PENNINE ecological

# BAT ACTIVITY SURVEY RESULTS REPORT

## UNITED CHURCH,
## MARSDEN,
## WAREHOUSE HILL ROAD,
## HD7 6AB

**JULY 2026**

**Bat Activity Survey Results Report**

**United Church,**
**Marsden,**
**Warehouse Hill Road,**
**HD7 6AB**

*A report for*

**SB Homes Limited,**
**Empire House,**
**Lewisham Road,**
**Slaithwaite,**
**Huddersfield,**
**HD7 5AL.**

*Report authors*

PENNINE ecological

*email:* patrick@pennineecological.co.uk

*web:* www.pennineecological.co.uk



| Version | Author | Check / Review | Description | Date |
|---|---|---|---|---|
| 1.0 | Luke Pilling QCIEEM | Patrick Leatham M CIEEM | Draft report | 17/07/2026 |
| | | | | |
| | | | | |
| | | | | |

# CONTENTS

## Terms of Use

*This report has been compiled by PENNINE Ecological with all reasonable skill, care, and diligence within the terms of the instruction and permissions granted by the client. The results, conclusions and recommendations of this report are proportionate and in line with the British Standard 42020:2013.*

*This is a technical report and does not represent legal advice/opinion.*

*The report is for the sole use of the commissioning client in connection with the development project described in the report, and must not be used for any other purpose, copied, re-produced, or sent to any other party other than the Local Planning Authority without the permission of PENNINE Ecological.*

*This report remains the property of PENNINE Ecological and cannot be relied upon until full payment has been made. PENNINE Ecological reserve the right to retract any survey reports submitted to planning where payments are outstanding.*

*PENNINE Ecological will retain the right to re-publish data obtained, and to forward data collected during all its ecology surveys to the local wildlife records centre.*

# 1. INTRODUCTION

## 1.1 BACKGROUND AND REASON FOR SURVEY

PENNINE ecological have been commissioned by SB Homes Ltd to undertake bat presence/absence surveys of the property at United Church, Marsden. The survey is required following a Preliminary Roost Assessment undertaken by Pennine Ecological, which concluded the church to be of **High suitability** to support a bat roost(s).

Therefore, in accordance with current Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023)*, three presence/absence surveys have been undertaken (see Figure 1.1 below).

***Figure 1.1: Extract from in Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023)***

**Table 7.2. Recommended minimum number of survey visits 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 or PRF-I | Moderate roost suitability | High roost suitability or PRF-M |
|---|---|---|
| One survey visit. One dusk emergence survey[a] (structures).<br><br>No further surveys required (trees). | Two separate dusk emergence survey visits[b]. | Three separate dusk emergence survey visits[b]. |

a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see para 5.2.44). In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more.

The surveys were undertaken to determine whether the proposals to renovate the building into residential apartments, would result in adverse impacts to bats which may potentially be roosting within the building.

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 building subject to survey is a church along Warehouse Hill Road in Marsden, HD7 6AB. The Ordnance Survey central grid reference for the site is SE 04890 11718. An aerial image of the building subject to survey is shown below.

***Figure 1.2: Aerial image of buildings at United Church, Marsden.***

# 2. METHODOLOGY

## 2.1 ACTIVITY SURVEY METHODS

Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023) states:-

Expertise and professional judgement:

- The guidelines do not aim to 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.
- However, in such scenarios an ecologist should provide evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.
- Equally, it would be inappropriate for someone with no knowledge or experience to read these guidelines and expect to be able to design, carry out, interpret the results of and report on professional surveys, simply by following the guidelines without the ability to apply any professional judgement.
- Training and experience is necessary to carry out all of the surveys described in these guidelines and interpret the survey results appropriately.

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

Three dusk emergence surveys were undertaken on the 18th May, 8th June and the 29th June 2026. This is considered to be within the main active season for bats (April to September inclusive).

The number of surveys and surveyors was adequate relative to the roost potential that was identified for the site i.e., high potential and requiring three surveys by four surveyors to monitor potential roost features (PRF's) on the property 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.

The surveyors were aided with bat detection equipment (EMTouch) that would enable surveyors to locate and record high frequency bat calls that are emitted by bats. The surveyors were also aided with an infrared night vision camera (Nightfox Whisker Binoculars) to assist visually observing the features once light levels dropped. The recordings were analysed following the survey to verify field observations.

