CHISNALL FARM, DALTON, WIGAN, LANCASHIRE

- Bat Activity Survey Results Report -

JUNE 2023

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- Bat Activity Survey Results Report -

A report for

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1. INTRODUCTION

1.1 BACKGROUND AND REASON FOR SURVEY

PENNINE Ecological was commissioned in February 2023 by Mr. Phil Waterworth to undertake emergence/re-entry surveys of Chisnall Farm, Dalton, Wigan, Lancashire. The surveys and subsequent report are required to support a planning application to demolish the existing farmhouse and rebuild a single residential dwelling and a stable block.

The surveys followed the completion of Preliminary Ecological Appraisal by PENNINE ecological in January 2023 (PENNINE ecological, 2023) of the site which included an internal and external assessment of the existing farmhouse. The internal inspection identified bat droppings within the loft space thus confirming the likely presence of bats within the property.

Therefore, in accordance with current Bat Conservation Trust (BCT) guidelines (see Figure 1 below), three presence/likely absence surveys were undertaken in May and June 2023.

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.

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

The surveys were undertaken to determine whether the proposals to demolish the farmhouse would result in impacts to bats which may potentially roosting within the building.

The results, conclusions and recommendations following the survey, 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 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 site is SD 51050 07543. Chisnall Farm is approximately 750m north west of Roby Mill, 2.4km north of Up Holland and 2.85km north east of Skelmersdale. It is located within a largely rural landscape comprised farmyards, arable and pastoral farmland, deciduous woodland, hedgerows and brooks. A network of minor roads such as Farley Lane, Crow Lane, Beacon Lane and Stoney Brow provide access to the aforementioned villages and towns. Beacon Park Golf Club and Beacon Country Park are both approximately 750m to the south west of the site.

Figure 2: Aerial view of the farmhouse subject to presence/likely absence surveys for bats is highlighted by the red line boundary.

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.

Three surveys were undertaken on the 11th May (dusk emergence), 26th May (dawn re-entry) and 8th June (dusk emergence) 2023. 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.

The number of surveys (three) and surveyors was adequate relative to the roost potential that was identified for the building i.e., 'high' and requiring four surveyors to monitor potential roost features (PRF's) on the building 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. Infrared cameras (Nightfox Whisker) were also used during the surveys to aid surevyors when the human eye could no longer observe pitentailly emerging or re-entering bats to/from a roost. 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 ecologist Stuart Macpherson BSc (Hons) MSc, ACIEEM – Class 2 Natural England licence reference number (2021-10079-CL18-BAT).

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. **20:43 – 22:28**	11/05/2023	**Sunset: 20:58** Calm, no precipitation, 1 okta cloud cover. Start temp: 12°C End temp: 11°C
Survey 2; dawn. **03:26 – 05:11**	26/05/2023	**Sunrise: 04:56** Calm, no precipitation, 0 oktas cloud cover. Start temp: 11°C End temp: 11°C
Survey 3; dusk. **21:22 – 23:07**	08/06/2022	**Sunset: 21:37** Gentle breeze, no precipitation, 1 okta cloud cover. Start temp: 14°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: • Emergence of three common pipistrelle bats. • Continuous foraging throughout the survey.		
	21:10	Common pipistrelle	Bat **emerged** from the farmhouse' south west facing gable end (reference point A in Photograph 1 and 2).
	21:19	Common pipistrelle	Bat **re-entered** the south west facing gable end and **emerged** soon after (reference point A in Photograph 1 and 2).
	21:29	Common pipistrelle	Bat **emerged** from the south eastern aspect of the farmhouse under the fascia approx. 2m to the south of the chimney (reference point B in Photograph 2).
	21:30	Common pipistrelle	Second bat **emerged** from the same location as those at 21:10 and 21:19 (reference point A in Photograph 1 and 2).

