Preliminary Bat Roost Assessment & Breeding Birds Survey Report

Site: Barn at Cheetall Farm, Clitheroe BB7 3LH

10th December 2024

CLIENT:

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Date checked & released:

12th December 2024

Valid Until

1st July 2026

Summary

This report presents the results of a daylight preliminary bat roost assessment (PRA) and breeding bird survey undertaken on 25th November 2024, at Cheethall Farm, Edisford Road, Clitheroe, Lancs, BB7 3LH, Lancashire. The work has been commissioned in connection with a planning application for a proposed development at the above property.

The scope of the survey has primarily considered roosting and hibernating bats, breeding birds and barn owls.

The survey has identified that there is **moderate** roosting habitat for bats in the building, and therefore further surveys are recommended. Evidence of nesting birds was found in the building, and the surrounding garden and farmland has good quality habitat for birds and therefore some mitigation will be required for habitat loss. Barn owl pellets and other evidence of feeding by barn owls was present in the barn, and so will also require further survey for barn owl activity.

The site is exempt from Biodiversity Net Gain requirements, as no greenspace or habitats exist on-site.

Further surveys and recommendations:

Bats
Two further emergence surveys. These must be carried out during the peak activity period for bats which is May – September inclusive, ideally with one survey falling in the peak breeding season (June). However, if bats are recorded during any of these surveys, a further survey may be required to characterise the roost(s) and gather sufficient evidence to inform a Natural England protected species mitigation licence application.
Birds
Barn Owl surveys will be required (before any work is carried out) by a suitably experienced & licenced ecologist to quantify how the barn owl(s) are using the barn, to inform a mitigation and enhancement plan. Any building clearance or removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building to be removed should be undertaken by a suitably qualified ecologist, immediately prior to clearance. All active nests will need to be retained until the young have fledged. Clearing the Site outside this timeframe avoids delays and further costs.

For full justification of these recommendations, please go straight to section 4.0 Conclusions, Impacts and Recommendations. Otherwise, the full report starts below.

Contents

1.0 Introduction and Context

1.1 Background

Carol Edmondson of Ark Ecology was commissioned by LJG Planning on behalf of their client to carry out a Potential Bat Roost & breeding bird survey (PRA) at Cheetall Farm, Clitheroe, BB7 3LH in November 2024.

The survey building was a two-storey detached agricultural barn, which is currently used for storage.

From this point forward, the land encompassed by the red-line boundary of the survey map (appendix 1) is termed '**the Site**'.

1.2 Context

A bat survey has been deemed necessary to support a planning application due to the nature of the proposed building and location of the Site. In addition, the presence or absence of barn owl *Tyto alba* and nesting birds has been taken into consideration, along with other local wildlife.

1.3 Scope of the report

This report provides a description of all features suitable for roosting bats and evaluates those features in the context of the Site and wider environment. It further documents any physical evidence collected or recorded during the Site survey that establishes the presence of roosting bats. It provides information on constraints to the proposals as a result of roosting bats, and summarises the requirements for any further surveys, to inform subsequent mitigation proposals, achieve planning or other statutory consent, and to comply with current wildlife legislation.

The aim of the assessment was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how they could use the Site. Due to the transient nature of bats, this report is not able to definitively ascertain the absence of bats, rather the absence of *evidence* of use by bats either prior to or at the time of the survey.

To achieve this, the following steps have been taken:

- A desk study has been carried out, including information from MAGiC website
- A request to Lancashire Environmental Records for bat records within a 2km radius of the site has been obtained.
- A field survey has been undertaken, including an external survey and internal inspection where possible.
- An outline of likely impacts on any known roosts has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on European Protected Species Mitigation Licensing where appropriate.

A survey plan is presented in Appendix 1, the proposed Project Plan is included in Appendix 2.

The assessment is informed by the Bat Conservation Trust publication *Bat Surveys for Professional Ecologists – Good Practice Guidelines* (Collins, J. (Ed) 2023).

2.0 Methodology

2.1 Desk Study methodology

Desk and internet-based resources were used to obtain background information about known bat habitat and occurrences in an approx. 2km surrounding radius. The results are shown at Appendix 3.

The resources used for the desk study were as follows:

- Google Earth Pro (http://earth.google.co.uk) for aerial photographs
- Multi-Agency Geographic Information for the Countryside (MAGIC) collaborative database website (http://magic.defra.gov.uk/MagicMap.aspx), for information on statutory designations.

