

# PENNINE ecological

**Out Lane Head Cottage, Chipping, Lancashire**

**- Bat Activity Survey Results Report -**

**August 2022**



# Out Lane Head Cottage, Chipping, Lancashire

## - Bat Activity Survey Results Report -

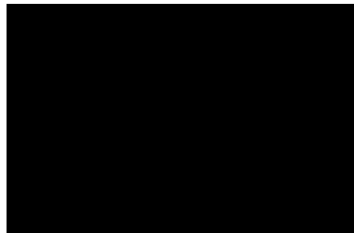
*A report for*

Mrs. Mary Beth Morris

*Report authors*

PENNINE  
ecological

**PENNINE Ecological**



*email:* [Redacted]

*web:* [www.pennineecological.co.uk](http://www.pennineecological.co.uk)

August 2022

## CONTENTS

<b>1.</b>	<b>Introduction</b>	<b>1</b>
1.1	Background and Reason for Survey	1
1.2	Site Location and Context	2
<b>2.</b>	<b>Methodology</b>	<b>3</b>
2.1	Survey Methods	3
2.2	Survey Limitations	4
<b>3.</b>	<b>Results</b>	<b>5</b>
3.1	Bat Activity Survey Results	5
<b>4.</b>	<b>Conclusion &amp; Recommendations/Mitigation</b>	<b>7</b>
4.1	Conclusion	7
4.2	Recommendations/Mitigation	7
<b>5.</b>	<b>References</b>	<b>11</b>
	<b>Appendix A: Bat Legislation and Policy</b>	<b>12</b>

## **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 Mrs. Mary Beth Morris ('the client') to undertake bat presence/absence surveys of Out Lane Head Cottage (hereafter referred to as 'the property'). The property comprised two buildings; the farmhouse and an annex (the latter is called 'Fell View').

The surveys follow the recommendations outlined in the Preliminary Roost Assessment (PRA) report by PENNINE Ecological which was completed and submitted to the client on the 25<sup>th</sup> of February 2022.

The PRA identified the farmhouse to be of moderate suitability to support a bat roost(s) and the annex to be a confirmed bat roost. Therefore, in accordance with current Bat Conservation Trust (BCT) guidelines (see Figure 1 below), two and three presence/absence surveys respectively were undertaken in June and July 2022.

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, with at least one of surveys between May and August <sup>1</sup>	May to September, with at least two of surveys between May and August <sup>1</sup>

<sup>1</sup> 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. 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 21 August followed by a mid-September survey is unlikely to check up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.

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

The surveys were completed so to determine whether the proposals to develop the building into a larger residential dwelling would result in impacts to bats which may potentially be roosting within within the building.

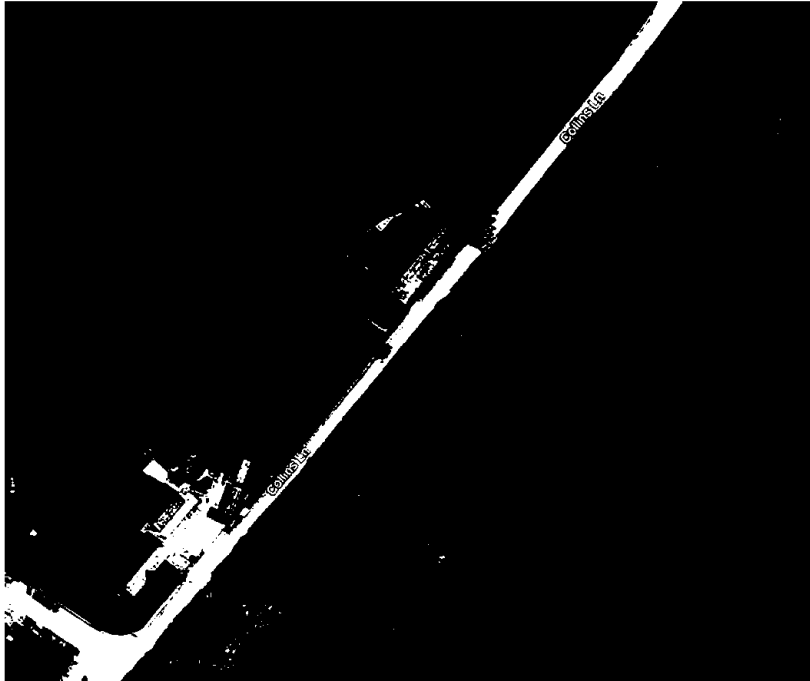
The results, conclusions and recommendations following the surveys, including any indicative mitigation to inform an application to Natural England for a EPS Mitigation Licence (EPSML), where necessary, will be supplied within this report.