Survey Results	Time	Species	Activity
	21:30 – end of survey	Common pipistrelle	Constant foraging of common pipistrelle bats (max four bats) around the farmhouse. The majority of the activity was on the building's north western and south western aspects above the garden which comprised semi-mature trees and shrubs. Limited activity on the north eastern aspect of the building. The activity recorded was between the farmhouse and the treelined brook to the north west.
Survey 2	**Summary/Key Points:** • Re-entry of two common pipistrelle bats. • Continuous foraging around the farmhouse up until approx. 04:30.		
	03:42	Common pipistrelle	Bat foraging on the buildings south western aspect, seen but not heard. Brief foraging passes along the south eastern elevation of the farmhouse.
	03:52	Common pipistrelle	Brief foraging pass, heard not seen.
	04:05	Common pipistrelle	**Re-entry** of a single bat on the south west facing gable end. This is the same location as a bat was observed emerging at 21:10 during Survey 1 (reference point B in Photograph 2). This followed two bats foraging in the garden and swarming close to the gable end, however, only one bat re-entered with the second commuting to the west.
	04:14	Common pipistrelle	**Re-entry** of a single common pipistrelle bat under the fascia approximately 2m the south of the chimney on the farmhouse' south eastern aspect. This is the same location as the emergence at 21:29 during Survey 1 (reference point B in Photograph 2).
	04:15	Common pipistrelle	Three bats foraging along the farmhouse' north western aspect.
	04:30 -end of survey	n/a	No further activity.
Survey 3	**Summary/Key Points:** • Emergence of two common pipistrelle bats. • Continuous foraging throughout the survey.		
	22:05	Common pipistrelle	**Emergence** of a single bat from the south west facing gable end. This is a separate location to that identified during Surveys 1 and 2 (reference point C in Photograph 1 and 2).
	22:06	Common pipistrelle	**Emergence** of a single bat from the fascia 2m south of the chimney on the south eastern aspect of the building (reference point B in Photograph 2).. This is the same location as the emergence at 21:29 during Survey 1 and re-entry at 04:14 during Survey 2.
	22:06	Common pipistrelle	Brief foraging pass from the south eastern aspect of the farmhouse.

Survey Results	Time	Species	Activity
	22:12	Common pipistrelle	Two common pipistrelle bats foraging in the garden to the south west of the farmhouse.
	22:17	Common pipistrelle	Foraging pass in front of south west facing gable end.
	22:54	Brown long-eared	Brief pass, heard but not seen.

Figures 3 - 6 provide an overview of the bat activity encountered during each of the surveys and the location of the emergence / re-entrance points.

The key below is applicable to all three figures.

Key	
○	Bat re-entry/exit point (inc ref)
→	Foraging/commuting activity
■	Surveyor positions

Figure 3: Overview of Bat Activity During Survey 1 (11/05/23)

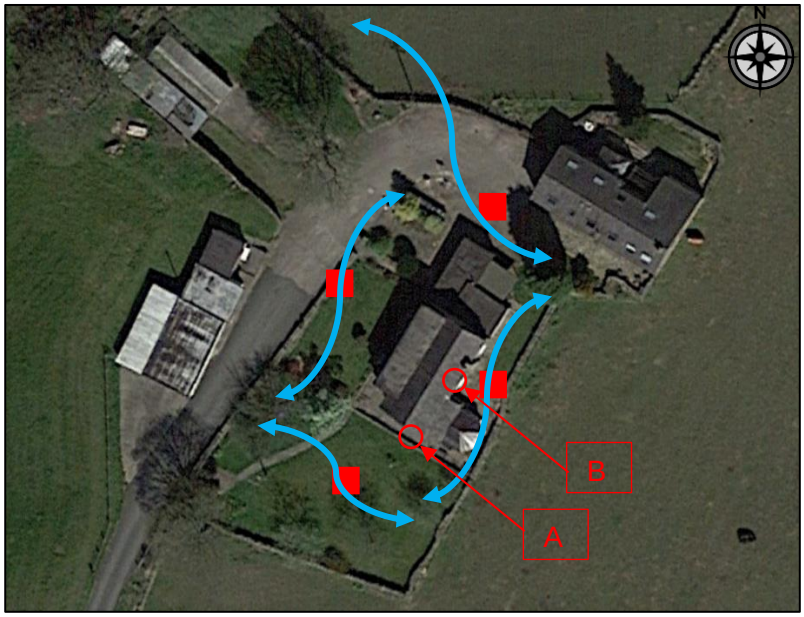


Figure 4: Overview of Bat Activity During Survey 2 (26/05/23)

