Outbuildings at Higher Chipping House, Forest of Bowland

Bat Survey Report

1st September 2022



Prepared by:

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1. Summary

- 1.1.1 The bat survey was commissioned by Rachel Trend of DWA Architects, on behalf of the client Mr Damian Hodkinson, on 20th July 2022.
- 1.1.2 The survey was commissioned to inform the proposed conversion of a stone outbuilding into office space. It is also proposed to demolish a small timber barn to facilitate construction of a new greenhouse (Planning Application Ref.: 3/2022/0186).
- 1.1.3 The preliminary roost assessment and single nocturnal survey was conducted on 9th August 2022.
- 1.1.4 No historic bat records were received in relation to the site. In addition, no evidence of roosting bat presence was recorded during the visual inspection of the two target buildings, with no bat roosting recorded from the stone outbuilding during the nocturnal survey. It is considered that survey works undertaken have demonstrated the probable absence of roosting bats from the two target buildings (the stone outbuilding and timber barn).
- 1.1.5 Four common pipistrelle day roosts were recorded from the Grade II Higher Chipping House, although these will not be impacted by the proposed works.
- 1.1.6 Evidence of historic swallow nesting was recorded from the timber barn during the internal inspection.
- 1.1.7 It is concluded that no further survey effort is necessary providing that works commence within 12 months of the survey.
- 1.1.8 Building demolition works should commence either outside the bird nesting period (March to September inclusive), or the works will need to be preceded by a nesting bird check.
- 1.1.9 It is advised that use of Non-Bitumen Coated Roofing Membranes (formerly known as Breathable Roofing Membranes) be avoided during re-roofing of the outbuilding. The justification for this recommendation is that bats have been shown to regularly become entangled and die in the component filaments of modern woven roofing membranes.
- 1.1.10 In order to mitigate for the loss of a swallow nesting location, it is advised that a swallow nest cup is installed in an adjacent building. A bat roosting enhancement measure has also been recommended.

2. Introduction

- 2.1.1 The bat survey was commissioned by Rachel Trend of DWA Architects, on behalf of the client Mr Damian Hodkinson, on 20th July 2022.
- 2.1.2 The survey was commissioned in order to inform the conversion of a stone outbuilding into office space. It is also proposed to demolish a small and derelict timber barn to facilitate construction of a new greenhouse (Planning Application Ref.: 3/2022/0186).
- 2.1.3 Middleton Bell Ecology were contracted to conduct a baseline assessment to determine the likely presence or absence of roosting bats. Where bats were present the survey was also designed to identify roost locations, access points, species present, level of use and the importance of nearby landscape features.
- 2.1.4 The surveyed buildings are located within the grounds of Higher Chipping House on the southern periphery of the village of Chipping in the Forest of Bowland. The site is 4.2km northeast of the Longridge town centre.

3. Habitat Assessment

- 3.1.1 The stone outbuilding is located adjacent to Cutler Lane, c.10m north of the Grade II listed Higher Chipping House, whose curtilage it is sited within. The wooden derelict barn is located c.25m northwest of the house. The grounds of Higher Chipping House include mature tree and shrub vegetation and a large lawn, as well as an access track, hardstanding and an additional stable. To the south of the property is a small woodland block.
- 3.1.2 The wider area is rural, with the vast majority of the area comprising mixed farmland. Street lighting is absent from Cutler Lane, therefore there is little light pollution in this locality.
- 3.1.3 The immediate area surrounding the barn is likely to be used by a moderate density of bats comprising a moderate diversity of species.

| Table 1. Location and habit | tat table |
|-----------------------------|-----------|
|-----------------------------|-----------|

| Name and address: Higher Chipping House, Cutler Lane, Chipping, PR3 2SY | | | | | |
|---|----------|----------------|--------------------------------|--|--|
| OS Grid Ref. SD 61465 | 41506 | Altitude. 101m | | | |
| Local Planning Authority: Ribble Valley Borough Council | | | | | |
| Features on site and adjacent to site | | | | | |
| Feature | On site | Adjacent | Comments | | |
| Buildings | > | > | Located adjacent to dwellings | | |
| River bordered by trees | | | Minor stream c.60m to south | | |
| Standing water | | | | | |
| Bridges tunnels and | | | | | |
| culverts | | | | | |
| Trees | > | > | Mature trees in grounds | | |
| Woodland | | < | Small woodland border south | | |
| | | | boundary of curtilage | | |
| Grassland | ~ | ✓ | Grassland adjacent to surveyed | | |
| | | | buildings | | |





