



BAT ACTIVITY SURVEY RESULTS REPORT

OAK LEA, OSBALDESTON, BB2 7LT

JUNE 2025

Bat Activity Survey Results Report

Oak Lea, Osbaldeston, BB2 7LT

A report for

Leehand Limited

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CONTENTS

1.	Introduction	1
1.1	Background and Reason for Survey	1
1.2	Site Location and Context	2
2.	Methodology	3
2.1	Survey Methods	3
2.2	Survey Limitations	4
3.	Results	5
3.1	Bat Activity Survey Results	5
4.	Conclusion & Recommendations	12
4.1	Bat Survey Conclusion	12
4.2	Recommendations / Mitigation	12
	References	15
	Appendix A: Bat Legislation and Policy	16

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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 the buildings at Oak Lea, Osbaldeston. The survey is required following a Preliminary Roost Assessment undertaken by Pennine Ecological, which concluded the buildings to be of **Moderate suitability** to support a bat roost(s) Pennine Ecological, (2025).

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)*, two presence/absence survey 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). No further surveys required (trees).	Two separate dusk emergence survey visits ^b .	Three separate dusk emergence survey visits ^b .
<p>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.</p> <p>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.</p>		

The survey was undertaken to determine whether the proposals to demolish the existing residential bungalow and replace with a new residential property, will have any adverse effects on a potential bat roost.

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 Oak Lea, Osbaldeston, BB2 7LT. The sites central National Grid Reference is SD 64837 32106. An aerial image of the area subject to survey is shown below.

Figure 1.22: Aerial image of properties at Oak Lea, with red line survey area



2. METHODOLOGY

2.1 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

1.1.3 The guidelines do not aim to either override or replace knowledge and experience.

1.1.4 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.

1.1.5 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.

1.1.6 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.

1.1.7 Training and experience is necessary to carry out *all of the surveys* described in these guidelines and interpret the survey results appropriately (see para 2.5.1 onwards).

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

Two dusk emergence surveys were undertaken on the 15th May 2025 and 5th June 2025. 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., moderate potential and requiring two surveys with 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 surveyor was aided with bat detection equipment (EMTouch) that would enable surveyors to locate and record high frequency bat calls that are emitted by bats. The surveyor was 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 survey was completed by the following people:

- Patrick Leatham – Consultant ecologist with over 13 years' experience undertaking bat emergence surveys.
- Luke Pilling - Assistant ecologist with three years' survey experience undertaking bat emergence surveys.
- David Scott - Seasonal ecologist with three years' survey experience undertaking bat emergence surveys.
- Sally Standish – Seasonal ecologist with one year experience undertaking bat emergence surveys.
- Amber Sheehan – Seasonal ecologist with several years' experience undertaking bat emergence surveys.

2.2 SURVEY LIMITATIONS

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

There are no limitations considered with the survey undertaken.

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. Images of Night vision aid (NVA) screenshots at the surveys darkets point can be found in Figures 3.1 to 3.2. Bat activity, surveyor positions and bat flight paths can be found in figures 3.3 to 3.4 for each of the surveys.

Table 3.1: Bat Activity Survey Details

Time of Survey	Sunset/Sunrise Time	Date	Weather Conditions
20:51 – 22:36	21:06	15/05/2025	Cloud (oktas): 0 Wind (Beaufort): 1 Rainfall: no rain Start temp: 11°C End temp: 10°C
21:21 – 23:06	21:36	05/06/2025	Cloud (oktas): 7 Wind (Beaufort): 1 Rainfall: no rain Start temp: 12°C End temp: 11°C

Table 3.2: Bat Activity Survey Results

Survey Results	Time	Species	Activity
Dusk survey 1 15/05/2025	20:51 – 22:36	Summary: No bat emergence. Low bat activity.	
	21:35	Noctule	First bat out, heard not seen.
	21:46	Common pipistrelle	Foraging around building, flew from southwest and headed northeast.
	21:48	Common pipistrelle	Foraging around the main dwelling.
	21:59	Noctule	Commuting overhead south of site.
	22:11	Common pipistrelle	Foraging around the main dwelling.
Dusk survey 2 05/06/2025	21:21 – 23:06	Summary: No bat emergence. Low bat activity.	
	21:55	Noctule	Commuting over site.

