

3/2023/0595

25/9/2023



# **Preliminary Bat Roost Assessment & breeding birds survey**

**Site: 12 Calder Ave, Billington, BB7 9NQ**

15<sup>th</sup> September 2023

**CLIENT:**

Mr & Mrs Parkinson  
12 Calder Avenue  
Billington  
BB7 9NQ

**Prepared By:**

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**Date checked & released:**

17<sup>th</sup> September 2023

**Valid Until**

1<sup>st</sup> April 2025

**Ark Ecology: Lower White Carr Farm, Moor Lane, Whalley, Lancs. BB7 9JQ**

## **Summary**

This report presents the results of a daylight potential bat roost assessment (PRA) undertaken on 8<sup>th</sup> September 2023, at 12 Calder Avenue, Billington, Lancashire. The work has been commissioned in connection with a proposed planning application.

The scope of the survey has primarily considered roosting and hibernating bats, breeding birds and barn owls.

The survey has identified that there is **negligible** roosting habitat on site for bats, and no further surveys are recommended. No evidence of nesting birds 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**, however 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 as recommended 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.

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## 1.0 Introduction and Context

### 1.1 Background

Carol Edmondson of Ark Ecology was commissioned by Emma Parkinson to carry out a Potential Bat Roost Survey (PRA) at 12 Calder Avenue, Billington, Lancs in September 2023.

The survey building was a two-storey semi-detached residential dwelling.

From this point forward, the land encompassed by the red-line boundary of the survey map (appendix 1) is termed 'the Site'.

### 1.2 Context

A bat survey has been deemed necessary to support a planning application due to the nature of the proposed building 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, 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 website
- A field survey has been undertaken, including an external survey and internal inspection where possible.
- An outline of likely impacts on any known roosts has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on European Protected Species Mitigation Licensing where 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.

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

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.

### 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.

#### For any surveyed buildings:

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	<p>Buildings/structures with features of particular significance for roosting bats e.g., mines, caves, tunnels, icehouses and cellars.</p> <p>Habitat on site and surrounding landscape of high quality for foraging bats e.g., broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>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.</p> <p>Site is proximate to known or likely roosts (based on historical data).</p>
Lower	<p>A small number of possible roost sites/features, used sporadically by more widespread species.</p> <p>Habitat suitable for foraging in close proximity but isolated in the landscape. Or an isolated site not connected by prominent linear features.</p> <p>Few features suitable for roosting, minor foraging or commuting.</p>

## 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 description 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.

- There were no limitations to the survey.

## 3.0 Results and Evaluation

### 3.1 Desk Study Results

The desk study includes a 2km buffer zone surrounding The Site.

The Site is located at National Grid Reference SD 72454 35639

### 3.1.1 Designated sites & Priority habitats

The site lies within the following designated areas:

- Impact Risk Zone (IRZ) for Hodder river, Cock Wood Gorge Light Clough Site of Special Scientific Interest (SSSI)

The Site proposals will not likely have any impact on the SSSI due to the size of the development.

- There are no Local or National Nature Reserves within the study area but is located 1.9km from Forest of Bowland AONB.

Other Priority habitats:

- Several areas of Ancient and Semi-Natural Woodland & deciduous woodland within the study area, the closest at 400m to the south.

### 3.1.2 Landscape

A review of the designated sites, aerial photographs (Figure 1), the Magic database (App. 3) and OS maps has been carried out. The Site and its surrounding landscapes' relevance to bat habitat is described below:

The Site is located in a residential estate, in Billington Village. Broadleaf woodland is located at 400m to the south, with the river Calder at 730m to the north. These features along with the wider rural landscape of pasture and meadows with hedges, and small areas of deciduous woodland form suitable commuting and foraging habitat for bats.



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

### 3.1.3 Historical records

A search of the magic database shows two granted European Protected Species Mitigation Licence (EPSMLs) for bats within a 2km radius of the survey site. These licences are to destroy the breeding or resting place of common pipistrelle *Pipistrellus pipistrellus*, and brown long eared bat *Plecotus auritus*.