Figure 1. Site location, as indicated by red circle

3.2 Aims

- 3.2.1 The survey was conducted to help determine the following:
 - The presence/absence of roosting bats
 - Potential roosting areas and access/egress points into structures
 - The level of bat roost suitability associated with the structures
 - To characterise any bat roost/s present
 - The presence/absence of nesting birds
 - Any further survey work or mitigation requirements

4. Methodology

4.1 Data Consultation

- 4.1.1 Bat records relating to locations within 2km of the site were requested from Lancashire Environmental Record Network (LERN).
- 4.1.2 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was undertaken to identify historic European Protected Species (EPS) licences obtained for locations within 2km of the site.

4.2 Field Survey

Internal and External Visual Inspection

- 4.2.1 The following personnel conducted the survey on 9th August 2022:
 - Robert Bell (MCIEEM; Bat Survey Class license WML-A34-Level 4, 2016-25236-CLS-CLS; Barn Owl Survey Class Licence CL29/00070)
- 4.2.2 The following activities were carried out during the survey in compliance with relevant Bat Survey Guidelines (Collins 2016):
 - A brief inspection and assessment of the site and habitats present to within 300m.
 - An extensive examination of all parts of the buildings both inside and out to record structural features and condition and to record features that may be suitable for roosting bats. Particular attention was paid to any crevices or gaps in walls, lintels, gaps between beams and joists and to the possibility of finding droppings stuck to walls, floors or other surfaces, or insect remains below beams, among a number of other factors. All signs indicative of a bat roost presence including live or dead bats, droppings, feeding remains, scratch marks and staining were recorded if present.
 - An assessment of the buildings' bat roost potential (negligible, low, moderate, high or confirmed roost).
- 4.2.3 In addition:
 - Recording of any signs of nesting bird usage of the buildings.
- 4.2.4 The following equipment was used or at hand during the survey:
 - Clulight
 - Binoculars
 - Endoscope
 - Ladders
 - Camera

Nocturnal Survey

- 4.2.5 A single dawn return survey was undertaken by Robert Bell. An unmanned camera position was also used during this survey, which was undertaken on 9th August 2022. The survey focused on the stone outbuilding only. The surveyor was equipped with a Wildlife Acoustics EM Touch bat detector and iPad recorder. One Canon XA10 infrared lit video camera was positioned near the surveyor, with a second camera of the same type deployed in the unmanned position.
- 4.2.6 An image taken from the unmanned camera position is shown in Plate 1. The footage from this camera position was watched back in its entirety by the licensed surveyor the following day.
- 4.2.7 The dawn return survey continued from 1.5 hours prior to sunrise until 15 minutes after this time. The arrangement of the surveyor and cameras during the nocturnal surveys is shown in Figure 2.



Figure 2. Nocturnal survey plan



Plate 1. Image taken from unmanned camera position



4.3 Survey Limitations

4.3.1 No limitations to the bat survey were encountered.

5. Results

5.1 Data Consultation

- 5.1.1 A total of 11 bat records were supplied by LERN, of which five originated from South Lancashire Bat Group. Species positively identified in these records comprised common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmeaus*, and Brandt's bat *Myotis brandtii*. One record was attributed to an unidentified *Pipistrellus* species. None of the supplied bat records related to the site. The closest bat record comprised a field record of a common pipistrelle, collected in 2008 from a location 530m east of the site.
- 5.1.2 A single bat EPS mitigation licence has been issued for a location within 2km of the surveyed buildings. This licence was issued in 2019, to permit destruction of a resting places used by common pipistrelle, soprano pipistrelle and Brandt's bat, in a location 1.6km southeast of the site.

5.2 Field Survey

Internal and External Visual Inspection

- 5.2.1 No signs of bat presence were recorded during the visual inspection of either the stone outbuilding or the timber barn. The location of these buildings is shown on Figure 3.
- 5.2.2 An old disused swallow *Hirundo rustica* nest was recorded from the timber barn.
- 5.2.3 The stone outbuilding was considered to display a low level of bat roost suitability with the timber barn displaying a negligible level of suitability.