Oak Lea, Osbaldeston
Bat Activity Survey Results Report

Survey Results	Time	Species	Activity
	22:12	Common pipistrelle	Foraging southwest of site.
	22:17	Common pipistrelle	Flew from west of the site, over the garage and headed east.
	22:35	Common pipistrelle	Foraging up and down Osbaldeston Lane, north of the site.
	22:44	Common pipistrelle	2no. bats foraging around the garden east of the dwelling.
	22:54	Common pipistrelle	Foraging around the main dwelling.

Figure 3.1: NVA Screenshots at darkest point of survey 1



Oak Lea, Osbaldeston
Bat Activity Survey Results Report



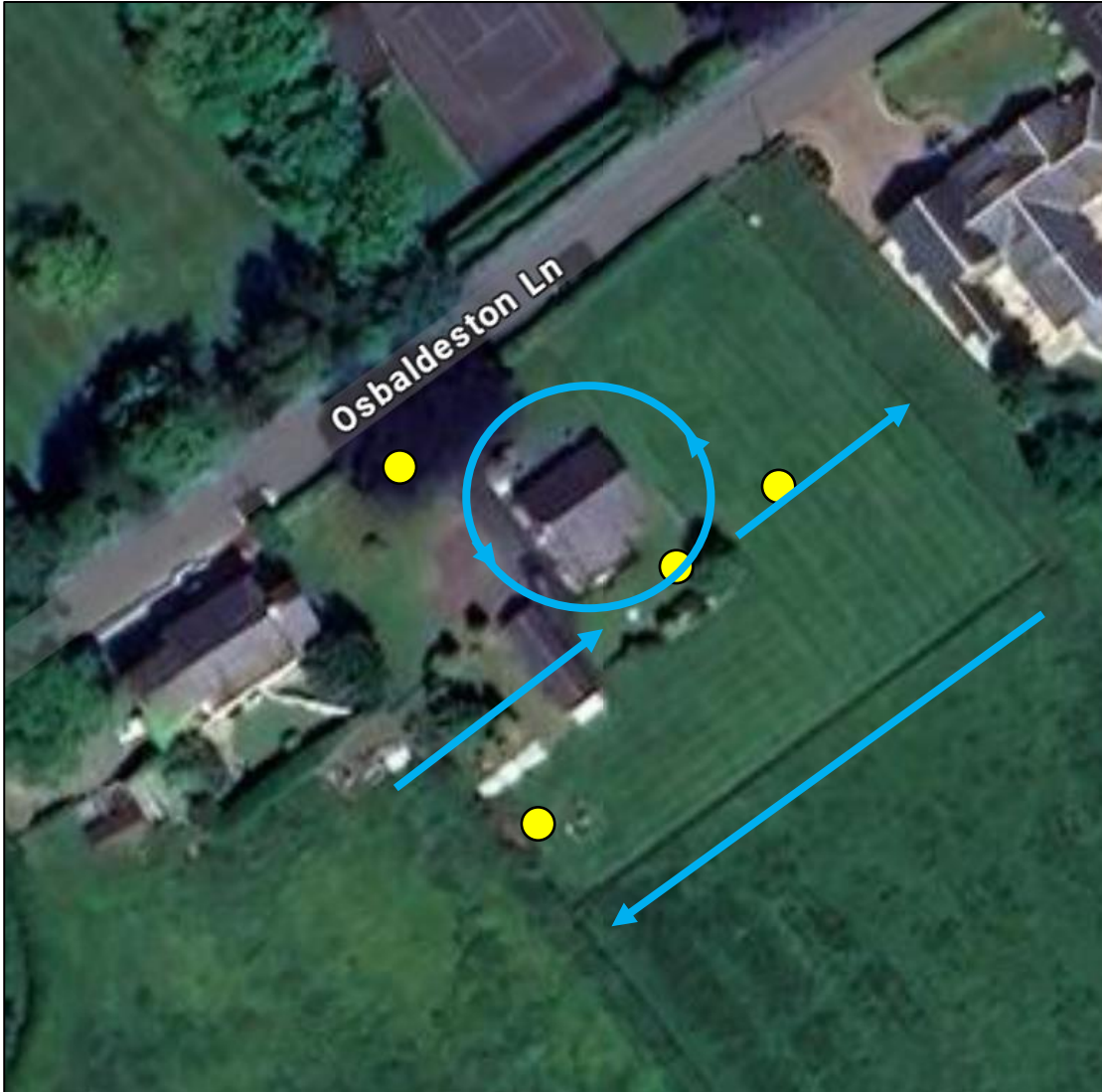
Figure 3.2: NVA Screenshot at darkest point of survey 2



