

# Bat Survey Report

2 Beacon View, Longridge, Preston, PR3 2NB

*Prepared for*

Mr and Mrs Dewhurst

11<sup>th</sup> October 2022

Version 01

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**Appendix C:** Desk Study Data

**Note:** all Figures and Tables integral with the report structure.

## 1. Introduction

### 1.1. Background

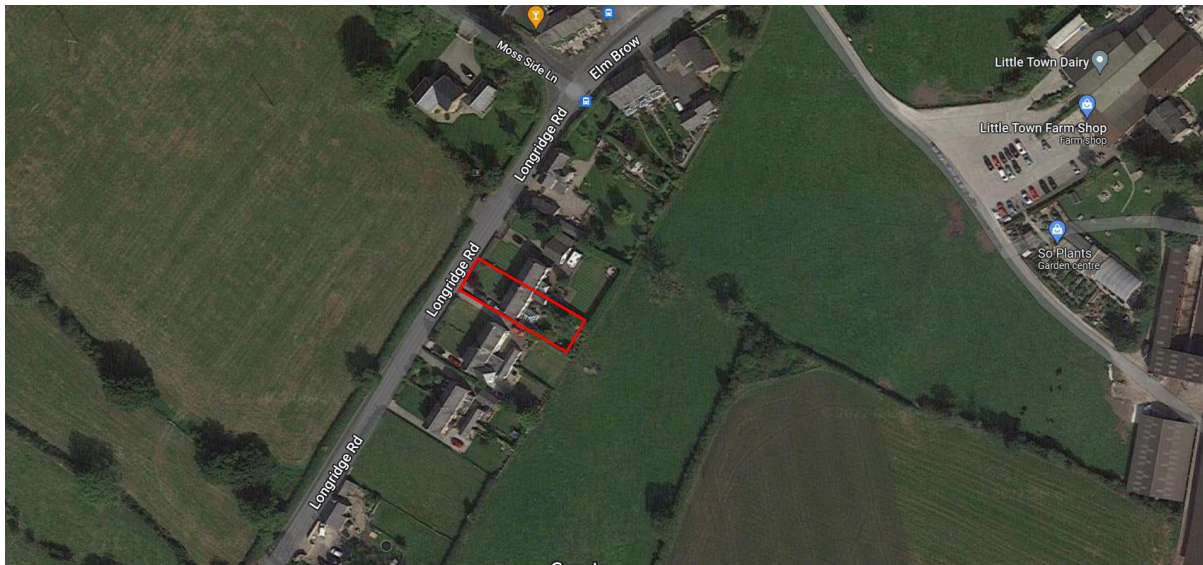
Miranda Cowan Ecology Ltd. was instructed by Mr and Mrs Dewhurst ('the client') in September 2022 to undertake a Preliminary Bat Roost Assessment (PRA) and one follow up bat activity survey for a residential dwelling located at 2 Beacon View, Longridge, Preston, PR3 2NB.

**Figure 1.1** illustrates the location of the property, which is centred on Ordnance Survey National Grid Reference (OSNGR) SD 6039 5916. The proposal relates to a two-story extension at the rear of the property. The existing conservatory will be replaced with a new cavity wall constructed on new foundations, with the ground floor being converted to a living room and an additional bedroom on the first floor, which will be tied into the roof. The adjoining existing garage will also be extended. **Appendix B** illustrates the proposal.

The PRA and one bat activity survey for the property graded as low value for bats was completed on the 8<sup>th</sup> of September 2022. The PRA and bat activity survey were completed by Miranda Cowan Ecology Ltd, BSc (Hons), PGCert FdSc, MCIEEM (Bat Class licence WML – CL17-2021-52426).

The bat survey also included recording any observations of nesting bird activity.

**Figure 1.1:** Location of 2 Beacon View



## 1.2. Survey Aims

The aims of the PRA were to:

- Determine the potential of the property for roosting bats, by identifying and describing PRF and any access / egress points.
- According to standard assessment criteria the property were graded as Negligible, Low, Medium or High potential for roosting bats.
- Complete follow up dusk emergence / dawn re-entry surveys, according to the results of the PRA.
- Estimate the size and status of the roost, for where bats were found to be present.
- Recommend further surveys, mitigation measures (including avoidance of ecological impact), compensation and biodiversity enhancement.

## 1.3. Legislative Context

### **Bats**

All bats are protected in the UK under the Conservation of Habitats and Species Regulations 2017 (as amended) and Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). In summary, in the UK, it is an offence to:

- Deliberately capture, injure or kill a bat.
- Deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young, hibernate or migrate or significantly affect the local distribution or abundance of the species.
- Damage or destroy a roost (this is an absolute offence).
- Intentionally or recklessly disturb a bat at a roost.
- Intentionally or recklessly obstruct access to a roost.