Local records show the presence of common pipistrelle bats in the survey area.

This shows the presence of these bats within the survey area but does not exclude the presence of other bat species.

### 3.2 Field Survey Results

The survey was undertaken on 08/09/2023 by Carol Edmondson (Natural England bat licence number: 2015-12195 CLS-CLS), an MSc qualified ecologist with 10 years' experience in specific bat surveying.



The survey was carried out using a high-powered torch, binoculars and endoscope where necessary. The proposals include for the change of roof pitch on the attached garage. The entire exterior of the dwelling was surveyed for potential bat roosting features, to ensure no disturbance will be caused to bats by the proposed works.

There is 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: 08/09/2023	
Temperature	18°C
Cloud Cover	20%
Wind	6 km/h
Rain	none

### 3.2.1 Site Feature descriptions and photos

<p><b>Building Description</b> The survey building is a semi-detached residential dwelling, with proposals to extend the height on the garage roof and alter the pitch. The buildings were rendered brick, with cement tiled roof to the dwelling, and pitch felt to the flat roof of the garage.</p>	 <p>Photo 1: Overview of the complex roof structure.</p>
<p><b>Potential roosting features:</b> Main dwelling: All roofline materials, windows and doors were uPVC and in an excellent state of repair, with no gaps to the wall or cracks that could be used by bats for roosting. Roofing materials were all in an excellent state of repair, with no lifted or cracked tiles forming potential gaps for crevice dwelling bats.</p> <p>No potential bat roosting features (PRF's).</p>	 <p>Photo 2: Southwest and southeast elevations of the house.</p>

**Garage:**

A single storey, flat roofed garage attached to the southwest elevation, and running the full length of the gable end.

The door and window frame were timber and close fitting with no gaps to the brickwork or lintels.

Roof fascia boards were also timber, and although there was the occasional gap these were either open above to the elements or covered in cobwebs.



Photo 3: Northwest elevation of the garage.

The garage doors was an 'up-and-over' door with a gap along the top which could potentially allow access to the interior of the garage.

The roof felt was in a good state of repair. Any slight gaps were inspected by endoscope; but were considered too short to be suitable for bats to roost under at max. 1.5cm depth.

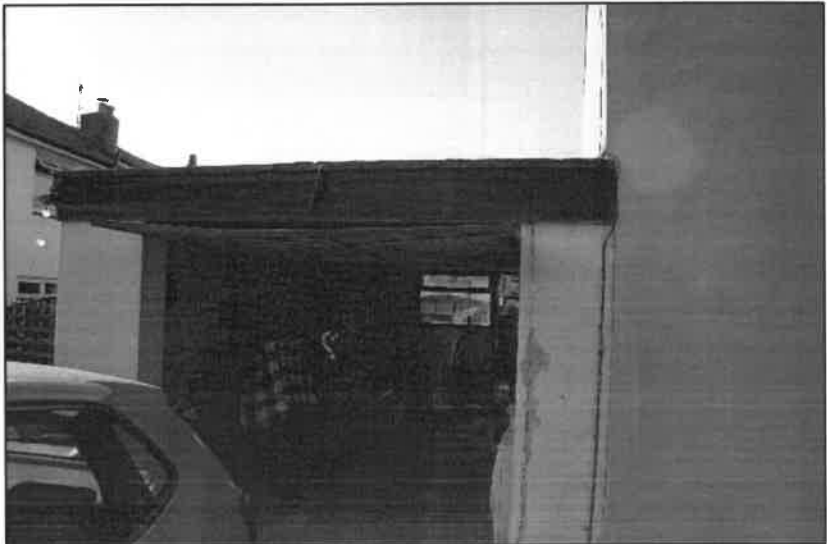


Photo 4: Southeast elevation of the garage.

**Internally** the garage was underdrawn by a flat sheet material, similar to plasterboard. There were some gaps at the corners, and a large opening in the centre of the ceiling.