The surveys was completed by the following people:

- Stuart Macpherson BSc (Hons) ACIEEM – Pennine Ecological ecologist with over 15 years' experience of undertaking bat surveys (preliminary roost assessments, bat

activity surveys, and bat transect surveys). Class 2 Bat licence (2021-10079-CL18-BAT). Lead surveyor on these surveys.

- Gareth Hey – Freelance ecologist with 10 years' survey experience undertaking bat emergence surveys and preliminary roost assessments(preliminary roost assessments, bat activity surveys, and bat transect surveys). Class 2 Bat licence (2021-51195-CLS-CLS).

- Charis Russel-Smith – Freelance ecologist Class 2 Bat licenced ecologist.

- Holly Spencer – Freelance ecologist with seven years' survey experience undertaking bat emergence surveys and preliminary roost assessments. Class 1 (CL17) bat licenced.

- Luke Pilling – Pennine Ecological ecologist with four years' survey experience undertaking bat emergence surveys and preliminary roost assessments.

- Dominic Stokes - Seasonal ecologist with two years' survey experience undertaking bat emergence surveys.

- Barney Sheehan - Seasonal ecologist with two years' survey experience undertaking bat emergence surveys.

## 2.2 SURVEY LIMITATIONS

The surveys were undertaken in suitable weather conditions and within the recommended BCT survey timeframes.

# 3. RESULTS

## 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. NVA Screenshots from each surveyor location taken at the surveys darkest points are provided in Figure 3.1, 3.2, and 3.3. Common flight paths and bat activity can be found in Figures 3.4, 3.5, and 3.6.

***Table 3.1: Bat Activity Survey Details***

| Time of Survey | Sunset/Sunrise Time | Date | Weather Conditions |
|---|---|---|---|
| 20:51 – 22:36 | 21:06 | 18/05/2026 | Cloud (oktas): 8<br>Wind (Beaufort): 1<br>Rainfall: no rain<br>Start temp: 11°C<br>End temp: 9°C |
| 21:18 – 23:03 | 21:33 | 08/06/2026 | Cloud (oktas): 1<br>Wind (Beaufort): 2<br>Rainfall: no rain<br>Start temp: 11°C<br>End temp: 10°C |
| 21:26 – 23:11 | 21:41 | 29/05/2026 | Cloud (oktas): 8<br>Wind (Beaufort): 1<br>Rainfall: no rain<br>Start temp: 14°C<br>End temp: 13°C |

***Table 3.2: Bat Activity Survey Results***

| Survey Results | Time | Species | Activity |
|---|---|---|---|
| Dusk survey 1<br><br>18/05/26 | 20:51 – 22:36 | **Summary: No emergence. Moderate activity by at least bats.** | |
| | 21:15 | Common pipistrelle | Flew from the east over the roof, no emergence confirmed by surveyor on eastern aspect. |
| | 21:24 | Common pipistrelle | 1no. foraging over the roof of the building. |
| | 21:38 – 21:45 | Common pipistrelle | Two bats observed foraging to the north of the building around the woodland canopy. |
| | 22:17 | Common pipistrelle | Social calling around the building. |
| | 22:24 | Common pipistrelle | Foraging around the building. |

| Survey Results | Time | Species | Activity |
|---|---|---|---|
| Dusk survey 2<br><br>08/06/2026 | **21:18 – 23:03** | **Summary: No emergence. Low activity.** | |
| | 21:43 | Common pipistrelle | First bat seen/heard. 1no. bat commuting over site, flew from South, heading North. |
| | 21:45 – 22:30 | Common pipistrelle | 2no. bats frequently using the woods north of site and the adjacent gardens east of site to forage. Occasionally foraging over the church car park east/south of the building. |
| | 22:47 | Common pipistrelle | Heard not seen. |
| Dusk survey 3<br><br>29/06/2026 | **21:26 – 23:11** | **Summary: No emergence. Low activity.** | |
| | 21:50 | Common pipistrelle | First bat seen/heard. 1no. bat commuting over site, flew from South, heading North. |
| | 22:00 – 22:42 | Common pipistrelle | 2no. bats frequently using the woods north of site and the adjacent gardens east of site to forage. Occasionally foraging over the church car park east/south of the building. |
| | 22:08 | Common pipistrelle | 1no. briefly foraging over the car park south of the church building. |
| | 22:14 | Common pipistrelle | 1no. bats briefly foraging over the northwest area of the church building. Flew from west, headed back west. |
| | 22:53 | Common pipistrelle | Heard not seen. |