Oak Lea, Osbaldeston
Bat Activity Survey Results Report



Figure 3.3: Bat activity and flight paths from Survey 1





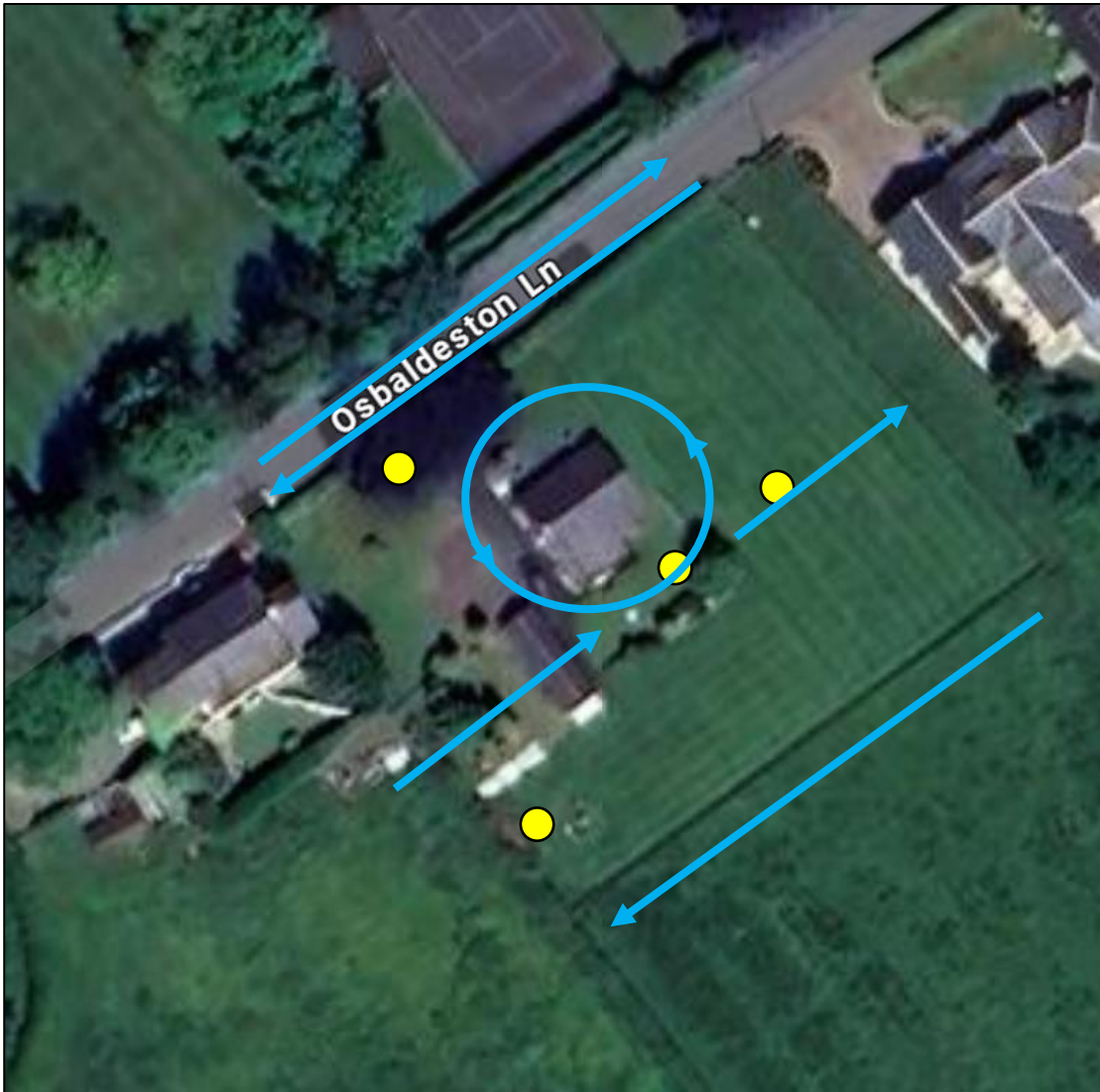


	Surveyor Position
	Flight Paths

Figure 3.4: Bat activity and flight paths from Survey 2



	Surveyor Position
	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. Bat activity was low on both of the surveys with occasional foraging around the buildings from common pipistrelles being the most common activity. Common pipistrelles are the most commonly found species in the UK.

There are suitable foraging opportunities immediately south of the buildings, where arable and pasture fields with extensive lines of trees and hedgerows can be found.

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 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; 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