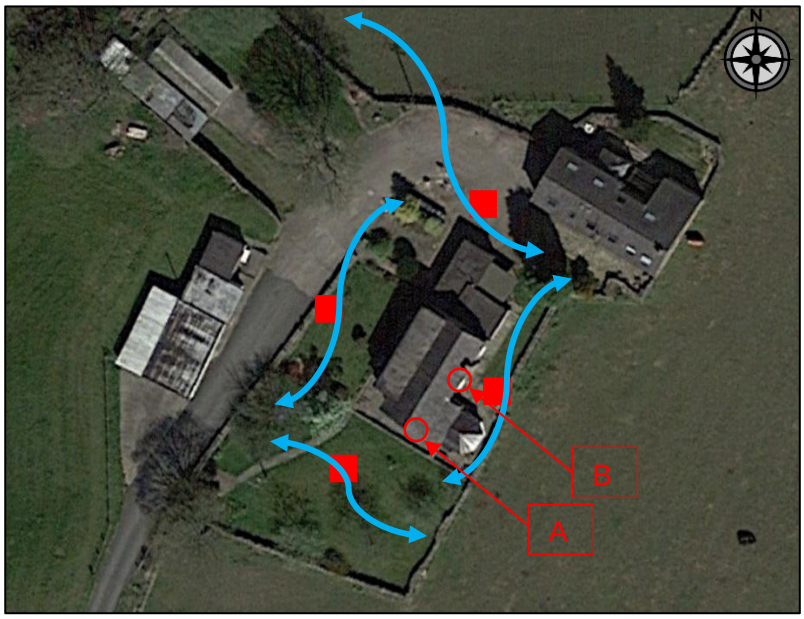
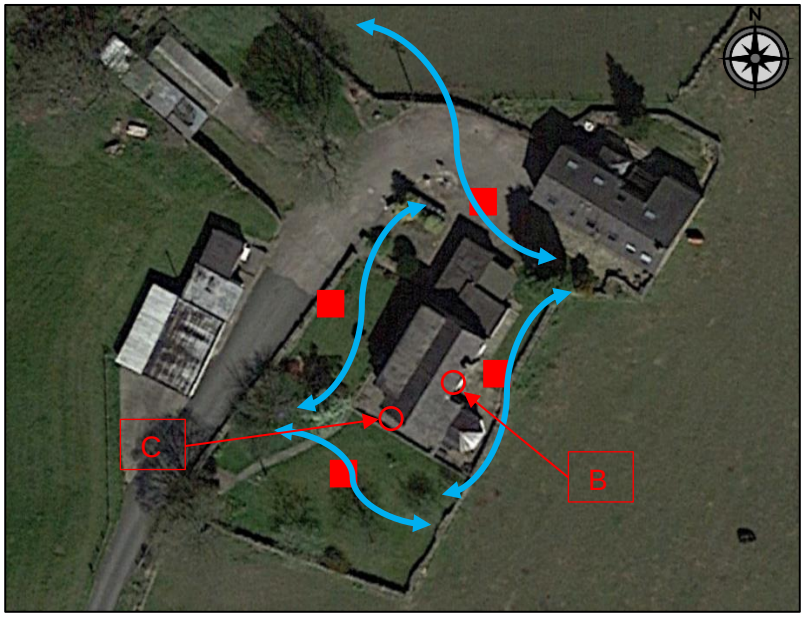


Figure 5: Overview of Bat Activity During Survey 3 (08/06/23)



The photographs below provide the locations of the emergence / re-entry points recorded during the surveys.

Photograph 1: Emergence / Re-entry location points A and C on the south western facing gable end of the farmhouse.

Photograph 2: Emergence / Re-entry location points A, B and C.

4. CONCLUSION & RECOMMENDATIONS/MITIGATION

4.1 CONCLUSION

From the three surveys undertaken, it can be concluded that the farmhouse is being used by common pipistrelle bats only. The bat roost has been categorised as a common pipistrelle 'Day roost'. A maximum of three bats were recorded emerging during the surveys.

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 involve the deoltion of the existing farmhouse this is highly likely to destroy the identified roost, appropritate mitigation will be required to ensure compliance with current legal legislation and conservation policy.

A European Protected Species Mitigation Licence will be required to legally destroy a place that is actively used for breeding, resting or sheltering by bats.

However, before a licence can be applied for, all planning issues must be resolved. In order that the Local Planning Authority LPA can implement its obligations under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), appropriate and proportionate mitigation will need to accompany the planning application which will demonstrate that the "favourable conservation" of the species concerned can be maintained (see below).

From the evidence gained during the surveys, the site is considered to be of 'low' conservation significance for the common pipistrelle bat species[1]. Therefore the proposed mitigation is proportionate to this assessment. If at any time the assessment of the roost is revised to a higher level and / or involves a species of higher conservation significance, 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.

