dense cobwebs along the line of the eaves internally shows that no bats or birds have been flying in this loft space in recent months.<br><br>There were no signs of bats using the loft space for roosting. |  <br>Photo 5: Internal view of the loft space with example gap to the exterior. |
| Further observations:<br>The mature oak *Quercus sp.* tree within the garden space would require further survey for bats should this be removed under the proposals. This tree will also be ideal for nesting birds. |  <br>Photo 6: Mature oak tree in the garden of the property. |

### *3.6.2 Evidence of bats*

There was no evidence of bats historically or currently using this building as roosting habitat.

### *3.6.3 Breeding birds and other incidental observations*

There was no evidence of nesting birds, however the surrounding gardens and mature oak tree offer plentiful nesting and feeding habitat for birds.

## 4.0 Conclusions, Impacts and Recommendations

### *4.1 Informative guidelines*

Bats and their roosts are protected under the Wildlife and Countryside Act and Conservation Regulations; see Appendix 3 for a summary of legislation protecting bats in the UK. Legislation protects all wild birds whilst they are breeding, and prohibits the killing, injuring, or taking of any wild bird or their nests and eggs. Certain species of bird, including the barn owl, are subject to special provisions; it is an offence to disturb any bird or their young during the breeding season.

### *4.2 Evaluation*

Taking the desk-based assessment and site survey results into account, the following value for roosting bats has been placed on The Site.

*Table 3: Evaluation Summary for presence of bats*

| | |
|---|---|
| **Survey assessment conclusions** | There is suitable bat foraging habitat in the proximity of these buildings however, the nature and condition of the buildings show that they have a **negligible** likelihood of supporting roosting bats. Taking into account the low number of potential bat roosting features and minimal impact of the proposals in the landscape it is deemed proportionate that no further surveys are required. |
| **Foreseen impacts** | There is a negligible risk that bats could be injured or killed during the building works. |
| **Recommendations** | No Further Surveys. However, due to the transient nature of bats, it is recommended that the "soft" strip method is employed for removal of any roofline materials i.e. soffits etc.<br>**If bats are found during any stage of the development, work should stop immediately, and a suitably qualified ecologist should be contacted to seek further advice**. |
| ***Enhancements***<br>*The Local Planning Authority* | The installation of a minimum of 1 bat box on the buildings when finished will provide additional roosting habitat for bats e.g.<br>• 1FF Schwegler Bat Box<br>• Greenwoods Ecohabitats<br>• https://www.greenwoodsecohabitats.co.uk/bats |

| | |
|---|---|
| *has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99* | • Soffit bat box (timber) e.g. https://www.wildcare.co.uk/media/catalog/product/cache/9b5d602e843d2f2d5201e0cbdcee8639/1/5/155c44d0da21c3_1.jpg<br><br>The Bat Conservation Trust guidance advises that bat boxes should be positioned 3-5m above ground level facing in a south/south-westerly direction with a clear flight path to and from the entrance.<br><br>Cavity bat boxes are also a good option in new construction e.g: https://www.nhbs.com/ib-vl-05-vivara-pro-build-in-woodstone-batbox?bkfno=252213<br>"Bat tiles" are another new build option where a traditional roofing membrane is to be used<br>(Breathable membranes are **not** compatible with bat roof tiles)<br>These can be used instead of bat boxes. |

*Table 4: Evaluation Summary for presence of breeding birds*

| | |
|---|---|
| **Survey assessment conclusions** | The surrounding site includes habitat for nesting birds. |
| **Foreseen impacts** | Bird's nests could be destroyed. |
| **Recommendations** | Any site clearance should be commenced outside the bird breeding season which is March – end August. If this is not practical, then a site check for nesting birds should be carried out by a suitably qualified ecologist immediately prior to commencement. |
| ***Enhancements***<br>*The Local Planning Authority has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99* | Install a minimum of one bird box on retained building or tree on site e.g.<br>• WoodStone® range of swallow nest cups, placed under the eaves<br>• https://www.wildcare.co.uk/vivara-pro-woodstone-build-in-11265.html<br>• Schwegler 1B nest boxes<br>• Schwegler 2H Robin Boxes<br>Nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. |

| | |
|---|---|
| | |

- **Lighting**

Any external lighting should not be directed at any wildlife features of the building as this will cause disturbance.