In accordance with Biodiversity Net Gain: Good practice principles for development (CIEEM *et al*, 2019), measures have been recommended. These are 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 central grid reference for the property is SD 60476 43832. The location and the approximate red line boundary of the property is shown in Figure 2 below. The property is surrounded by improved grassland fields and a farmstead to the south west.



**Figure 2: Aerial view of the site with approximate Red Line Boundary**

## 2. METHODOLOGY

---

### 2.1 SURVEY METHODS

The 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.

Three surveys were undertaken on the 6<sup>th</sup> and 20<sup>th</sup> June, and 7<sup>th</sup> July 2022. The first two surveys were dusk emergence surveys, with the third being a dawn re-entry survey (the latter conducted only on the annex due to it requiring three surveys in accordance with the guidelines as described above). These dates are within the optimal survey season for bats (May to September inclusive) and within the survey period in which Natural England accept bat surveys and grant European Protected Species Mitigation Licences if required.

The number of survey(s) and surveyors was adequate relative to the roost potential that was identified. For both the farmhouse and annex two surveyors each monitored potential roost features (PRFs) on the two buildings at any one time.

Surveyors observed the PRFs identified during the PRA for at least 15 minutes prior to and 1 hour 30 minutes after sunset and 1 hour and 30 minutes before and 15 minutes after sunrise.

The surveyors were aided with bat detection equipment that would enable them to locate and record high frequency bat calls emitted by bats whilst commuting and/or foraging. The recordings were analysed following the survey using Wildlife Acoustics software and Anabat Insight software to verify field observations where necessary.

The surveys were led by Class 2 licensed ecologists;

- Stuart Macpherson BSc (Hons) MSc, ACIEEM – Class 2 Natural England bat licenced ecologist (2021-10079-CL18-BAT). Experienced bat consultant and carer.
- Ryan Knight BSc (Hons), MCIEEM – Class 2 Natural England bat licenced ecologist (2015-12611-CLS-CLS). Experienced bat consultant and carer.

## **2.2 SURVEY LIMITATIONS**

The 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 survey 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 surveys provided in Table 3.2.

**Table 3.1: Bat Activity Survey Details**

Times of Survey	Date	Weather Conditions
Survey 1; dusk. 21:22 – 23:07	06/06/2022	Sunset: 21:37 Dry, light breeze, 2/8 cloud cover Start temp: 11°C End temp: 11°C
Survey 2; dusk. 21:30 – 23:15	20/06/2022	Sunrise: 21:46 Dry, calm, 0/8 cloud cover Start temp: 12°C End temp: 11°C
Survey 3; dawn. 03:24 – 05:02	21/06/2022	Sunrise: 04:46 Dry, calm, 100% cloud cover Start temp: 12°C End temp: 12°C