In addition, Local Planning Authorities in accordance with the obligations placed upon them by way of their duties under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579) have to take into consideration the presence of a European Protected Species before determination of an application where it/they have been identified.

[1] Significance level based on information provided in *English Nature: Bat Mitigation Guidelines, 2004*. Bats and their current status

The LPA need to consider the mitigation in relation to the potential success of a Natural England licence application and/or if in their opinion the mitigation is considered as being appropriate, or if it is over and above what is required; if they determine that the mitigation is appropriate then a Planning Condition should be attached requiring the roost provision to be implemented.

If the LPA consider that the mitigation is over what is necessary but require "enhancement" as part of their Local Biodiversity/Net-Gain Planning Policies this should be included in the terms of Consent. The acting bat ecologist deems the proposed new roost creation as appropriate and not over and above what is required.

Notwithstanding that Planning Consent is granted or equally if the work is undertaken outside of the planning system, whereby projects that do not require planning consent may affect bats or their roost, including disturbance, it does not absolve the applicant, site owner, developer or any other party involved with the work from ensuring that an application is made for a Natural England development licence, to legally undertake work that will affect bat(s) or their roost(s).

If work is undertaken without a licence and bat(s) or their roost(s) is/are affected then a breach of current wildlife legislation will occur for which penalties are severe.

(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.

To ensure that bats are not left without a roost while the work takes place three Schwegler 2F bat boxes or Schwegler 2FN bat boxes (or suitable equivalents) will be mounted on trees in proximity to the farmhouse. The large sycamore tree to the north west of the property is preferable and consent with the landowner will be required. The boxes will act as receptors should bats have to be captured and relocated during the work schedule (See Figure 6).

The receptor bat boxes will act as receiver boxes for any bats that need to be captured during the works. The bats will relocated to the boxes by the ecologist during the work schedule; the bat boxes will be retained permanently post-development to provide permanent roost opportunities for bats.

Figure 6: Potential location of receptor roost(s) (e.g., bat boxes) marked by red circle on mature sycamore tree.

(ii) Assigned Ecological Clerk of Works (ECoW)

At the pre-commencement stage, a suitably qualified ecologist will provide an induction 'toolbox talk' on possible bat presence and present/discuss document features taken from the licence i.e., Licence, Method Statement, Mitigation Figures and Work Schedule to be kept on site for the duration of the work.

Prior to any work being undertaken the presence/absence bats as far as is possible will be established by undertaking detailed investigation of the building and structures where bats have been observed re-entering and emerging. The ecologist will supervise careful dismantling of all places that will be removed as part of the proposed work which have been identified as offering roost access or roost potential at the ecologist discretion. In addition, wherever opportunities for bats exist in other parts of the site the supervised dismantling will extend to these areas with strategies for safely removing bat(s), as long as a more significant bat roost i.e., a maternity colony is considered not to have taken up occupancy.

All dismantling of roost features will be undertaken during favourable weather conditions, and outside of the hibernation season of bats (November to March).

Work undertaken by the Ecologist

Capture/Exclusion

Once an EPSML licence is in place, the contractor will provide a safe means of access to allow the ecologist to investigate the confirmed roost area for bat presence.

In addition, wherever opportunities for bats exist in other parts of the property the supervised dismantling will extend to these areas at the discretion of the ecologist in attendance. The bat licenced ecologist will oversee the works until they are satisfied that there is a low likelihood of bats being present within.

In the event of bat(s) being present, it/they will be removed, placed in a secure box with soft tissue and immediately transferred into the receptor bat boxes that will have previously been erected on a suitable feature e.g., tree as indicated on Figure 6. Once it has been established by the ecologist that bat(s) are absent the works will continue to completion.