See *Bat Conservation Trust Guidance note 8/18 Bats and artificial lighting in the UK*

**5.0 Bibliography**

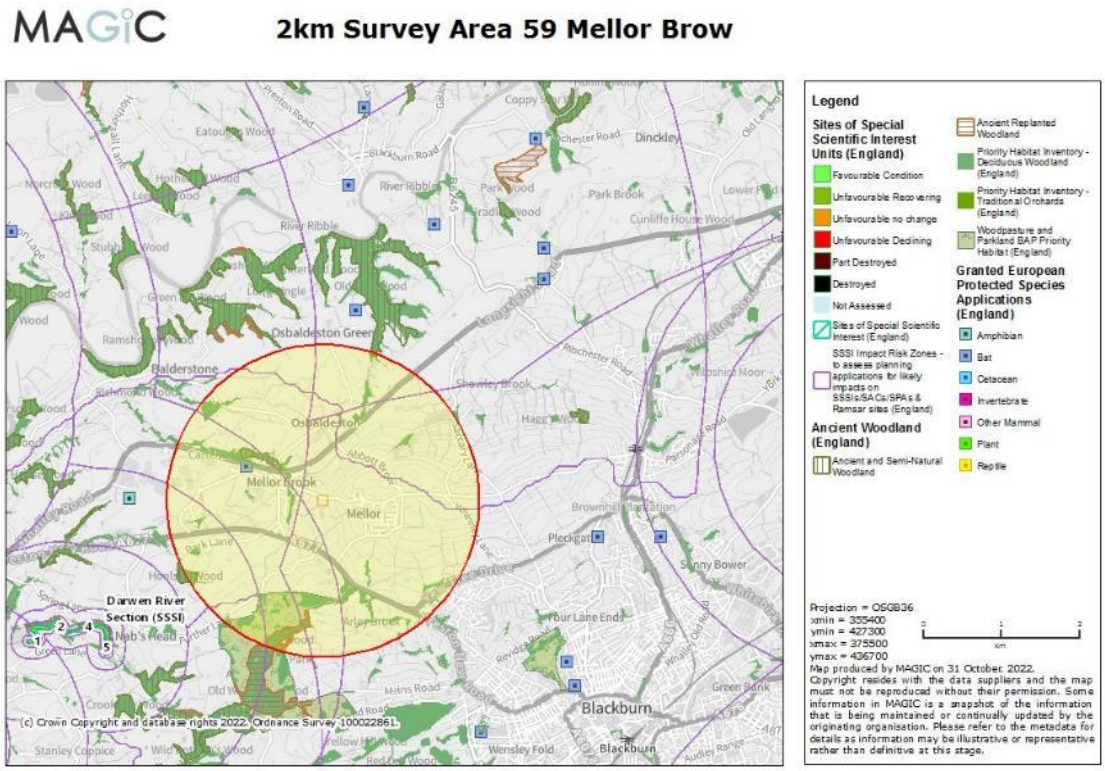

- Bat Conservation Trust: http://www.bats.org.uk/
- British Trust for Ornithology (2016) www.bto.org/about-birds/nnbw/putting-up-a-nest-box
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Google Earth Pro (2022)
- Magic database (2022) http://www.magic.gov.uk/MagicMap.aspx
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

## Appendix 1: Survey Plan


## Appendix 2: Proposed Site Plan

Not supplied

## Appendix 3: Desk Study Information




## Appendix 4: Legislation and Planning Policy related to bats

**LEGAL PROTECTION**

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2.

Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:

  a) to impair their ability:

  (i) to survive, breed, or reproduce, or to rear or nurture young

  (ii) to hibernate or migrate

  b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale

Effect on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant statutory authority (e.g. Natural England) will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

**NATIONAL PLANNING POLICY (ENGLAND)**

***National Planning Policy Framework***

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around

developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

***The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty***

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.