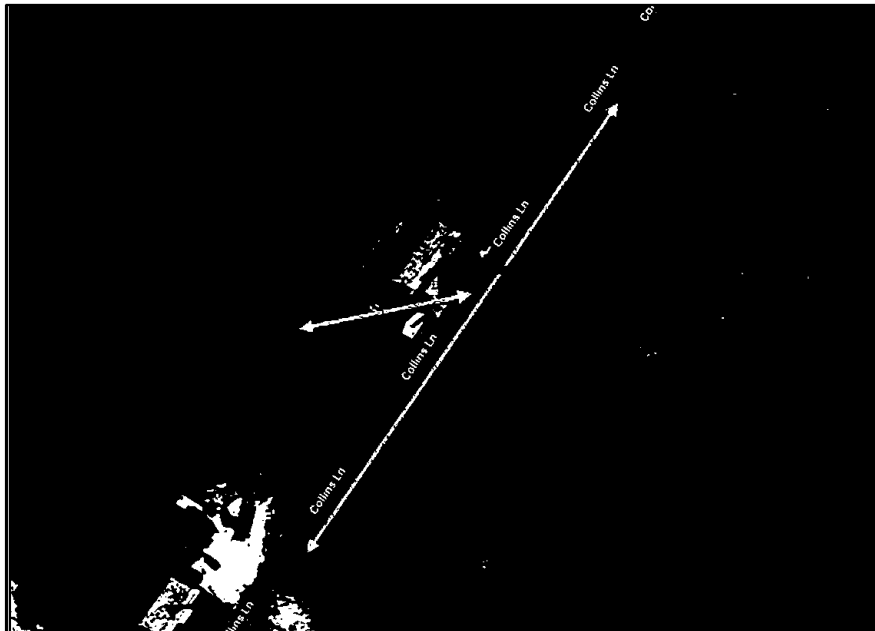
**Table 3.2: Dusk Emergence and Dawn Re-entry Survey Results**

Survey Results	Time	Species	Activity
Survey 1	Summary/Key Points: <ul style="list-style-type: none"> <li>No emergence.</li> <li>Maximum of three bats commuting along Collins Lane in a northeast to southwest direction.</li> <li>Often bats were commuting 2-3 meters from ground level beneath the height of stone walls.</li> </ul>		
	21:57	Common pipistrelle	Bat commuting along Collins Lane in a northeast to southwest direction.
	22:00 – 22:06	Common pipistrelle	Three bats commuting along Collins Lane in a northeast to southwest direction.
	22:13 – 22:23	Common pipistrelle	Single bat commuting/foraging along Collins Lane and also between the farmhouse and annex.
	22:24 – 22:26	Common pipistrelle	Bat foraging within the courtyard (south eastern aspect) of the farmhouse.
	22:30 – 23:07 (end of survey)	Common pipistrelle	Activity reflective of that detailed above continued until the end of the survey.
Survey 2	Summary/Key Points: <ul style="list-style-type: none"> <li>No emergence</li> <li>Activity was concentrated along Collins Lane</li> <li>Maximum 2 bats recored.</li> </ul>		

*Out Lane Head Cottage, Chipping, Lancashire  
- Bat Activity Survey Results Report -*

Survey Results	Time	Species	Activity
	22:14	Common pipistrelle	First bat heard commuting along Collins Lane.
	22:16	Common pipistrelle	As above
	22:19	Soprano pipistrelle	As above
	22:30	Common pipistrelle	Frequent foraging along lane
	22:30 – 23:15	Common pipistrelle	Infrequent activity until the end of survey.
Survey 3	Summary/Key Points: <ul style="list-style-type: none"> <li>• No re-entry recorded</li> <li>• First bat heard at 03:36, with two bats recorded commuting/foraging along Collins Lane.</li> <li>• Low levels of bat activity.</li> </ul>		
	03:36	Common pipistrelle	One bat recorded commuting. It was only heard not seen.
	03:48 – 03:50	Common pipistrelle	Two bats commuting and as above these were heard and not seen.
	Infrequent commuting/foraging was then heard up until 04:30 when the last call was recorded.		

Figure 3 provides an overview of the bat activity encountered during the surveys.