All gaps were closely inspected by endoscope, but no evidence of them being used by bats was found.

No droppings present on any surfaces.



Photo 5: Example of gap in the ceiling boards.

#### ***Evidence of bats***

There was no evidence of bats historically or currently using this building as roosting habitat i.e. no droppings, urine stains or grease smudge marks either internally or externally.

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

No signs of breeding birds on or within the building.

## **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*

<b>Survey assessment conclusions</b>	There is suitable bat foraging habitat in the proximity of this site and bat roosts present in the 2km study area. However, taking into account the nature and condition of this building, and the lack of potential roosting features as described above, the surveyor considers that the building has a <b>negligible</b> likelihood of supporting roosting bats.
<b>Foreseen impacts</b>	There is a negligible risk that bats could be injured or killed during the building process.
<b>Recommendations</b>	No further surveys. However, 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.
<b>Enhancements</b> <i>The Local Planning Authority has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99</i>	<p>The installation of a bat box on the building when finished will provide additional roosting habitat for bats in the area e.g. Local supplier:</p> <ul style="list-style-type: none"> <li>• Greenwoods Ecohabitats</li> <li>• <a href="https://www.greenwoodsecohabitats.co.uk/bats">https://www.greenwoodsecohabitats.co.uk/bats</a></li> <li>• Kent Bat Box (timber).</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>• Cavity bat boxes are also a good option in new construction for example available from: <a href="https://www.nhbs.com/ib-vl-05-vivara-pro-build-in-woodstone-batbox?bkfno=252213">https://www.nhbs.com/ib-vl-05-vivara-pro-build-in-woodstone-batbox?bkfno=252213</a></li> </ul>

Table 4: Evaluation Summary for presence of breeding birds

<b>Survey assessment conclusions</b>	The site surroundings include suitable habitat for nesting birds, but none within the proposed site.
<b>Foreseen impacts</b>	No impact.
<b>Recommendations</b>	N/A
<b>Enhancements</b> <i>The Local Planning Authority has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99</i>	<p>Install a minimum of 1 bird boxes on site, on an existing tree or building e.g.</p> <ul style="list-style-type: none"> <li>• Good quality timber nesting box with hole protection</li> <li>• Schwegler 1B nest box</li> <li>• Schwegler 2H Robin box</li> </ul>

	<p>Regular nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight.</p> <p>House martin/swallow/swift boxes should be placed under the eaves with clear entrance/exit paths, ideally on the west elevation.</p>
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## 5.0 Bibliography

- Andrews H and Gardener M 2016, *Bat Tree Habitat Key – Database Report 2016*. Bridgewater:AEcol.
- Andrews H *et al.* 2016. *Bat Tree Habitat Key*, 3<sup>rd</sup> edn. Bridgewater: AEcol
- Bat Conservation Trust: <http://www.bats.org.uk/>
- British Trust for Ornithology (2016) [www.bto.org/about-birds/nnbw/putting-up-a-nest-box](http://www.bto.org/about-birds/nnbw/putting-up-a-nest-box)
- Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*, 3<sup>rd</sup> edition, Bat Conservation Trust, London.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Google Earth Pro (2021)
- Magic database (2021) <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

The architectural drawings include:

- FRONT ELEVATION:** Shows a two-story house with a central entrance, a dormer window, and multiple windows.
- REAR ELEVATION:** Shows the back of the house with a large glass door and several windows.
- SIDE ELEVATION:** Shows the side profile of the house with a gabled roof.
- Interior Renderings:** Three images showing the proposed interior layout, including a living area, a kitchen, and a bedroom.
- Scale Bar:** A horizontal scale bar marked from 0 to 4 meters.