***Figure 3.1: NVA Screenshots at darkest Point – 18/05/2026***

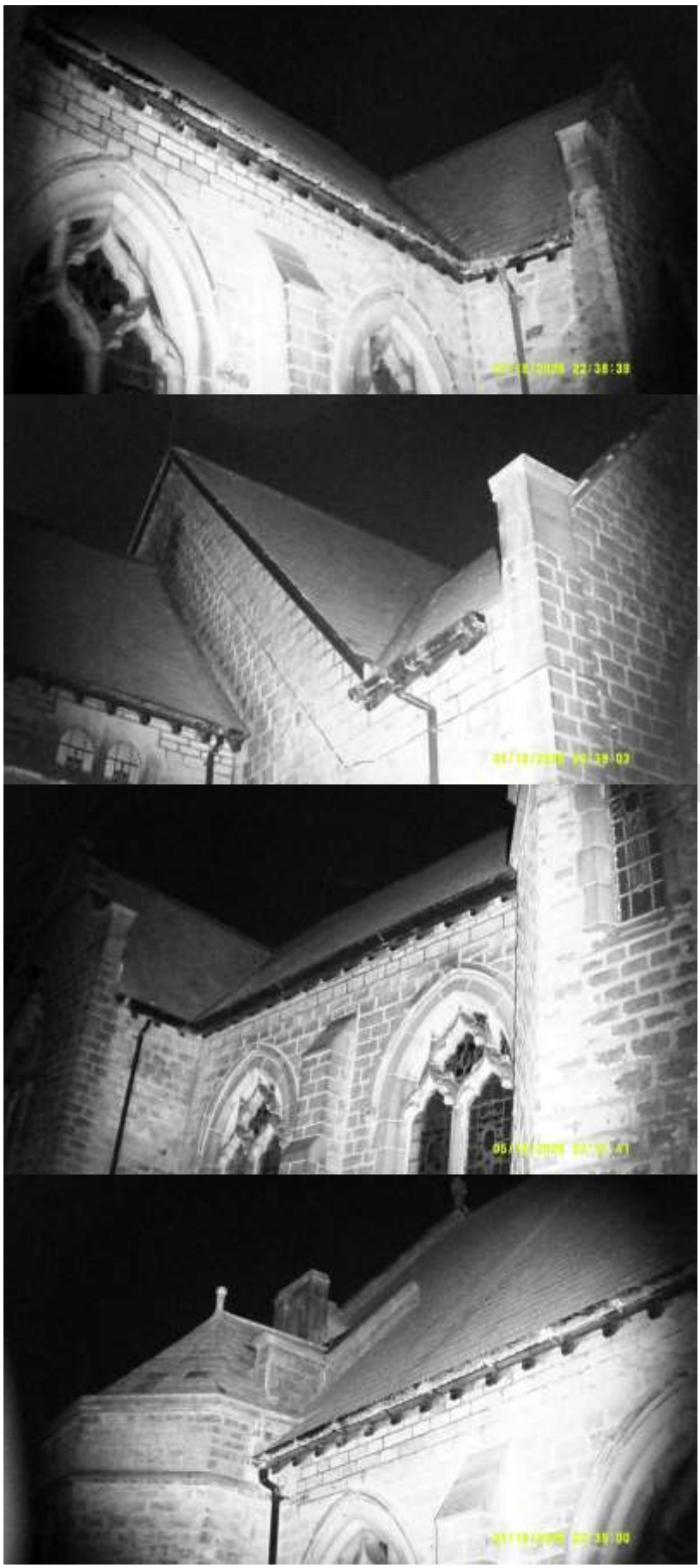


***Figure 3.2: NVA Screenshots at darkest Point – 08/06/2026***

***Figure 3.3: NVA Screenshots at darkest Point – 29/06/2026***

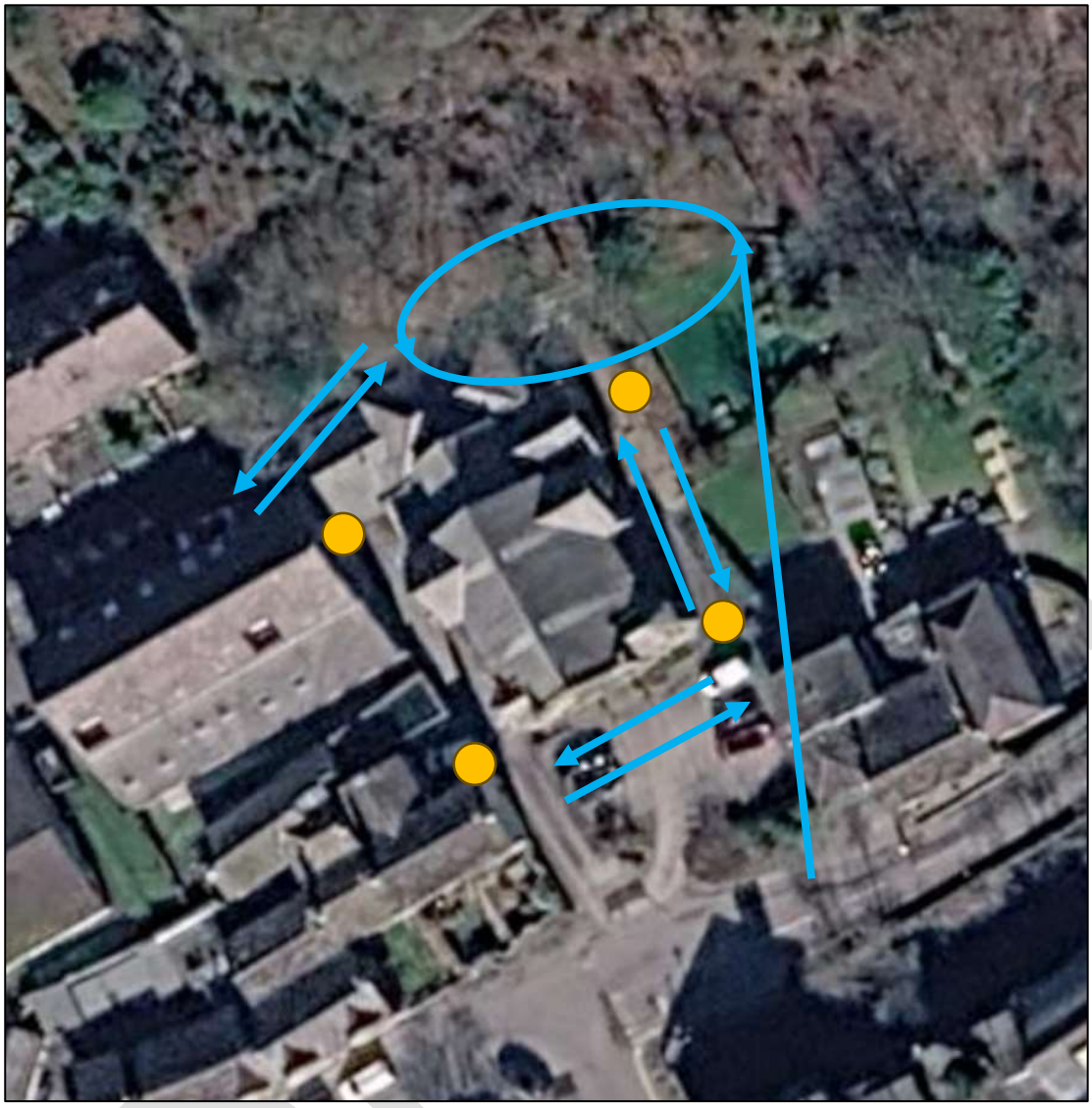
***Figure 3.4: Bat Activity – 18/05/2026***

| | |
|---|---|
| Surveyor Locations | |
| Common Flight Paths | |

***Figure 3.5: Bat Activity – 08/06/2026***

| | |
|---|---|
| Surveyor Locations | |
| Common Flight Paths | |

***Figure 3.6: Bat Activity – 29/06/2026***



| | |
|---|---|
| Surveyor Locations | |
| Common Flight Paths | |

# 4. CONCLUSION & RECOMMENDATIONS

## 4.1 BAT SURVEY CONCLUSION

From the surveys undertaken, it can be concluded that bats were absent from the building at United Church, Marsden. Bat activity was moderate within the site itself with frequent foraging activity along the northern and western areas of the site. Common pipistrelles are the most commonly found species in the UK.

More suitable habitats can be found north and south of the site along the River Colne and Huddersfield Narrow canal where woodland and scrub comprise the watercourses corridors. It was found that most the bats seen/heard during the surveys were commuting from either north of south of the site.

## 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 must stop immediately and a bat ecologist contacted for further advice.