**Figure 3 - General observed bat activity commuting and foraging pathways during the surveys undertaken.**

Key	
	Foraging/commuting activity
■	Surveyor positions

## 4. CONCLUSION & RECOMMENDATIONS/MITIGATION

---

### 4.1 CONCLUSION

During the surveys a bat did not emerge or re-enter either the farmhouse or annex.

However, bat droppings were recorded during the PRA of the annex only. The bat roost has been categorised as a common pipistrelle 'Day roost'.

The BCT *Good Practice Guidelines* describe a 'Day roost' as: "a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer".

As the scheduled works have potential to disturb the identified roost, appropriate mitigation will be required to ensure compliance with current legal legislation and conservation policy.

From the evidence gained during the surveys, the site is considered to be of 'low' conservation significance for the common pipistrelle species<sup>1</sup>. Therefore the proposed mitigation is proportionate to this assessment. If at any time the assessment of the roost is revised to a higher level, the mitigation will be revised accordingly.

### 4.2 RECOMMENDATIONS/MITIGATION

The following procedures and mitigation recommendations are designed to allow the LPA, in association with their ecological advisers, to determine a Planning Application where a European Protected Species has been identified and will be affected by the work for which the Planning Application seeks consent.

#### (i) Summary of Mitigation

The mitigation proposals outlined in this report are seen to be the most productive way forward that will retain long term roosting opportunities for bats.

There is not thought to be significant changes to the adjacent habitats to the building thus no foraging or commuting habitat is anticipated to be significantly impacted on by the proposed works.

Consideration has been given to the requirement for an application for European Protected Species Mitigation Licence. However, *a license is not always necessary if the work can be undertaken when bats are less likely to be present or will not be disturbed, or roosts/access points can be retained / re-instated during the process* (English Nature Bat Mitigation Guidelines, 2004). Through retention of the identified access point avoidance of any of the above can be achieved, and the possibility of an offence being committed under current wildlife legislation is unlikely. However, a strict method statement specifically in relation to the timings of the works is deemed to be appropriate.

---

<sup>1</sup> Significance level based on information provided in *English Nature: Bat Mitigation Guidelines, 2004*. Bats and their current status

Natural England in their licensing guidelines issued the following:-

**Key Message: Avoidance**

*A licence is not always necessary. Natural England advocates the use of good practice and avoidance measures to minimise the impact of a proposed activity on wildlife and in particular EPS. Licensing should be seen as the last resort where all other alternative ways of avoiding impacts on the species have been discounted. Ecological consultants are expected to advise their clients on whether works can proceed in the absence of a license. It is not Natural England's role to do this.*

In addition, The Conservation of Habitats & Species 2017 Regulation 43 states:-

**Protection of certain wild animals: offences**

**43.— (1) A person who—**

*(a) Deliberately captures, injures, or kills any wild animal of a European protected species,*

*(b) Deliberately disturbs wild animals of any such species,*

*(c) Deliberately takes or destroys the eggs of such an animal, or*

*(d) Damages or destroys a breeding site or resting place of such an animal, is guilty of an offence.*

**(2) For the purposes of paragraph (1) (b), disturbance of animals includes in particular any disturbance which is likely—**

**(a) to impair their ability —**

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

*(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or*

**(b) to significantly affect the local distribution or abundance of the species to which they belong.**

When undertaking work that may involve low level disturbance of bats then paragraph (1) (b) needs to be taken into consideration and this should be considered against the contents of paragraph (2). Thus, if any of the points contained in paragraph (2) can be avoided then the person committing the act of disturbance could rely upon those points as a defense, but care should be adopted, and paragraph (2) fully considered when undertaking potential acts of low-level disturbance.

Taking into consideration the above guidance it is the opinion of the bat ecologist that the work at Out Lane Head Cottage could be undertaken without an EPSML, but the following Method Statement will need to be strictly adhered to.