2.2 Site Survey methodology

All features that will be impacted by the project proposals were assessed for their bat roosting and/or commuting habitat. The surveyor systematically surveyed all features suitable for signs of bat activity by non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building for potential access/egress points, and for signs of bat use. An internal inspection of the building was also made where possible, including areas of derelict or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope & torch. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

2.3 Breeding birds and other incidental observations

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence, or signs of, breeding birds, and the suitability of the site for barn owls.

2.4 Suitability Assessment

All affected survey features on site were categorised according to the likelihood of bats being present, in line with best practice guidelines (Collins, J. (ed) 2023). The features that dictate the likelihood of roosting bats are summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats

Likelihood of bats being present	Feature of building and its context
Higher	Buildings/structures with features of particular significance for roosting bats e.g., mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g., broadleaved woodland, tree-lined watercourses and grazed parkland. Site connects with the wider landscape by strong linear features that would be used by commuting bats e.g., river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data).
Lower	A small number of possible roost sites/features, used sporadically by more widespread species. Habitat suitable for foraging in close proximity but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.

2.5 Limitations – evaluation of the methodology

It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete description of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on the site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study.

- The survey was undertaken outside the peak activity season for bats, when external evidence can be removed during inclement weather.

3.0 Results and Evaluation

3.1 Desk Study Results

- The desk study included a 2km buffer zone surrounding the Site.
- The Site is located at National Grid Reference SD 71894 41936

3.1.1 Designated sites for bats & Priority habitats

There are no sites designated for their importance to bats within the 2km study area.

Priority habitats:

- Small areas of deciduous woodland within the study area, the closest at 550m to the east.

3.1.2 Local bat records

Information from LERN & South Lancs Bat Group show 5 roost records within a 500m - 1km buffer of the property. These include records of both pipistrelle species and Daubenton's bat, all crevice dwelling bats. The records are spread out in the landscape, with some following the course of the River Ribble to the east.

A map showing the extent of the records is included at Appendix 3.

3.1.3 Landscape

A review of the designated sites, aerial photographs (Figure 1), the Magic database (App. 3) and OS maps has been carried out. The Site and its surrounding landscapes' relevance to bat habitat is described as being located to the west of Clitheroe in a rural, agricultural landscape. Some hedgerows connect the site through the surrounding farmland to the woodland pockets in the wider landscape, and River Ribble to the east. These features along with the wider rural landscape of pasture and meadows with hedges, and small areas of deciduous woodland form suitable commuting and foraging habitat for bats.

Figure 1: Aerial photo of site, showing surrounding landscape structure.

3.1.3 Historical records

A search of the magic database returned one granted European Protected Species Mitigation Licence (EPSMLs) records for bats within a 2km radius of the survey site. This is located >900m to the southeast on the edge of Clitheroe, and includes the destruction of a resting site for soprano pipistrelle (*Pipistrellus pygmeus*) bats.

The absence of licenced records does not confirm the absence of other bat species in the area.

3.2 Field Survey Results

The survey was undertaken on 25th November 2024 by Carol Edmondson (Natural England bat licence number: **2015-12195** CLS-CLS), an MSc qualified ecologist with 12 years' experience in bat and ecology surveys.

The survey was carried out using a high-powered torch, binoculars and endoscope where possible. The proposals include for the conversion of the barn into two residential dwellings. The exterior & interior of the dwelling was surveyed for potential bat roosting features, to ensure no disturbance will be caused to bats by the proposed works.

There is one survey building on the site which is illustrated in the map in Appendix 1. The environmental variables recorded at the time of the survey are shown in Table 2.

Table 2: Environmental variables during the survey

Date: 25/11/2024	
Temperature	8°C
Cloud Cover	80%
Wind	6 km/h
Rain	Occasional showers

3.2.1 Site Feature descriptions and photos

Building Description: The survey building is a link-detached two-storey agricultural barn with small lean-to extension to the north. Traditional stone and red brick-built solid walls with a corrugated sheet roof, without lining.	 Photo 1: Overview of the site with the survey area outlined in red.
Potential roosting features: The roofing sheets have both small and larger gaps to the wall tops allowing access for both bats and birds to the interior of the buildings. The fascia boards on the single-story extensions have a gap to the wall, forming a crevice suitable for bats to use for day roosting. The North gable end has gaps in the brickwork pointing which are also a potential bat roosting feature.	 Photo 2: Northwest elevations of the barn, showing the area where the single storey extensions have been added.

