



305 Middleton Road, Manchester, Greater Manchester

Bat Activity Survey Results Report

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A report for

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July 2022

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1. INTRODUCTION

1.1 BACKGROUND AND REASON FOR SURVEY

PENNINE ecological have been commissioned to undertake bat presence/absence surveys of 305 Middleton Road, Manchester. The building was previously surveyed in May 2020 by Pennine Ecological and found to be absent of any bat roosts. However as these surveys were undertaken two years ago, the local planning authority have advised that updated surveys are required to support the new planning application.

The previous surveys identified the building to be of moderate suitability to support a bat roost(s). The current condition of the building remains consistent with the building condition in 2020 and therefore the building assessment has remained as moderate suitability. In accordance with current Bat Conservation Trust (BCT) guidelines, two presence/absence surveys were undertaken in June and July 2022 (see Figure 1 below).

Figure 1: Extract from Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016)

Table 7.1 Recommended timings for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability	Moderate roost suitability	High roost suitability
May to August (structures) No further surveys required (trees)	May to September ^a with at least one of surveys between May and August ^b	May to September ^a with at least two of surveys between May and August ^b
^a September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. ^b Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example, a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse). If there is potential for a maternity colony then consideration should be given to detectability. A survey on 31 August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.		

The surveys have been undertaken to determine whether the proposals to demolish the existing buildings to facilitate the construction of a new dwelling house, would result in impacts to bats which may potentially be using the buildings.

The results, conclusions and recommendations following the surveys, including any indicative mitigation to inform an application to Natural England for a European Protected Species Mitigation Licence (EPSML), where necessary, will be supplied within this report.

In accordance with Biodiversity Net Gain: Good practice principles for development (*CIEEM et al, 2019*), measures have been recommended proportionate to anticipated impacts to ensure that the proposed development results in a biodiversity net gain.

Information pertaining to bat legislation and planning policy is included in Appendix A.

1.2 SITE LOCATION AND CONTEXT

The site is along Middleton Road, at the junction with Sheepfoot Lane. Heaton Park is located to the north of the property on the opposite side of Sheepfoot Lane. The sites central National Grid

Reference is SD 8372 0361. The location of the dwelling which was subject to bat surveys is shown in Figure 2 below;

Figure 2: Aerial View of the Farmhouse Subject to Survey



2. METHODOLOGY

2.1 SURVEY METHODS

Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016) edition states:-

“The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. The guidance should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.”

The survey methods have been determined using the experience of the surveyors and knowledge of the specific nature of the site.

Two dusk surveys were undertaken on 30/06/2022 and 14/07/2022. This is considered to be within the main active season for bats (April to October inclusive) and within the optimal survey period in which Natural England accept bat surveys and grant European Protected Species Mitigation Licences (May to August inclusive).

The number of surveys and surveyors was adequate relative to the roost potential that was identified for the site i.e. ‘Moderate’ and requiring two surveys by three surveyors to monitor potential roost features (PRF’s) on the building, at any one time.

Surveys were undertaken in good weather conditions and there were no visual constraints. Surveyors observed the roost features for at least 15 minutes prior to sunset and 1 hour 30 minutes after sunset (dusk).

The surveyors were aided with bat detection equipment that would enable surveyors to locate and record high frequency bat calls that are emitted by bats. The recordings were analysed following the survey using Anabat Insight software to verify field observations.

The surveys were undertaken by the following people:

- **Stuart Macpherson** BSc (Hons) MSc, ACIEEM – Class 2 Natural England bat licenced ecologist (2021-10079-CL18-BAT). Experienced bat consultant and carer.
- **Patrick Leatham** BSc (Hons) MCIEEM – Ecological consultant with 10 years’ experience of undertaking bat surveys (preliminary roost assessments, bat activity surveys, and bat transect surveys).
- **Laura Roche** BSc (Hons) Qualifying CIEEM – Ecological consultant with over 5 years’ experience of undertaking bat activity surveys.

2.2 SURVEY LIMITATIONS

Surveys were undertaken in suitable weather conditions and within the recommended survey timeframes. There are considered to be no survey limitations.

3. RESULTS

The results of the bat activity surveys are outlined below.

3.1 BAT ACTIVITY SURVEY RESULTS

Survey details including dates, times and weather conditions are provided in Table 3.1 and the results of the dusk surveys provided in Table 3.2.

Table 3.1: Bat Activity Survey Details

Times of Survey	Date	Weather Conditions
Dusk survey 1 21:26 – 23:11	30/06/2022	Sunset: 21:41 Dry, light breeze, 30% cloud cover Start temp: 15°C End temp: 14°C
Dusk survey 2 21:17 – 23:02	14/07/2022	Sunset: 21:32 Dry, calm, 10% cloud cover Start temp: 18°C End temp: 17°C

Table 3.2: Dusk Emergence Survey Results

Survey Results	Time	Species	Activity
30/06/2022	21:26 – 23:11		Summary: No emergence from the building. Very low bat activity.
	22:51	C.pip x1	First bat call. Faint, brief call. Heard, not seen.
14/07/2022	21:17 – 23:02		Summary: No emergence from the building. Very low bat activity.
	22:12	C.pip x1	First bat call. Faint, brief call. Heard not seen.
	22:25 – 22:29	C.pip x1	Occasional foraging in the garden and adjacent property garden.

4. CONCLUSION & RECOMMENDATIONS/MITIGATION

4.1 CONCLUSION

From the surveys undertaken, it can be concluded that bats were absent from the building. Bat activity was very low at the site with one pass recorded on visit one and four minutes of foraging activity during visit two. Although the site is situated adjacent to Heaton Park which provides highly suitable habitat for bats, the property is situated on a busy road junction with high levels of light pollution from the street lights.