The following strict requirements must be adhered to in order to negate the requirement for a EPSML. Should they not be adhered to then contravention of the relevant legislation outlined in Appendix A of this report is likely to occur, for which the penalties are severe. Additionally, not following the requirements will likely lead to the cessation of the works until further advice from a suitably qualified ecologist has been sought.

**Method Statement**

At the pre-commencement stage a suitably qualified Ecological Clerk of Works (ECoW) is to undertake an induction 'toolbox talk' on possible bat presence and identify / discuss the features taken from the Method Statement which should be kept on site for the duration of the work.

Immediately prior to any work being undertaken on the annex the presence/absence bats as far as is possible will be established by undertaking detailed investigation of any areas to be affected. This will focus on areas which have been identified as holding potential for roosting bats and/or allowing access in to the roof space of the annex.

The roost ingress/egress points should not be altered in any way and must be retained as part of the property. Should this not be possible then works must stop, advice sought from a suitably qualified ecologist. Should interference or significant disturbance be anticipated to the feature on the annex's southwestern aspect then it is likely an EPSML will be required which will cause a delay to the proposals.

Works to the internal walls of the annex, should these need to be removed, must be completed under close supervision of a suitably qualified ecologist. This will follow an internal inspection of the roof space to ensure bats are absent, as far as is possible.

To ensure that bats still have access to roost provision and in accordance with Biodiversity Net Gain: Good practice principles for development (CIEEM *et al*, 2019) while the work takes place one Schwegler 2F bat box (or suitable equivalent) will be erected on the north western aspect of the farmhouse (or other agreeable location). The box can also be retained permanently post-development to provide a long-term roost opportunity for bats (see also section 4.3).

There are no constraints to the time of year that the works can be undertaken.

Once it has been established by the ecologist that bat(s) are absent, the building works will continue to completion. In the unlikely event that bats are found outside of supervision time, then as legal requirement work will immediately cease and the ecologist contacted for further advice. Contractors must not touch, handle, or in any way cause bats to move.

#### 4.3 Further Design Recommendations

Notwithstanding the absence of impacts to bats under the proposed development, it is recommended that provision for bats is incorporated into the remodelling works to enhance the site for bats and to help meet the Local Planning Authority criteria in respect to local biodiversity policies. A number of indicative suggestions for enhancement are provided overleaf.

Additional bat provisions include:

##### Integrated bat boxes

The Habibat Bat Box (Figure 4) 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 a building. The bat bricks should be placed with the entrance holes at the top, at wall plate level, and on the south-western section of any new buildings.

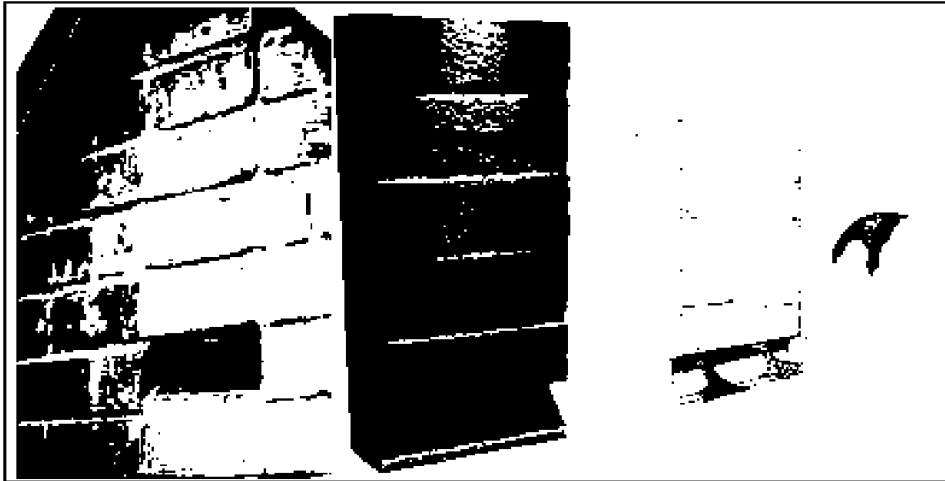


Figure 4: Image showing Integrated bat boxes which are recommended.

