



**322 Turton Road, Tottington
Greater Manchester**

- Bat Survey Results -

322 Turton Road, Tottington Greater Manchester

- Bat Survey Results -

A report for

Howard & Jane Turner
322 Turton Road
Tottington
Bury
BL8 3QG

Report authors



PENNINE ecological
62 Markland Hill Lane
Heaton
Bolton
BL1 5NU

Tel. 07545 385 898

email: patrick@pennineecological.co.uk

web: www.pennineecological.co.uk

Licensed Bat Consultant: Mrs. K. Wilding
&
Author: Patrick Leatham BSc (Hons) MCIEEM.

October 2021

322 Turton Road, Tottington Greater Manchester

- Bat Survey Results -

Contents	Page No.
1. Background & Introduction	4
2. Bats - Legislation & Policy.....	4
3. Bats in Greater Manchester.....	5
4. Survey Methods	6
5. Results	7
6. Conclusions & Recommendations	11
6. Conclusions & Recommendations	11
8. References	22

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.

1.0 Background and Introduction

- 1.1 As part of a proposed planning application at 322 Turton Road, PENNINE Ecological conducted a daytime assessment of the site in August 2021. As part of this survey a Preliminary Roost Assessment (PRA) was carried out, which concluded the following (Figure 1.1):

Figure 1.1 - Extract from *Preliminary Bat Roost Assessment: 322 Turton Road (PENNINE Ecological, August 2021)*

The cottage supports numerous features that have the potential to support bats. The building is also situated within optimal bat foraging and commuting habitat. Based on this information, the bat roost potential for 322 Turton Road is **Moderate**.

- 1.2 Development proposals for the site involve a renovation of the cottage which will include going up into the roof space.
- 1.3 In accordance with current Bat Conservation Trust (BCT) Guidelines, two presence/absence surveys were undertaken in August and September during the active season of bats (see Figure 1.2).

Figure 1.2 - 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.		

- 1.4 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.
- 1.5 This report should be read, understood and presented to the local authority as an additional document to the daytime assessment (PENNINE Ecological, August 2021).
- 1.6 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.

2.0 Bats - Legislation & Policy

2.1 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.

2.2 Use of Buildings by Bats

- a) Summer breeding roost (May-August)
- b) Hibernation roost (October-March)
- c) Transitional or temporary roost (Mainly spring/summer months)

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

Policy

2.3 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.

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.

3.0 Bats in Greater Manchester

- 3.1 Up to eleven bat species have been recorded in Greater Manchester, many of which use built structures and trees for roosting. A variety of building types and features are utilised by bat species at different times of year, ranging from occupied residential dwellings to disused barns and bridges. The most frequently encountered species is the common pipistrelle bat (*Pipistrellus pipistrellus*) and its abundant status in Greater Manchester is mirrored throughout the UK.

4.0 Survey Methods

- 4.1 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.”

Relative to the above, the survey protocol has been determined using the collective and long standing experience of the surveyors and knowledge of the specific nature of the site.

Survey Protocol

- 4.2 The timing of the surveys took place in August and September thus within the main active period of bats, i.e. at a time when maternity colonies have formed / returned to summer roosts and bats are in a highly active and social stage.

In accordance with Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016), it is specified that:

“The bat active period is generally considered to be between April and October inclusive”, though the period of May - August is the optimal most productive period that Natural England accept bat surveys and grant European Protected Species Mitigation licences (EPSML).

When considering survey protocol the decisions about whether dusk or dawn surveys are selected are based on the extensive experience of the surveyors, the nature of the building and species that can be anticipated as being present either at the property or in the locality and how complex a building is relative to observations.

In this case the bat roost potential that exists at 322 Turton Road presents no problems for dusk observations; if a building is complex, or observations were restricted, or species that are difficult to detect at dusk are suspected then dawn surveys would be conducted. At 322 Turton Road, the identified PRFs are clearly visible from ground level and to date there is no evidence to suggest the presence of such species.

It should also be noted that at dawn temperatures are usually lower than at dusk as a result bat activity can, in some locations, be less frequent. Additionally, where singular/small numbers of bats are present and there are no survey constraints then dawn surveys are of no more value than dusk surveys; singular bats can and do return to a roost before dawn and

as a result a dawn survey would not record them anyway. Dawn surveys are more productive when “back tracking” bat to a roost from foraging grounds.

Survey protocol should not be determined by parties who are 1) not familiar with the site 2) do not have a sufficient level or experience in relation to the undertaking of dusk/dawn bat surveys.