The southern gable end is well pointed, with well-fitting uPVC door and window frames. The eaves have also been pointed sealing this area well.	 Photo 3: South & east elevations of the building, the gable end having less gaps and potential roosting features than other elevations.
The front (east) elevation of the building had an open roller shutter door, with a timber door and further roller shutter to the single-storey extensions. All doors had gaps that both birds and bats could use to enter the buildings, with a gap behind roofline materials, brickwork and also in the lintel of a bricked-up window.	 Photo 4: East elevation of the barn and single story extensions.

There were bird droppings (likely swallow) on the face of the blocks in the first-floor window, suggesting the wooden beam has been used for nesting above. The smaller gap forms the type of feature known to be used by crevice dwelling bats.	 Photo 4: Close up of gaps in lintel and blockwork on the east elevation of the barn showing evidence of birds nesting above the wood lintel, and the smaller gap suitable for bats to roost..
Internally: The main barn was partitioned into two sections; however the partition did not reach full height to the roof. The roof was not lined or underdrawn, with the underside of the roofing sheets visible. There were gaps to the exterior visible at the ridge top on the gable ends, and ventilation slits in the original walls of the building.	 Photo 5: Example of the roof materials.

Although there was access to the interior of the building, there were only suitable roosting spaces on the wall tops, the framework of the roof being steel. The barn was also light and airy with the gaps to the exterior and the roof lights, making it less suitable for void dwelling bats.	 Photo 6: Example of the new roof materials.

Evidence of bats

There was no evidence of bats currently using this building as roosting habitat i.e. no droppings, urine stains or grease smudge marks either internally or externally, however the survey was carried out outside the peak bat activity period. There were multiple suitable features for crevice dwelling bats that don't always leave evidence of their presence.

Breeding birds and barn owls

There were 4 visible historic nesting places within the main barn itself, and evidence that the wall tops had been used in places.

There was evidence of use by a barn owl as a feeding perch, with 20+ pellets (some fresh) on both the ground floor and the upper mezzanine, with urine platter on the walls under one of the ventilation holes in the north gable end, and on the walls close to the pellets.

Photo 7: Swallow nests on the girder supporting the mezzanine in the main barn.

Photo 8: Barn owl pellets on the upper mezzanine.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

Bats and their roosts are protected under the Wildlife and Countryside Act and Conservation Regulations. Legislation protects all wild birds whilst they are breeding, and prohibits the killing, injuring or taking of any wild bird or their nests and eggs. Certain species of bird, including the barn owl, are subject to special provisions; it is an offence to disturb any bird or their young during the breeding season.

4.2 Evaluation

Taking the desk-based assessment and site survey results into account, the following value for roosting bats has been placed on The Site.

Table 3: Evaluation Summary for presence of bats

Survey assessment conclusions	There is ample bat roosting potential in the building itself, but the surrounding landscape is fairly open with little tree cover forming suitable bat foraging habitat in the proximity of this site. Records include crevice dwelling bats from 500 – 2000m from the site. Low records of EPSML's in the 2km study area. Taking these factors into account, the author considers that the building has a **moderate** likelihood of supporting roosting bats.
Foreseen impacts	There is a moderate risk that bats could be injured or killed during the building process.
Recommendations	Two further emergence surveys. These must be carried out during the peak activity period for bats which is May – September inclusive, ideally with one survey falling in the peak breeding season (June). However, if bats are recorded during any of these surveys, a further survey may be required to characterise the roost(s) and gather sufficient evidence to inform a Natural England protected species mitigation licence application.
Enhancements *The Local Planning Authority has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99*	This will be expanded upon when the emergence surveys have been carried out, and can include the installation of bat bricks, bat roof slates and external boxes, depending on the species found and the type of roosts (simple day roost or maternity roost with multiple bats). Bat boxes should be positioned 3-5m above ground level facing in a south/south-westerly direction with a clear flight path to and from the entrance. • Cavity bat boxes are also a good option in new construction for example available from: https://www.nhbs.com/ib-vl-05-vivara-pro-build-in-woodstone-batbox?bkfno=252213 The use of "Bat tiles are not recommended in this instance due to the presence of the breathable roof membrane, which can entrap bats in the fibres.

Table 4: Evaluation Summary for presence of breeding birds

Survey assessment conclusions	The site surroundings include suitable habitat for nesting birds, and evidence within the impacted building. Evidence of Barn owl using the barn interior as a feeding perch.
Foreseen impacts	Active nests could be destroyed during building/vegetation removal. Any works which affect the Site could have an impact on nesting birds.