### Traditional bitumen 1F roofing felt

It is imperative that traditional bitumen 1F roofing felt will be used as the chosen local underfelt/roof lining, as opposed to any breathable roofing membrane (BRM) (Figure 5). Modern BRM entrap bats through wear and tear in the synthetic polymers used to protect the breathable membrane causing bats harm, injury and death. Where bitumen 1F felt is not the chosen roof lining for the building, it is essential that there is no access to areas lined with BRM from the ingress point (i.e. integrated bat box). An area of the felt may be instated in a 1m<sup>2</sup> area around the ingress point; however, this must be separated from the rest of the roof space using timber roofing batons to prevent bats moving out of this area.

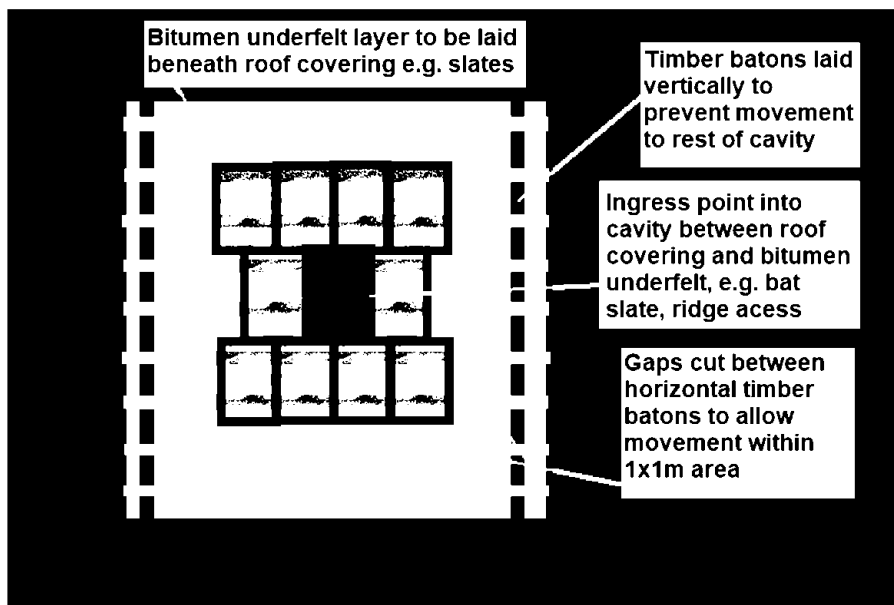


Figure 5: Diagram showing the layout of felt around an ingress point.

## 5. REFERENCES

---

Bat Conservation Trust (BCT), 2018. *Bats and artificial lighting in the UK: Bats and the Built Environment series*. Available from: <https://www.theilp.org.uk/documents/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](http://www.cieem.net/data/files/Publications/Biodiversity%20Net%20Gain%20Principles.pdf)

Collins, J (ed.), 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 3rd edition. 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.

PENNINE Ecological, 2022. Preliminary Roost Assessment of Out Lane Head Cottage, Chipping, Lancashire.

### Online References

Google Earth. Accessed various dates. Latest access 09/08/2022

Natural England – MAGIC. Accessed various dates. Latest access 09/08/2022  
<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

## Appendix A: Bat Legislation and Policy

---

### Legislation

All British bats and their **\*\*roosts<sup>2</sup>** 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

---

<sup>2</sup> 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



- 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

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 reasons<sup>63</sup> 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 Lancashire

Up to eleven bat species have been regularly recorded in Lancashire, most of which use built structures, notably occupied residential properties for roosting. The most frequently encountered species is the common pipistrelle bat and its abundant status in Lancashire is mirrored throughout the UK.