The legislation also applies to sites that are not currently occupied, as bats can return to roosts year after year.

Some UK bats species are also included in the list of habitats and species, which are of Principle Importance for the conservation of biodiversity in England as required under Section 41 (S41) of the Natural Environmental and Rural Communities (NERC) Act. The S41 list is used to guide decision-makers, including local planning authorities, in implementing their duty under Section 40 of the Act, to have regards to the conservation of biodiversity in England, when carrying out their normal functions.

Natural England is the Government body responsible for nature conservation in England. Local planning authorities must consult them before granting planning permission for any work that would be likely to result in harm to bats or their habitat. Natural England consults with the BCT to provide advice.

“Development” licences for European Protected Species (EPS) are issued by Natural England for any actions that may compromise the protection of bats, under the Conservation of Habitats and Species Regulations 2017 (as amended).

### ***Breeding Birds***

All birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended) and it is an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird; and,
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.

Schedule 1 of the Wildlife and Countryside Act 1981 provides further protection for species such as barn owl, a species that typically nests in barns / agricultural buildings. If any person intentionally or recklessly disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. That person shall be guilty of an offence.

## 2. Methods

### 2.1. Desk Study

Bat roost records, for up to 2 km from the central grid reference: SD 6039 5916, were requested from Lancashire Environmental Records Network (LERN). This data was reviewed together with analysis of Google Pro Aerial imagery to determine the presence of habitat connectivity between the property and surrounding landscape, which could be used for bat commuting and foraging.

Defra’s Multi-Agency Geographic Information for the Countryside (MAGIC) interactive map was used to identify any Special Areas of Conservation (SAC) or Sites of Special Scientific Interest (SSSI) within 10 km of the property which were relevant to bats. MAGIC was also used to determine the presence of any bat European Protected Species licencing (EPSL) within 2 km.

### 2.2. Preliminary Bat Roost Assessment

The PRA followed methodologies detailed in the Bat Conservation Trust guidelines (Collins, 2016). This involved an external (internal loft space not safe to access) inspection of the property. The external features were assessed using close-focusing binoculars and a high-powered torch to identify PRF, such as gaps under slates, eaves, gaps above doors, between the brickwork and wood fascia boarding.

Any potential entry / exit points were noted on a plan and described. In addition, any direct evidence of bats, such as scratch marks, oil stains, droppings and feeding remains were also recorded.

The property was assigned a level of roost suitability in accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016), see **Table 2.1**.

**Table 2.1:** Bat roost suitability and descriptions (PRF Potential Roost Features)

Bat Roost Suitability	Description of Features
Confirmed presence	Bat presence confirmed as part of the Preliminary Bat Roost Assessment.
High	Buildings with many PRF and suitable for use by a larger number of bats including maternity colonies.
Moderate	Buildings with a smaller number PRF, but still supporting features that could be attractive to bats and potentially support maternity colonies.
Low	Buildings with limited PRF but which could be used on a sporadic or occasional basis by a low number of bats, but which are unsuitable for maternity roosts.
Negligible	Buildings which appear unsuitable for roosting bats due to a clear lack of roosting spaces such as voids and/or absence of suitable access points.

### 2.3. Bat Emergence Survey

**Table 2.2** shows the date and timings of one dusk emergence survey, which commenced 15 minutes before sunset and continued until 90 minutes after sunset. The surveyor recorded the time of any bat emergence, the point from which they emerged and the direction of flight (if seen). Species and call type (social, commuting, foraging) were also recorded. Echo Meter Touch 2 PRO devices were used by surveyors to listen to, record and identify bats in real-time.

The survey focused on a gap under two roof tiles at the rear of the property, see **Appendix B** PRA assessment findings.

**Table 2.2:** Date, timings, and weather conditions of bat activity survey

Survey Type	Date	Sunset/ Sunrise	Start time	End time	Weather
Dusk	08/09/2022	19.42	19.20	21.30	14 <sup>0</sup> Dry and clear sky, Beaufont scale 2

### 2.4. Breeding birds

An inspection was made for any active birds' nest, including observation of nests being built and by identifying any bird species entering features of the property.



### 3. Results

#### 3.1. European Protected Species Licences

At the time of review (07/10/2022) no European Protected Species Licences (EPSL) were documented on MAGIC.