Recommendations	Barn Owl surveys will be required (before any work is carried out) by a suitably experienced & licenced ecologist to quantify how the barn owl(s) are using the barn, to inform a mitigation and enhancement plan. Any building clearance or removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building to be removed should be undertaken by a suitably qualified ecologist, immediately prior to clearance. All active nests will need to be retained until the young have fledged. Clearing the Site outside this timeframe avoids delays and further costs.
Enhancements *The Local Planning Authority has a duty to ask for enhancements under the NPPF and circular 06/2005: Biodiversity and Geological Conservation. Para.99*	Mitigation and enhancements for barn owls will be provided following the barn owl surveys. For other birds: To mitigate for the loss of swallow nesting sites a bespoke swallow nesting terrace can be designed into the exterior of the buildings. Swallows require an overhang with a darkened interior space. For example: **Eaves/ridge overhang swallow nest box**  For enhancement: Install an additional 2 bird boxes on site, on an existing tree or building e.g. • Good quality timber nesting box with hole protection • Schwegler 1B nest box • Schwegler 2H Robin box Regular nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. House martin/swallow/swift boxes should be placed under the eaves with clear entrance/exit paths, ideally on the west elevation.

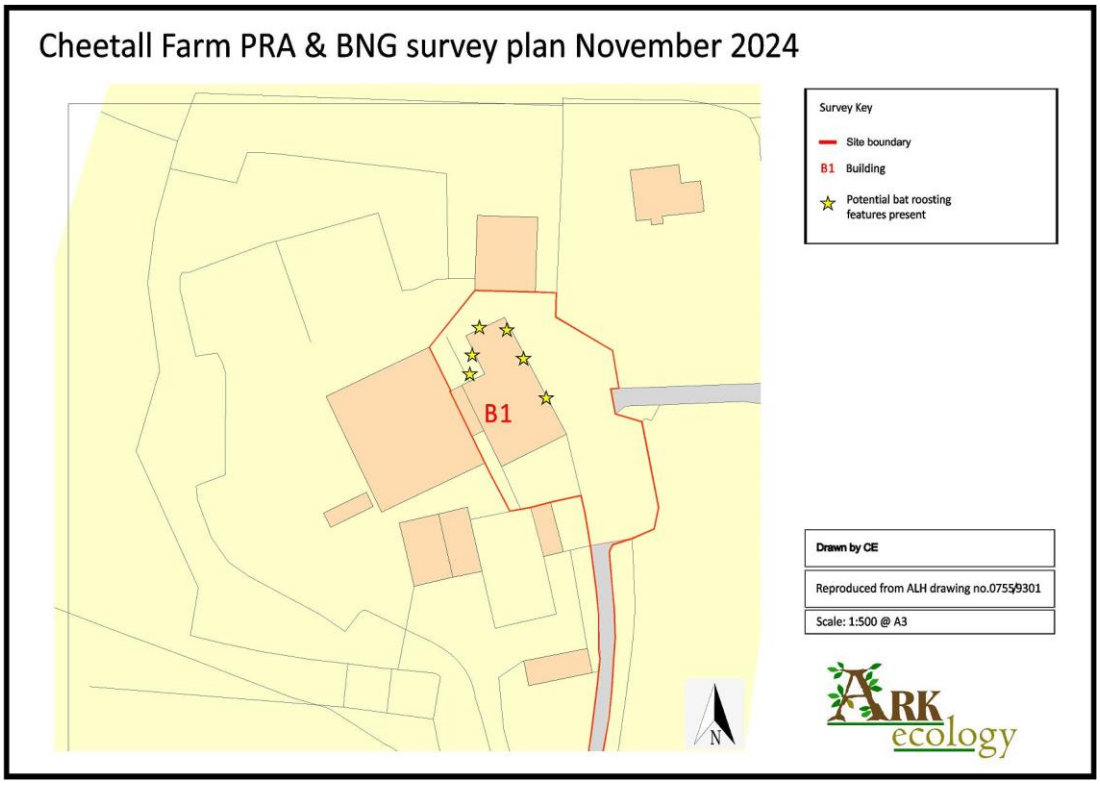
5.0 Biodiversity Net Gain

The site consists entirely of tarmac surface, concrete surface or buildings, and therefore under the Biodiversity Gain Requirements (Exemptions) Regulations 2024.de-minimis rules, Biodiversity Net Gain does not apply to this site. (see https://www.gov.uk/guidance/biodiversity-net-gain)