**Technical Specifications:**

- All external finishes to match existing
- Dark Roof
- Grey Rendered Walls
- White uPVC Windows
- Black uPVC Roof Line

**Client and Project Information:**

- CLIENT:** Mrs. E. Parkinson
- PROJECT:** 12 Calder Avenue, Billingen, BB7 9WQ
- DRAWING TITLE:** Proposed (1) Elevations
- DRAWING NUMBER:** 0956/01\_06
- DATE:** 19/07/2023
- Scale:** @ A1 1:50

**Company Information:**

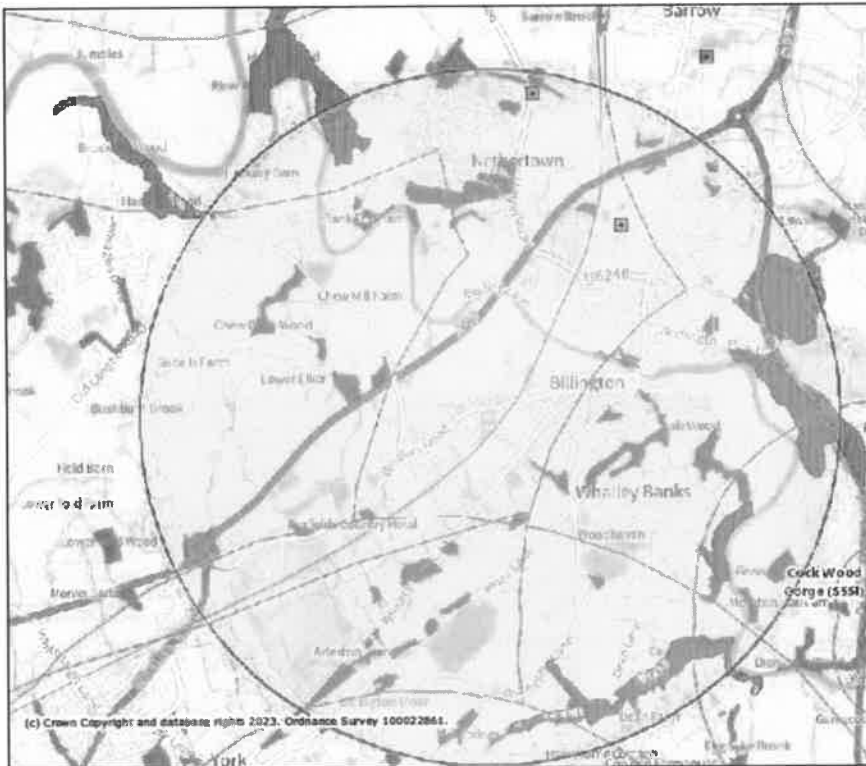
- HOME** Architects & Interior Design
- 13 Springside View, Bury, BL8 4LU
- Company No. 13018964
- Address: home@homeorguides.com
- Website: www.homeorguides.com

**Disclaimer:** DRAWING PRODUCED FOR PLANNING PURPOSES ONLY. DO NOT SCALE FROM THIS DRAWING.

Appendix 3: Desk Study Information

MAGIC

MAGIC results 12 Calder Ave 09.23



**Legend**

**Sites of Special Scientific Interest (England)**

- ✓ Favourable Condition
- ✗ Unfavourable Recovering
- ✗ Unfavourable no change
- ✗ Unfavourable Declining
- ✗ Part Destroyed
- ✗ Destroyed
- ✗ Not Assessed

**SSSI Impact Risk Zones - to assist planning applications for (Rudy) impacts on SSSI/ SAC/ SPA/ S/ Ramsar sites (England)**

- SSSI Impact Risk Zone
- SSSI Impact Risk Zone

**Ancient Woodland (England)**

- ✓ Ancient and Semi-Natural Woodland
- ✗ Ancient Restored Woodland

**Priority Habitat Inventory - Deciduous Woodland (England)**

- ✓

**Granted European Protected Species Applications (England)**

- ✓ Amphibian
- ✓ Bat
- ✓ Otter
- ✓ Invertebrate
- ✓ Other Mammal
- ✓ Plant
- ✓ Reptile

**Projection = OSGB36**  
 xmin = 267200  
 xmin = 433500  
 xmax = 377100  
 ymax = 436100

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