#### 3.2. Lancashire Environmental Record Network

South Lancashire Bat Group submit records to LERN, where there are 28 listed bat records. The records date from 2005 and 2010 and relate to common pipistrelle *Pipistrellus pipistrellus* recordings with use of a bat detector. There are no records specific to the property, with the nearest records at a distance of 250m. The records are not considered significant to the property and its proposal.

#### 3.3. Habitat Connectivity with the Site

2 Beacon View is located within a rural setting surrounded by semi-improved fields used for grazing, which are bounded by a network of hedgerows, some of which are fragmented. There are limited areas of continuous woodland cover, with the potential functionality of bat commuting and foraging assessed as moderate.

#### 3.4. Preliminary Bat Roost Assessment

##### ***Building description***

A well-maintained brick-built end terrace, with a glass conservatory extension to the rear of the property, a small porch overhang to the front and a garage located on the driveway, which is large enough to accommodate one vehicle.

The roof and porch overhang are constructed from slate tiles, with PVC fascia boarding fixed to the rear, front and west gable end. The windows are constructed from windows and the conservatory is a mix of glass and PVC frame.

The garage is brick built, with front wooden doors and a side door for access from the rear garden. The roof is constructed from slate tiles and there is fascia boarding on the garble ends.

The loft void was not safe to access.

##### ***Potential Roost Features***

**Appendix B** includes the findings and photographic plates from the PRA. Overall, the main property and garage are well-maintained structures, with the roof tiles mostly sitting flush and the fascia boarding on both the property and the garage being firmly fixed, with no obvious gaps beneath. There are no gaps or crevices around windows or doors to either the property or garage.

The only identified PRF related to two tiles to the rear of the property, one above the conservatory with a gap beneath and a second relating to newly replaced tiles, one that has dislodged. The gaps associated with the tiles are large enough to accommodate crevice dwelling bats such as common pipistrelle *Pipistrellus pipistrellus*.

No evidence of bat droppings was found stuck to the external walls or windows of the property or garage.

In accordance with criteria set out by the Good Practice Guidelines (Collins, 2016), the PRF of property were assessed as having Low Bat Roost Potential; PRF were limited in number but could be used on a

sporadic or occasional basis by a low number of bats. No PRF were identified with the garage, and this was graded as negligible value for roosting bats.

### **3.5. Bat Emergence Findings**

No bats were observed emerging from the PRF's during the dusk survey. A single common pipistrelle bat was recorded as distant foraging around the time of 20.10-20.16.

### **3.6. Breeding Birds**

There was no evidence of any active bird's nests or bird activity around the property or garage features. There was a hole fronted bird box fixed to the rear of the garage that was being used by blue tit *Cyanistes caeruleus*, assumed as nesting.

## 4. Conclusion and Recommendations

### 4.1. Summary Findings

The bat activity survey confirmed that no bats were observed to be egressing the PRF of 2 Beacon View, Longridge, Preston. There was a single record of distant common pipistrelle foraging, although this was not of significance to the outcome of the survey.


Based on the collective survey findings, bats are currently assessed as absent from the property and no additional survey effort / specific mitigation will be required.

Taking into context the mobile nature of bats, this Bat Survey Report will remain valid for two bat seasons. Should the proposal extend beyond this time, a repeat bat PRA and emergence survey will be required.

### 4.2. Provision of Bat Roost Features

Any development provides an opportunity for a positive contribution towards helping conserve and enhance local bat populations. This can be achieved by integrating new features that bats can seek out for roosting. It is therefore recommended that a single bat box is sourced from <https://www.nhbs.com/> and positioned on the new proposed dwelling in accordance with the notes in **Table 4.1**.

**Table 4.1:** Example bat box suitable for integrating with new developments.

	<p>A bat box incorporated into the design scheme will provide additional roosting opportunities for bats.</p> <p>These could be attached to the building exterior or where this is not possible, on a retained mature tree.</p> <p>The box should be sited at a minimum height of 3m, facing south to southwest to allow heating from the sun and shelter from prevailing winds and close to vegetation.</p> <p>Boxes with an opening at the base will allow droppings to fall out naturally and will not require cleaning.</p> <p>Only a suitably experienced and licensed ecologist can inspect bat boxes.</p>
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### 4.3. Lighting

To avoid impacts from any proposed increased artificial light levels, the following can be used to minimise adverse impacts from lighting on bats (and other wildlife):

- Type of lamp: using low- or high-pressure sodium instead of mercury or metal halide lamps;
- Use of UV filters/glazing;
- Light levels: Within standards for safety and security, light levels should be at the minimum required;
- Timing: Use of timers and/or movement sensors to ensure lighting is only used when required;
- Minimising light spill by design of luminaire and use of accessories such as hoods, cowls louvres and shields; and
- Use directional lighting to avoid illuminating important commuting corridors and foraging habitat, as well as potential bat roost features within trees.