Although no roost has been identified, the proposal should 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 should be directed internally within the site avoiding spillage towards boundary habitats.
- The use of low powered sodium lights or similar should be used and these will be fitted with cowls / covers that prevent lateral light spillage towards boundary habitats.
- Wherever possible, low level (1-1.5m high) bollard lighting should 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; links are provided below.

- Bat Conservation Trust's Artificial Lighting Guidance. Webpage link https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting

- Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/23: Bats and Artificial Lighting in the UK. Webpage link https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

## Bat Roost Provisions

It is recommended that at least three of the provisions detailed below are provided within the site to compensate for the loss of existing potential roost features.

Integrated bat boxes

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.

***Figure 4.1: Integrated bat box***

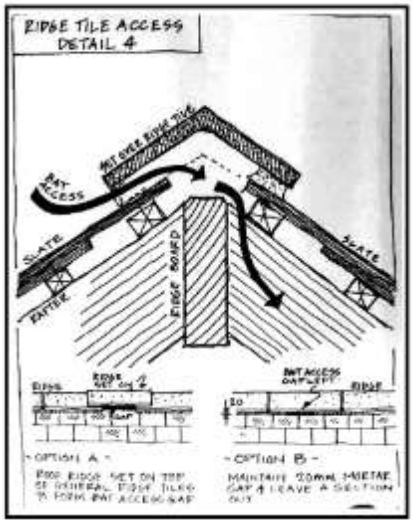
Externally fitted boxes

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

***Figure 4.2: Externally fitted bat box***

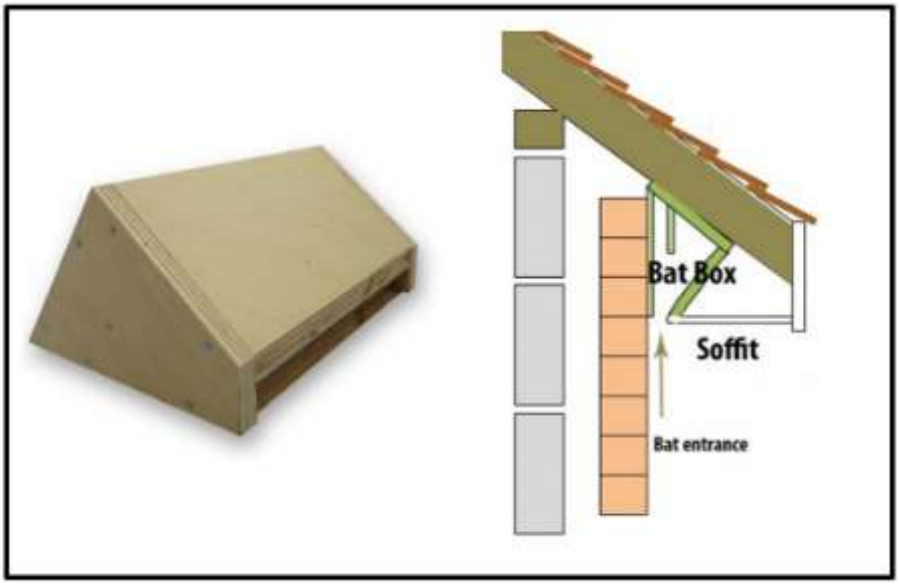
Ridge access

Where appropriate, 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.




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.



# REFERENCES


Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/23: *Bats and Artificial Lighting in the UK.* Webpage link https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

CIEEM et al, 2019. *Biodiversity Net Gain: Good practice principles for development*. Available from: www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf

Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).* The Bat Conservation Trust, London.

Mitchell-Jones, A. J., 2004. *Bat mitigation guidelines*. External Relations Team, English Nature, Northminster House, Peterborough, PE1 1UA.

Mitchell-Jones, A. J. (ed.), 1987. *The bat worker's manual*. Dept. BWM, Nature Conservancy Council, Northminster House, Peterborough, PE1 1UA.

Google Earth. Accessed various dates. Latest access 14/07/2026

# 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.

## Policy

*[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*

Section 15, Paragraph 186 of the National Policy Planning Framework (as revised in December 2023) states:

186. 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 reasons 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.

<u>Bats in West Yorkshire</u>

Up to ten bat species have been recorded in West Yorkshire, most of which use built structures (e.g., residential properties, bridges, and culverts) as well as features in trees (e.g., knot holes, woodpecker holes, peeling bark and torn limbs). The most frequently encountered species are the common and soprano pipistrelle bats; their abundant status in West Yorkshire is reflected throughout the UK.