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.



Externally fitted boxes

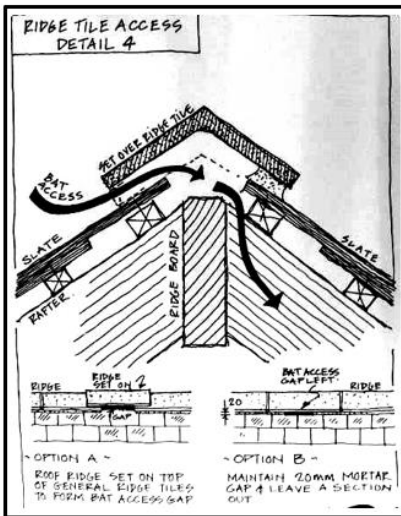
A large number of externally fitted box models for bats exist for buildings. Suitable models for both buildings and trees may include the Eco Kent Bat Box or a soffit bat box.



Ridge access

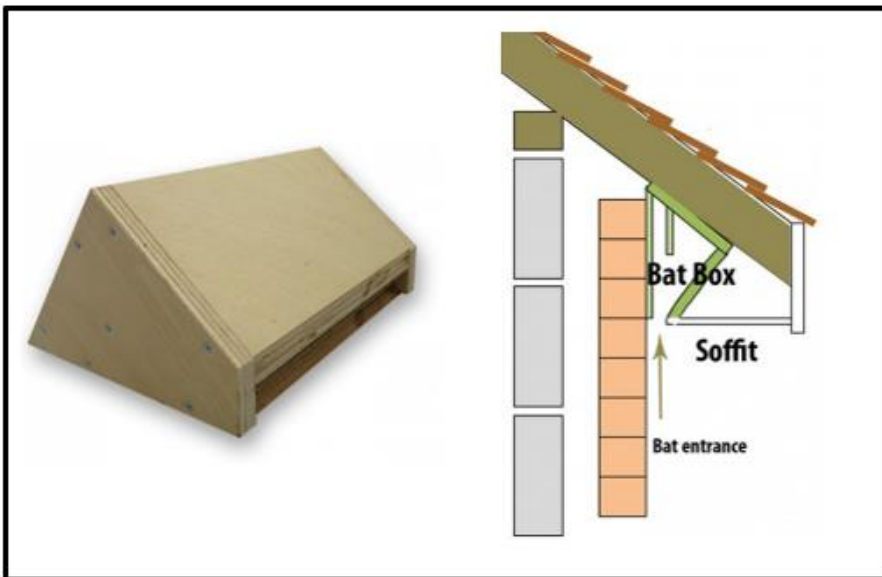
Where appropriate, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can

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/>

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Appendix A: Bat Legislation and Policy

Legislation

All British bats and their roosts¹ 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.

Bats in Lancashire

Up to ten bat species have been recorded in Lancashire, 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 Lancashire is reflected throughout the UK.