Figure 3. Building plan, with surveyed buildings in red outline

Description – stone outbuilding

5.2.4 The stone outbuilding comprises a small 19th Century two-storey stone building with a pitched Welsh slate roof, stone ridge tiles and mortar filled verges (Plates 2-4). The building has solid walls. There is a single first-floor wood door in the southeast gable, a wood-framed and single-paned window in the northwest gable and two wood-framed single-paned windows and a single wood door in the southwest elevation. An external



stone staircase accesses the door in the southeast gable. A steel wall tie is present in the northeast elevation and a wooden gutter with a metal down pipe is present on the southwest elevation. Fairly dense ivy *Hedera helix* cover is present on the southern corner of the building.

External inspection - stone outbuilding

5.2.5 The main potential roost feature recorded from the stone outbuilding comprised occasional open joints in the masonry, most notably on the northeast elevation (Plate 5). Bats may also access the wall top in places and occasional slipped roof slates are present, resulting in crevice spaces between slates. A ladder was used to inspect open joints in the masonry.

Internal inspection - stone outbuilding

- 5.2.6 The unlined roof of the outbuilding is suspended on a ridge beam, rafters, battens and vertical wood strut suspended on a horizontal steel beam (Plate 6). Missing roof slates and windows result in a light and airy first floor, potentially accessible to bats. The first floor is not in current use, with the ground floor is used for occasional storage. No signs of bats were found (Plate 7).
- 5.2.7 The stone barn was considered to display a low level of bat roost suitability.



Plate 2. Eastern corner of stone outbuilding



Plate 3. Northern corner of stone outbuilding



Plate 4. Southern corner of stone outbuilding



Plate 5. Open joints between masonry on northeast elevation of stone outbuilding







Plate 6. Interior of first floor within stone outbuilding

Plate 7. Ground floor of stone outbuilding



Description - timber barn

5.2.8 The wooden barn has brick and block walls to a height of c.1m, with timber framed wood-clad walls above that height and a pitched shed-felt covered roof (Plate 8). Open glazed windows are present in three elevations, with a door opening in the south elevation. The northwest corner of the shed is partially collapsed (Plate 9). A wooden bird box is present on the east gable.

External inspection - timber barn

5.2.9 The only potential roost feature noted from the exterior of the barn comprised the bird



box. This was inspected from a ladder and found to be rotten with no evidence of historic bat or bird presence noted.

Internal inspection – timber barn

- 5.2.10 Internally the roofing felt covers timber sarking with the walls unlined (Plate 10). No signs of bat presence were noted, and no potential roost features were recorded from the interior of the barn.
- 5.2.11 A disused historic swallow nest was noted from the barn interior (Plate 11).
- 5.2.12 The timber barn was considered to display a negligible level of bat roost suitability.

Plate 8. Southeast corner of timber barn



Plate 9. Northwest corner of timber barn





Plate 10. Interior of timber barn



Plate 11. Disused swallow nest on roof timber in barn



Nocturnal Survey

9thAugust 2022 – dawn return survey

- 5.2.13 The temperature at the beginning of monitoring was 9°C, with no wind and 10% cloud cover. The temperature increased to 11°C during the survey. The weather was dry throughout. Sunrise was at 05:37.
- 5.2.14 No bat roosting activity was recorded from the stone outbuilding during the survey. Four common pipistrelle bats were however recorded occupying four day roost locations in the main house (Higher Chipping House) between 04:46 and 05:13 (Plate 12)



5.2.15 The last bat activity recorded during the survey comprised the fourth roosting common pipistrelle, recorded at 05:13 (24 minutes before sunrise). Prior to this time occasional common pipistrelle passes were noted, together with one soprano pipistrelle pass, heard at 04:37.



Plate 12. Bat roost observations recorded from Higher Chipping House

6. Assessment

6.1 Summary and Evaluation of Findings

- 6.1.1 No bat records were received in relation to the site. In addition, no evidence of bat presence was recorded during the visual inspection of either of the two target buildings, with no bat roosting recorded from the stone outbuilding during the nocturnal survey.
- 6.1.2 It is considered that survey works undertaken have demonstrated the probable absence of roosting bats from the two target buildings (the stone outbuilding and timber barn).
- 6.1.3 The scheme is not considered to have potential to significantly impact bat roosts present in Higher Chipping House.
- 6.1.4 Evidence of historic swallow nesting was recorded from the timber barn during the internal inspection.