Of particular importance will be to direct lighting away from surrounding trees, as these features could be used by commuting and foraging bats.

#### **4.4. Breeding Birds**

The property does not have potential for nesting birds and no further survey / mitigation recommendations are required. The nest box fixed to the garage should be temporarily removed in the winter should there be a risk of causing disturbance (noise and vibrations) to the potential nest during the months of March to August, inclusive. Birds can also extend their nesting season into September; therefore, consideration should also be given to bird nesting during this month. Where the nest box is temporarily removed, it should be sighted in an alternative location within the garden.

## 5. References

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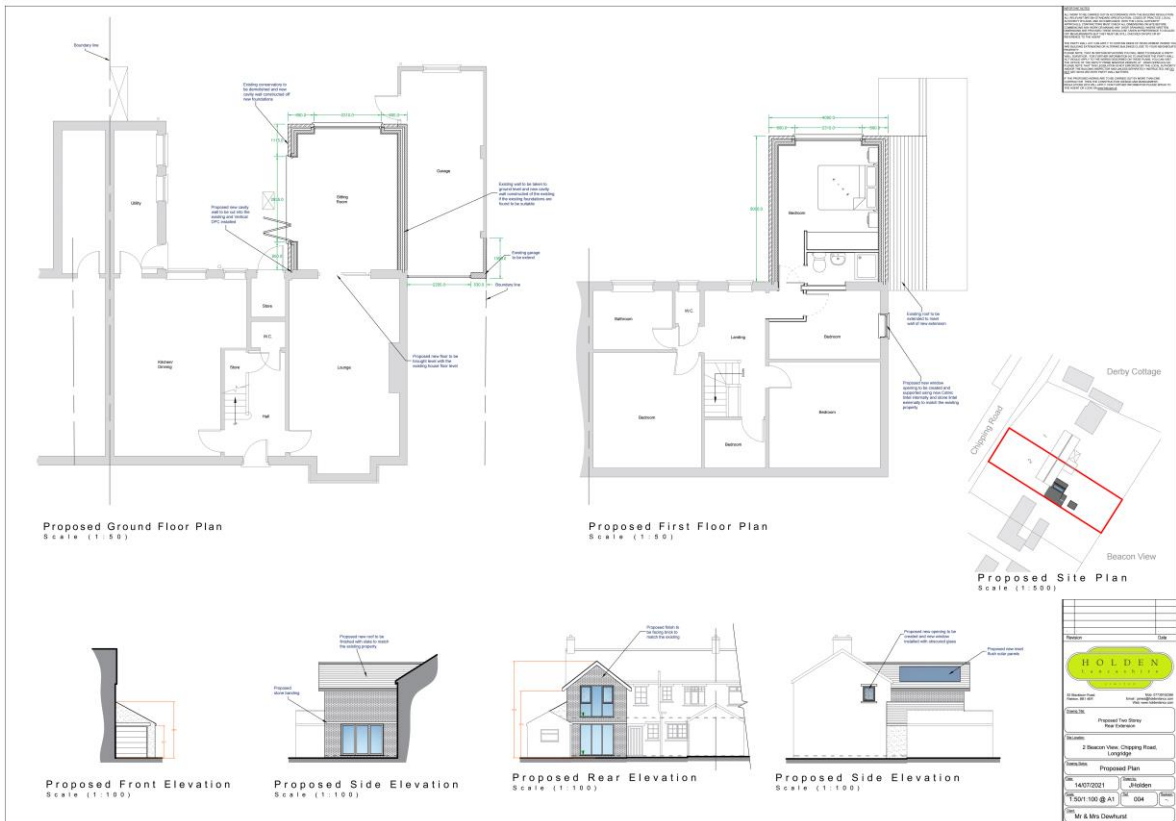
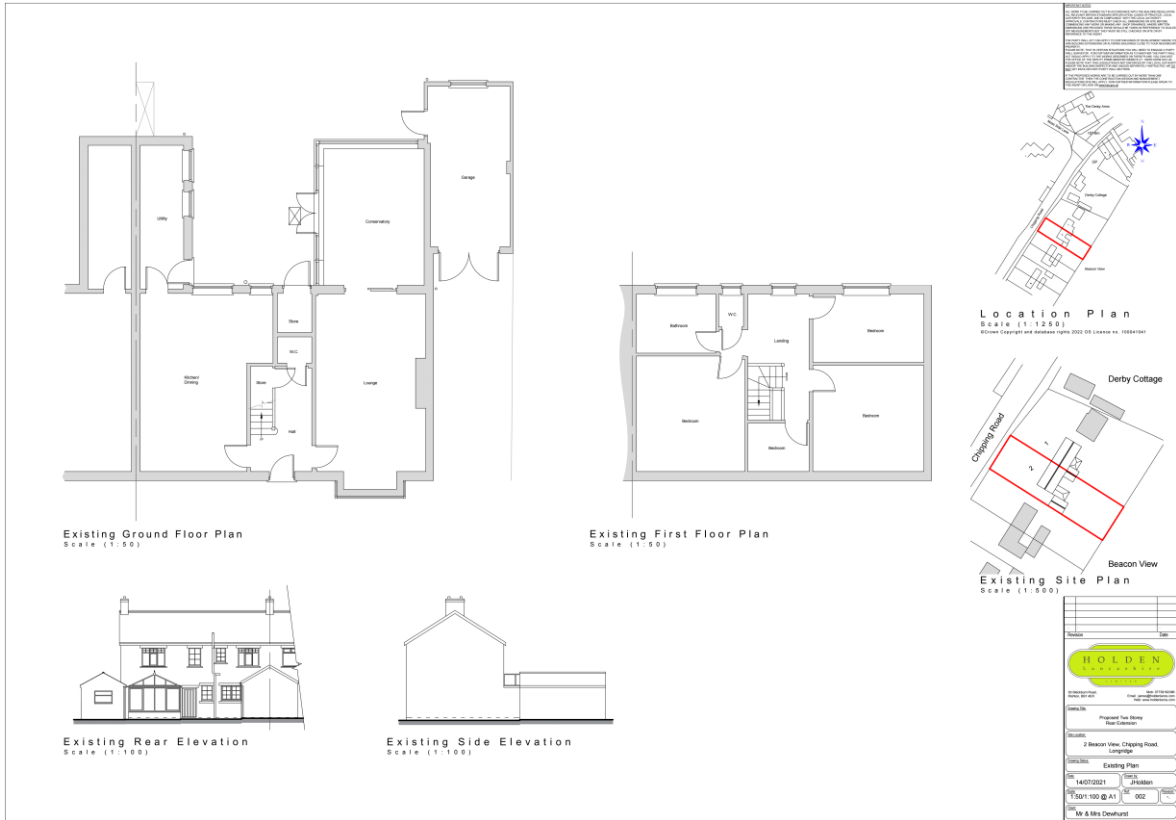
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# Appendix A: Proposal Plan