- 4.3 The number of surveys and surveyors was adequate relative to the roost potential that was identified on attendance of the site i.e. ‘Moderate’ and requiring two surveyors to accurately monitor potential roost features (PRF’s) on the buildings at any one time.
- 4.4 Surveyors were strategically positioned so that all elevations with bat roost potential (as described in the daytime report), could be observed without limitations. The surveys were aided with Anabat electronic bat detectors that enable the locating and recording of the high frequency calls that are emitted by bats; echolocation calls were analysed the next day using Analook computer software to verify field observations.

5.0 Results

- 5.2 Two dusk emergence surveys were undertaken on the 31st August 2021 and the 14th September 2021 by two surveyors at any one occasion. Surveyor credentials have been given within Table 5.1. Tables 5.2 and 5.3, alongside Figure 5.1, document the results of the dusk surveys.

Table 5.1 - Surveyor Credentials

Surveyor(s)	Experience	Surveyor Credentials
Ms. H. Taylor-Boyd	7 years	A highly experienced bat surveyor with several years' experience undertaking professional bat surveys
Mr. D. Boyd	7 years	A highly experienced bat surveyor with several years' experience undertaking professional bat surveys

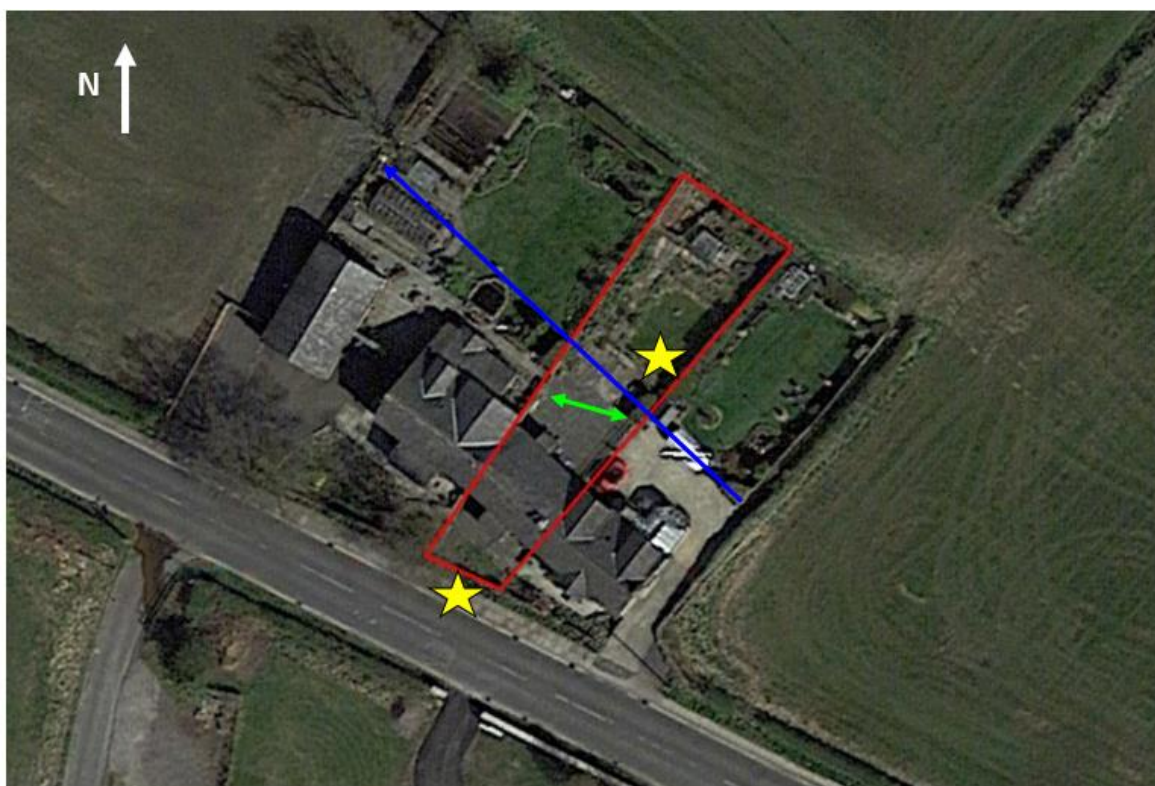
Table 5.2 – Survey dates, times, and weather conditions

Times of Survey	Date	Weather Conditions
Dusk survey 1 19:43 – 21:35	31 st August 2021	Sunset: 20:03: Dry, moderate breeze, 100% cloud cover Start temp: 16°C End temp: 14°C
Dusk survey 2 19:09 – 20:50	14 th September 2021	Sunset: 19:29: Dry, gentle breeze, 20% cloud cover Start temp: 15°C End temp: 13°C