6.2 Legislation and Policy Guidance

Bats

- 6.2.1 Bats receive protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended).
- 6.2.2 It is an offence to:
 - Deliberately capture (or take), injure or kill a bat.
 - Intentionally or recklessly disturb bats whilst they are occupying a structure or place used for shelter or protection or obstruct access to any such place.
 - Damage or destroy the breeding or resting place (roost) of a bat.
 - Possess a bat (live or dead), or any part of a bat.
 - Intentionally or recklessly obstruct access to a bat roost.
 - Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.
- 6.2.3 The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.
- 6.2.4 In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". It notes that "conserving biodiversity includes restoring or enhancing a population or habitat". Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, brown long-eared, greater horseshoe *Rhinolophus ferrumequinum*, lesser horseshoe *Rhinolophus hipposideros*, noctule *Nyctalus noctula*, and soprano pipistrelle *Pipistrellus pygmaeus* bats are included as priority species within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.



- 6.2.5 Where it is proposed to carry out works which will have an adverse impact on roosting bats, the site must either be registered on the Bat Mitigation Class Licence (BMCL), or a European Protected Species (EPS) license must first be obtained from Natural England. This requirement applies even if no bats are expected to be present when the work is carried out.
- 6.2.6 The National Planning Policy Framework for England was revised in 2021. This document states that plans should 'promote the conservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'.

<u>Birds</u>

- 6.2.7 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to:
 - Intentionally kill, injure or take any wild bird.
 - Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

6.3 Recommendations/enhancements

- 6.3.1 No further bat survey is considered necessary, providing that works commence within 12 months of the bat survey works. If works are to commence after this date, then Middleton Bell Ecology should be contacted to determine the requirement for update survey.
- 6.3.2 Building demolition works should commence either outside the bird nesting period (March to September inclusive), or the works will need to be preceded by a nesting bird check.
- 6.3.3 It is advised that use of Non-Bitumen Coated Roofing Membranes (formerly known as Breathable Roofing Membranes) be avoided during re-roofing of the outbuilding. The justification for this recommendation is that bats have been shown to regularly become entangled and die in the component filaments of modern woven roofing membranes.
- 6.3.4 In order to mitigate for the loss of a historic swallow nest site during demolition of the timber barn, it is recommended that one swallow nest cup be fitted in the retained stable building (mainly used as a garage) (Plate 13). This nest cup should be fitted close to wall top height.
- 6.3.5 In order to enhance the ecological value of the site and in accordance with the aims of the National Planning Policy Framework (2021), it is suggested that one solid wall bat roost location is created in the southeast gable of the stone outbuilding, to be constructed close to wall top height in accordance with the specification shown in Appendix 1.

Plate 13. Suggested swallow nest cup location



6.4 Conclusion

- 6.4.1 No evidence of bat presence was recorded in association with either of the surveyed buildings during the desk-based survey, the visual inspection or the single nocturnal survey. It is considered that the survey work undertaken have demonstrated the probable absence of roosting bats.
- 6.4.2 No further survey effort is necessary, providing works commence within 12 months of the survey date. If works are to commence after this date, then Middleton Bell Ecology should be contacted to determine the requirement for update survey.
- 6.4.3 Works should proceed with caution and vigilance for unexpected bat presence, as single bats can roost almost anywhere. If bats are subsequently discovered, work should cease, and further advice sought without delay.
- 6.4.4 A bat roosting enhancement measure and a swallow mitigation measure have been recommended.

7. References

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines. The Bat Conservation Trust, London.



Appendix 1. Solid Wall Bat Roost Feature Specification

SP The above information is for guidance only and may not be appropriate in all circumstances. If in doubt seek professional advice.
English Nature Cumbria Team, Juniper House, Murley Moss, Oxenholme Road, Kendal LA9 7RL. Tel: 01539 792800 Fax: 01539 792800 Email: cumbria@english-nature.org.uk

Appendix 2. Bat Records

In accordance with best practice and the requirements of bat licensing, bat records collected during surveys are supplied to the relevant biological record centres and bat groups. The records to be supplied in accordance with this survey are shown below. House names/numbers are not given out by record holding organisations except under very particular circumstances. Please let us know if you object to the distribution of these records.

| Date | Species | Site Address | OS Grid Reference | Notes |
|------------|------------------------|---|----------------------|---------------------------------------|
| 09/08/2022 | Common pipistrelle | Higher Chipping House, Cutler Lane, Chipping, PR3 2SY | SD 61466 41490 | Four day roosts, each used by one bat |
| 09/08/2022 | Soprano pipistrelle | Higher Chipping House, Cutler Lane, Chipping, PR3 2SY | SD 61466 41490 | Pass |