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Letter Report Reference: CH-KW-XX-XX-RP-E-0001_Bats

M and P Langley

Dear M and P Langley,

Preliminary Roost Assessment – Building Adjacent to Cotswold House, Pancake Hill, Chedworth, GL54 4AP.

I am writing to provide you with a short report of my survey findings at the above address which was visited on 11 August 2023. Weather conditions on the date of the survey were sun with clouds and a temperature of 16ºC.

The building is centred on Ordnance Survey grid reference SP 06749 11242. Planning permission is to be sought from Cotswold District Council for the conversion of the existing building. The survey was completed by Katie Warren (Natural England Bat [Level 1] Licence: 2021-52120-CLS-CLS and Barn Owl Survey Licence: 2021:52120-CLS-CLS). No limitations were noted during the survey. A desk study was undertaken using information from Gloucestershire Centre for Environmental Records which was carried out in August 2023 to identify any designated sites and protected/notable species within a 1km radius of the site. Magic Maps was also viewed to determine any granted European Protected Species Licence (EPSL) applications for bats within a 1km radius of the application site.

The survey followed best practice guidelines and techniques recommended in Collins (2016) and Mitchell-Jones (2004). The building was assessed as holding either confirmed, high, moderate, low or negligible suitability (see Appendix 1) to support roosting bats and categorised using definitions as per Collins (2016). Equipment used during the survey

included head torch and hand torch with red light filter, binoculars and extendable ladder. Evidence of the building being used by nesting birds including barn owls was also noted if applicable. Bat and birds were considered to be the only possible constraint as all works are to be restricted to the building and hardstanding.

Legislation

Bats are a European Protected Species. Individual bats and their roosts have strict protection and are listed in Annex 1V of the EC Habitats Directive 1992. The actions and activities that are prohibited are:

Deliberate capture, injury or killing of a bat,

Damage or destruct a breeding site or resting place (even if currently vacant)

Possess, control, transport, sell or exchange, or offer for sale or exchange, of any bat or any part of a bat or anything derived from one.

Deliberate disturbance of a bat in particular disturbance which is likely to impair their ability to: survive, breed or reproduce; rear or nurture their young; hibernate; migrate; or affect the local distribution or abundance of the species.

The Wildlife and Countryside Act 1981 (as amended) (HMSO, 1981) affords protection to wild birds and their nests and young by making it an offence to:

Intentionally kill, injure or take any wild bird, or to intentionally destroy or take the egg of any wild bird

Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built

Use traps or similar items to kill, injure or take wild birds

Intentionally or recklessly disturb a Schedule 1 bird when it is nest building or at a nest containing eggs or young.

Intentionally or recklessly disturb the dependent young of any wild bird listed on Schedule 1.

In addition, barn owls are included in Schedule 1 of the Wildlife and Countryside Act (HMSO, 1981) which affords them protection against disturbance whilst nesting. Specifically, under Part 1, Section 1 (5) it is an offence to intentionally or recklessly:

- Disturb a barn owl while it is building a nest or is in, on or near a nest containing eggs or young.
- Disturb a barn owl's dependent young.

Results

Results of the Desk Study

The site is located on the eastern outskirts of the small rural village and civil parish of Chedworth. The site contains a single building which was formerly a stable block but is now used for storage. The site is bordered by modified habitats such as modified grassland and hardstanding. Further afield there is low-density residential housing and gardens as well as arable and pasture fields and a small woodland copse (to the north). The River Coln lies 200m south of the site. The application site and locality are likely to be used by foraging and commuting bats with connectivity through habitats and features such as hedgerows, scattered trees and tree-lined water courses onto adjoining habitats such as farmland and woodland.

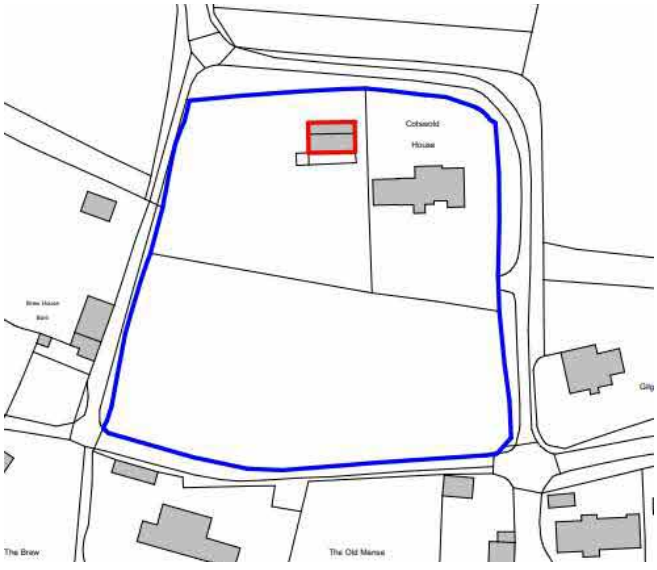

Figure 1: The building (application site) to be converted.