Table 5.3 – Dusk Survey Results

Dusk Survey	Time	Activity
31/08/2021	1943 - 2135	Summary: No bat emergence for the duration of survey. 2024 hrs: a Noctule was recorded but not observed 2030 hrs: a Common Pipistrelle (CP) foraged in the rear garden to the north-west of the property 2035 hrs: a CP foraged in the rear garden to the north-west of the property 2050 hrs: a CP commuted south-east to north, to the west of the property General activity comprised of sporadic commuting and foraging by a CP bat.
14/09/2021	1909 - 2050	Summary: No bat emergence for the duration of survey. 1957-2006 hrs: a CP was recorded but not observed General activity was comprised of occasional commuting by a CP outside of the survey area.

Figure 5.1 – Visual Aid – 31/08/2021 Dusk Survey 1 Results with Key



Dusk Survey 1 - 31/08/2021

Key			
	Site Boundary		Foraging activity
	Surveyor Positions		Commuting activity
	Directional compass		

6.0 Conclusions & Recommendations

- 6.1 From the dusk survey results, it can be concluded that whilst using best practice survey methodology, emergence of bats was absent at 322 Turton Road; general activity comprised of sporadic commuting and foraging by up to one Common Pipistrelle (*Pipistrellus pipistrellus*) bat.
- 6.2 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 (see Figure 6.1), is found at any stage during the works then as a legal requirement the work at the site should immediately cease and a bat ecologist contacted for further advice:

Figure 6.1 – Bat droppings (left) and pipistrelle bat (right)



- 6.3 If bat(s) or their roost will be affected then a Natural England Mitigation licence will be required to legally continue with the work. Notwithstanding the granting of a licence works that would affect a roost cannot take place if a maternity colony is in occupation.
- 6.4 Notwithstanding absence of roost behaviour observed, the proposed development scheme might consider enhancement for bats as part of its biodiversity net-gain goals, in accordance with local and national planning policy.

See Figures overleaf for indicative ideas which could be integrated during the development at 322 Turton Road.

Enhancing a development site for Bats

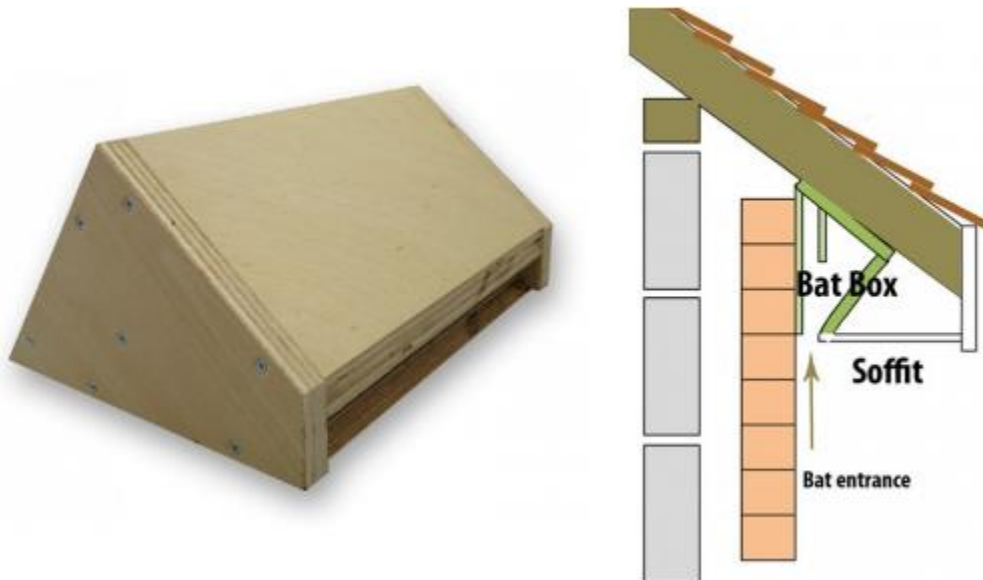
Integrated bat box

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.



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 model for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.