In the unlikely event that bats are found outside of supervision time, then as legal requirement and conditions of the granted licence work will immediately cease and the ecologist contacted for further advice; contractors must not touch, handle or in any way cause bats to move

4.4 Further Design Recommendations

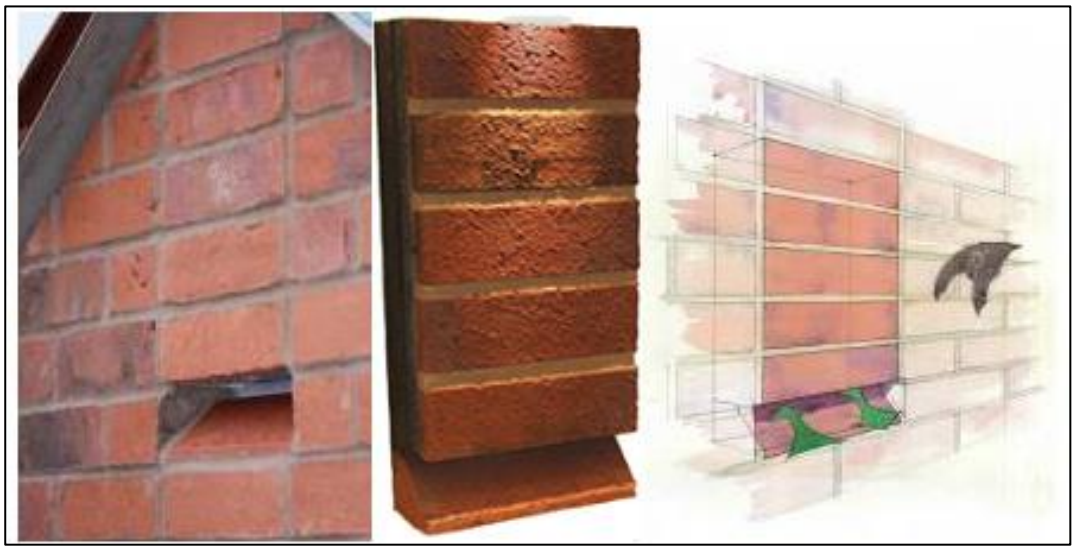
In addition to the bat boxes which are to be installed as part of the EPSML requirements, it is recommended that additional bat provisions are built into the design of the new property. The site has been identified as supporting at least two different bat species (common pipistrelle and brown long-eared) and it is possible other bat species inhabit the area.

Additional bat provisions include:

Integrated bat box

The Habibat Bat Box (Figure 7) 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 installed as shown below in Figure 7, at wall plate level, and on the south-eastern and south western facing aspects of any new buildings i.e., the same aspects on which the roosts were recorded.

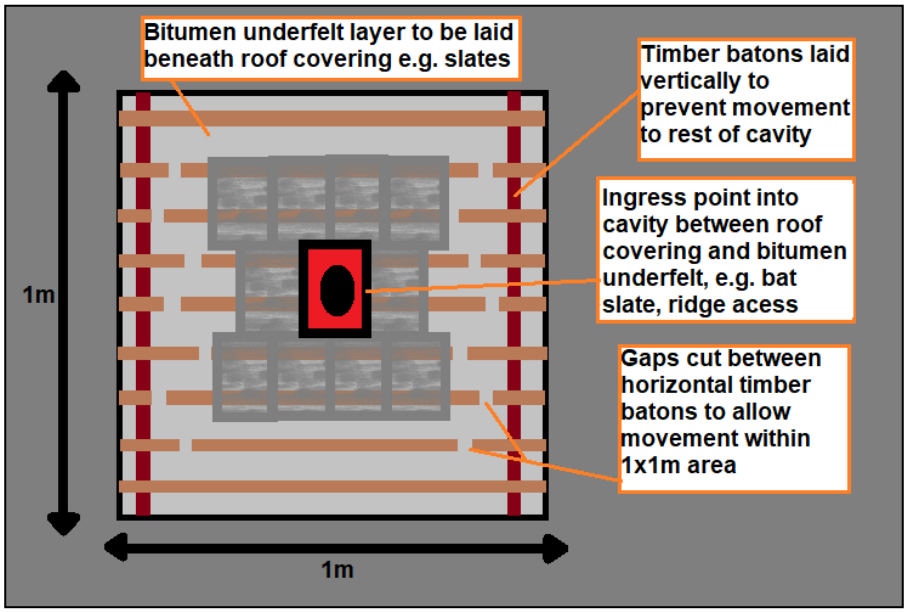
Figure 7: Image showing Integrated bat boxes which are recommended.



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 8). 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 $1m^2$ 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 8: Diagram showing the layout of felt around an ingress point.



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Appendix A: Bat Legislation and Policy

Legislation

All British bats and their **roosts[2] 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

[2] *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 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.

Lancashire Bats

Up to eleven 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 etc.). The most frequently encountered species are the common and soprano pipistrelle bats; their abundant status in Lancashire is reflected throughout the UK.