## Appendix B: Preliminary Roost Assessment Record Sheet

<b>Site:</b> 2 Beacon View, Longridge, Preston, PR3 2NB	<b>Structure Ref / OS Ref:</b> SD 6039 5916	<b>Date:</b> 8 <sup>th</sup> September 2022
<b>Surveyor:</b> Miranda Cowan Ecology Ltd.	<b>Weather:</b> Dry conditions, good visibility	
<b>Structure Description:</b> End terrace, brick-built house with west facing gable end, slate roof with fascia boarding on all aspects of property. PVC windows, guttering and drainpipes. There is a porch overhang at the front of the property and a glass / PVC conservatory at the rear of the property, which is to be demolished to accommodate the rear extension. The property is well maintained, with fascia boarding firmly sealed to the vertical roof on all aspects of the property. There is a garage at the side of the property, with wooden doors and firmly sealed tiles roof.		
<b>Note of PRF:</b> Overall the, the roof tiles sit flush. The only exception are two tiles to the rear of the property, one above the conservatory with a gap beneath and a second relating to newly replaced tiles, one that has dislodged. The gaps associated with the tiles are large enough to accommodate crevice dwelling bats such as common pipistrelle <i>Pipistrellus pipistrellus</i> .		
<b>Resulting Value:</b> Low bat roost due to PRF at rear of property, relating to two tiles that are lifted. The garage has negligible bat roost potential.		
<b>Additional Survey Requirements:</b> One dusk activity survey at the rear of the property.		
<b>Plate 1:</b> Front view of property with neatly flush roof tiles and no gaps under fascia. Garage to the side of the property (no image) with wooden doors, no gap above the doors or associated with the roof.	<b>Plate 3:</b> Gable end of property, the gap between the fascia and vertical wall is c.5-7cm, large enough to inspect and confirm vertical roof sits flush with roof.	
		
<b>Plate 2:</b> Rear view of property with PRF associated with two tiles. No bat droppings stuck to walls or windows.	<b>Plate 4:</b> Fascia boarding at rear of house has no gaps beneath, it is fully sealed to the wall. No bat droppings stuck to walls or windows.	
		