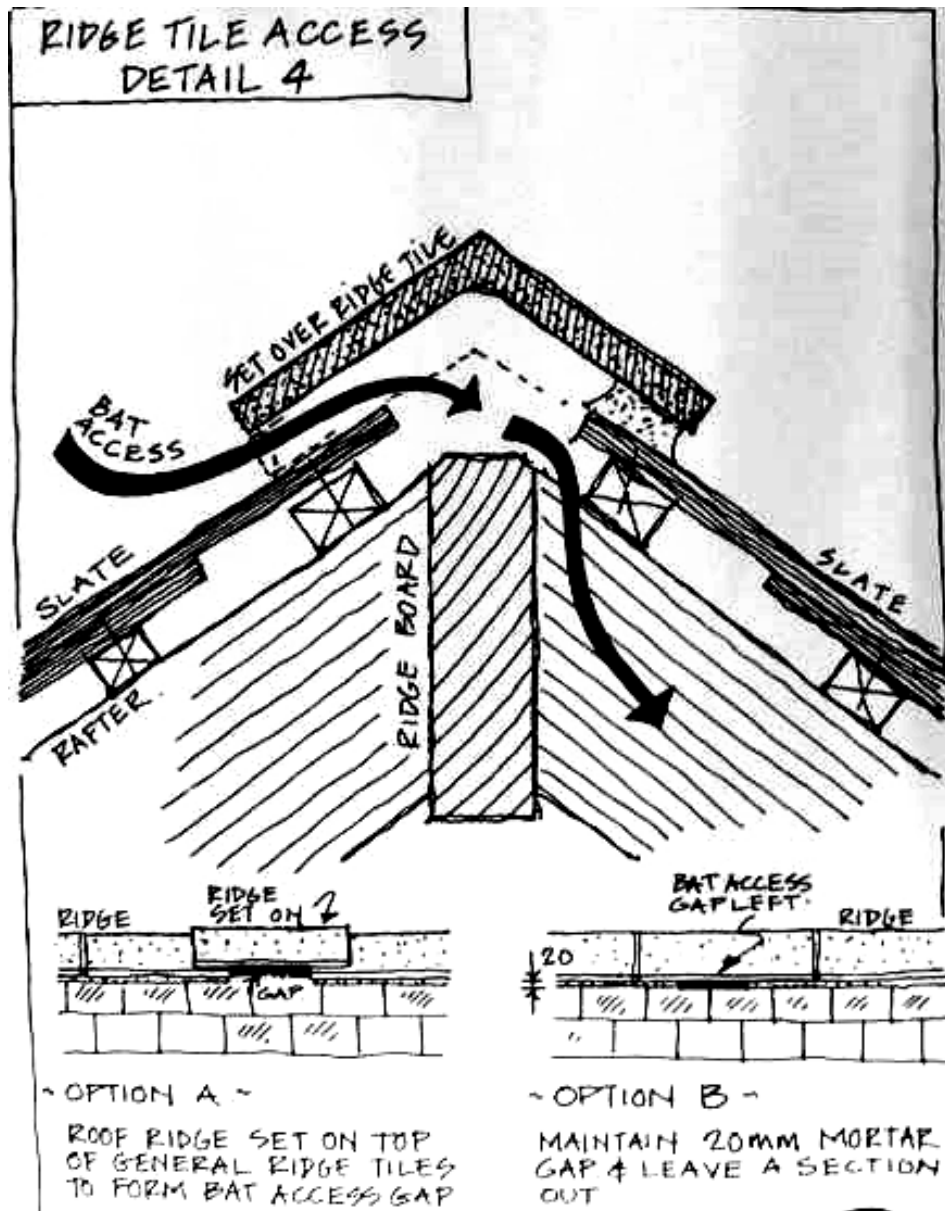


Ridge access

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.

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.





8.0 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/>
- **British Standards Institution (BSI)**, 2020. *BS 8683 Process for designing and implementing Biodiversity Net Gain – Specification*. Available from: <https://standardsdevelopment.bsigroup.com/projects/2018-02413#/section>
- **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
- **CIEEM (2018)** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1*. Chartered Institute of Ecology and Environmental Management, Winchester. Available from: <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.1Update.pdf>
- **CIEEM**, 2016. *UK Guidelines for Accessing and Using Biodiversity Data*. Available from: www.cieem.net/data/files/Publications/Guidelines_for_Accessing_and_Using_Biodiversity_Data.pdf
- **Collins, J (ed.)**, 2016. *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 3rd edition. The Bat Conservation Trust, London.
- **Communities & Local Government (C&LG)**, 2018. *National Planning Policy Framework*. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf
- **Magic Maps Application**, [accessed September 2021]. Available from: www.natureonthemap.naturalengland.org.uk/MagicMap.aspx
- **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** 2021. *Preliminary Ecological Appraisal – 322 Turton Road, Tottington*.