4.2 RECOMMENDATIONS/MITIGATION

Due to the absence of a bat roost, works can proceed as planned.

As bats are highly transient species' and can use buildings that offer potential roost features at any time of the year, it should be stated that if bats, or evidence of bats is found at any stage during the works, then as a legal requirement the work at the site should stop immediately and a bat ecologist contacted for further advice.

Although no roost has been identified, the proposal may consider enhancements for bats to demonstrate a biodiversity net gain for this site, in accordance with local and national planning policy. A number of potential enhancement measures are provided below.

4.2.1 Enhancing a development site for Bats

External lighting

In all cases illumination of peripheral boundary areas should be avoided. Where lighting is required, this must be low level, low intensity and directed downwards away from boundaries. The following principles will apply;

- Where and if lighting is required, this will be directed internally within the site avoiding spillage towards boundary habitats.
- The use of low powered sodium lights or similar will be used and these will be fitted with cowls / covers that prevent lateral light spillage towards boundary habitats.
- Wherever possible and only if required low level (1-1.5m high) bollard lighting will be used.
- If required lights will be fitted with timer controls that minimise the duration of lighting.

Lighting requirements will follow guidance provided by the Bat Conservation Trust (BCT, 2018).

Integrated bat box

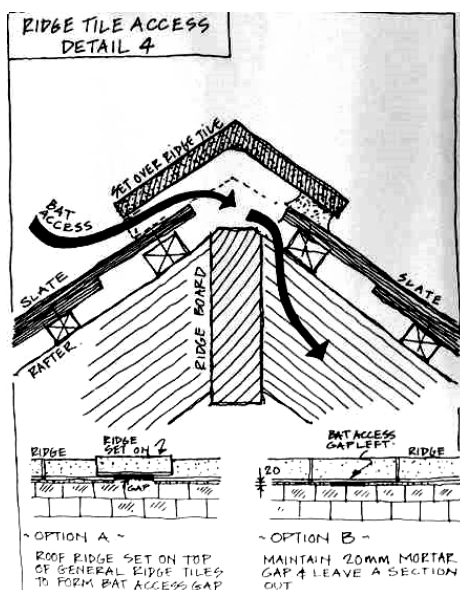
The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Ridge access

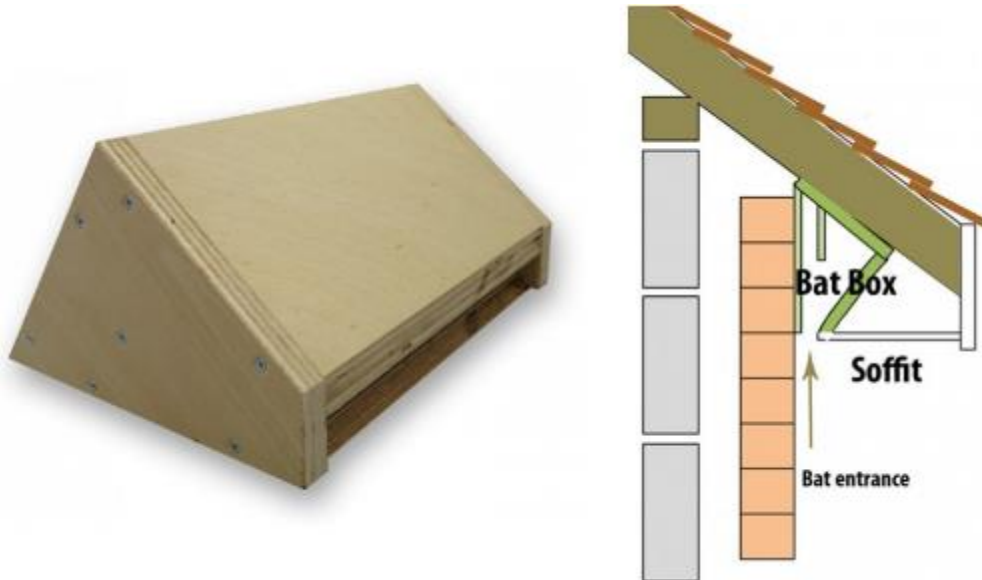
Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.

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Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.



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Appendix A: Bat Legislation and Policy

Legislation

All British bats and their ****roosts**¹ are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

The relevant sections of the Wildlife and Countryside Act 1981 (as amended) make it an offence to:

- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

The relevant sections of the Conservation of Habitats and Species Regulations 2019 make it an offence to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species; and,
- Damage or destroy a breeding site or resting place of such an animal.

Where it is likely that the scheme would result in contravention of this legislation, a bat mitigation licence would be required to allow the works to proceed. As part of this process, the application must meet 'three tests' for licencing under the Conservation of Habitats and Species Regulations 2019. Planning guidance and case law also require the Local Planning Authority (LPA) to address these three tests when deciding whether to grant planning permission. The three tests are as follows:

- Regulation 55 (2) (e) states that a derogation license can only be issued for preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- Regulation 55 (9) (a): that there is no satisfactory alternative; and
- Regulation 55 (9) (b): that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

¹ The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation

Policy

Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

180. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁶³ and a suitable compensation strategy exists; and,

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Bats in Greater Manchester

Up to 11 bat species have been regularly recorded in Greater Manchester most of which use built structures, notably occupied residential properties for roosting. The most frequently encountered species is the Pipistrelle bat; its abundant status in Greater Manchester is reflected throughout the UK.