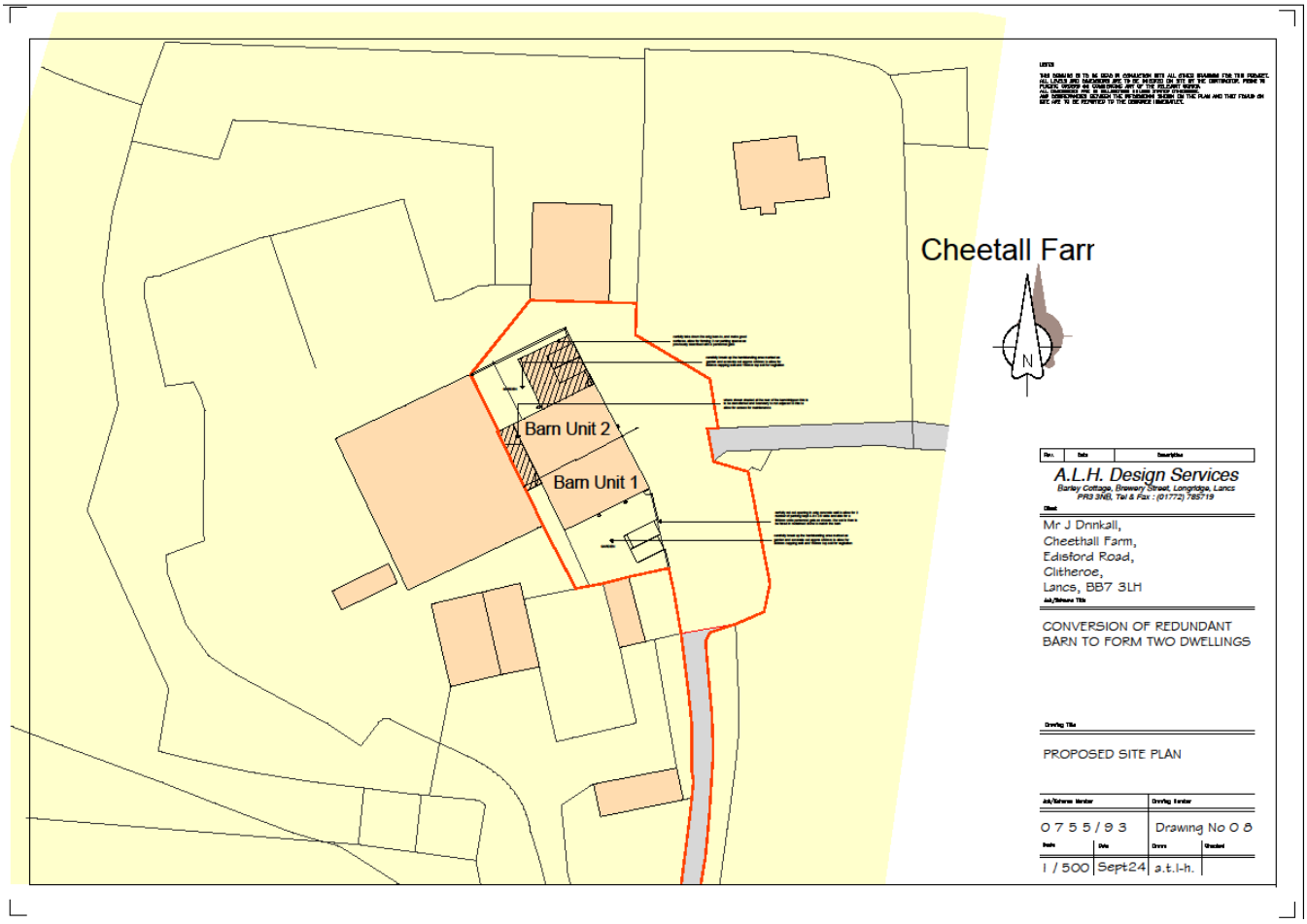
6.0 References

- Andrews H and Gardener M 2016, *Bat Tree Habitat Key – Database Report 2016.* Bridgewater:AEcol.
- Andrews H *et al.* 2016. *Bat Tree Habitat Key*, 3rd edn. Bridgewater: AEcol
- Bat Conservation Trust: http://www.bats.org.uk/
- British Trust for Ornithology (2016) www.bto.org/about-birds/nnbw/putting-up-a-nest-box
- Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 4th edition, Bat Conservation Trust, London.
- Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected?
- Google Earth Pro (2024)
- Magic database (2024) http://www.magic.gov.uk/MagicMap.aspx
- Mitchell-Jones, A.J. (2023). Bat Mitigation Guidelines. English Nature, Peterborough.

Appendix 1: Survey Plan



Appendix 2: Proposed Site Plan



Appendix 3: Desk study results

MAGIC **Cheetall farm 2km desk study area**