There are two statutory sites within a 1km radius of the proposed site. These are both Stony Furlong Railway Cutting Site of Special Scientific Interest (SSSI) (which is divided into two SSSIs) and both are designated for their geological interest. The closest part is approximately 710m south-west of the site.

The Natural England Site of Special Scientific Interest (SSSI) Impact Risk Zones layer (available on MAGIC) was reviewed to determine whether the site falls within any of the risk layers and therefore could impact SSSIs (or the SSSI components of SACs/SPAs etc.). The site falls within approximately 15.3km of the Cotswold Beechwoods Special Area of Conservation (SAC). Cotswold District Council request that sites within 15.4km of this SAC are considered for their recreational impacts. The Local Authority should be consulted to see whether a financial contribution and/or assessment will be required for the proposed residential development.

There are two non-statutory sites designated for nature conservation within a 1km radius of the proposed site. The closest of these non-statutory sites is Hedgley Local Wildlife Site (LWS) which is located approximately 290m south-east of the site and is designated for its semi-natural grassland. Given the small-scale nature of the development proposed, combined with the distance to the site, no direct or indirect impacts are predicted to Hedgley Bottom LWS or any other non-statutory sites.

The record search returned five records for bat species within a 1km radius of the proposed development site. These include records for lesser horseshoe *Rhinolophus hipposideros*, serotine *Eptesicus serotinus*, noctule *Nyctalus noctula* and common pipistrelle *Pipistrellus pipistrellus*. All these records date from 2021 and they relate to a property 250m north-west of the site and are a mixture of roost records as well as general observations. There were also two granted European Protected Species (EPS) Mitigation Licences for bats and these were identified on MAGIC within a 1km radius of the site:

> One licence (2015-13200-EPS-MIT) for the destruction of a resting place of common pipistrelle and brown long-eared bat *Plecotus auritus* with the licence dates 24/08/2015 to 23/08/2020. This is for a location 60 south-west of the site.
> One licence (2019-39735-EPS-MIT) for the destruction of a resting place of lesser horseshoe with the licence dates 10/04/2019 to 01/04/2029. This is for a location 215m south of the site.

Results of the Survey

The survey included an assessment of the building within the application site. The description of this building is given below and Table 1 describes the building in relation to its suitability to support roosting bats. The table should be read in conjunction with the photos that are included in Appendix 2.

The building is modern construction. It is a detached single-storey stable block with adjoining storage areas. It is predominantly wooden construction (including doors and windows). The pitched roof is wooden and the lean-to is clad with bitumen roofing felt. Wooden fascia boards are present on some elevations and the gable ends. No potential roosting features were noted and the building was noted as being well-sealed. All doors and windows are kept closed with no possible access for bats. Internally, the building is open floor to ceiling with the ceiling covered with wooden boarding. Rodent droppings were noted internally. No evidence of bats (e.g., live/dead bats, droppings, urine stains etc.) was identified internally or externally. When considering the lack of potential roosting features combined with the lack of evidence, the building has been assessed as having a negligible potential to support roosting bats (with reference to Collins, 2016).

There was also no evidence of use by nesting birds. Birds are unlikely to be able to gain access internally to the building and there are no gaps externally for birds to nest. The building is considered to have a negligible potential to support nesting birds.

Table 1. Details of Bat Roosting Potential

External Assessment		
Feature	**Present/Applicable?**	**Notes**
Lifted/warped/missing tiles	No	N/A
Missing mortar (at roof level)	No	N/A
Missing mortar (in brickwork)	No	N/A
Lifted lead flashing	No	N/A
Gaps around lintels (windows and doors)	No	N/A
Gaps at soffits/eaves/bargeboard	No	N/A

Other	No	N/A
Internal Assessment		
Feature	**Present /Applicable?**	**Notes**
Roof lining	No	N/A
Roof timbers/frame	No	N/A
Small/medium/large void	No	Open floor to ceiling.
Light ingress	Small amounts	Some light from windows on the northern elevation.
Temperature	Reasonably stable.	N/A
Cobwebbing	No	N/A
Other	No	N/A
Evidence of bats found?	**No**	
Suitability of building	**Negligible**	

Evaluation

The building is considered to have a negligible potential to support roosting bats (Collins, 2016). The environs of the application site itself could be utilised by a small number of commuting and / or foraging bats and any lighting should be designed sensitively to avoid impacting upon commuting and / or foraging bats.

During the survey, no signs of bat roosting activity (e.g., bat droppings, feeding remains, urine stains etc.) were observed and no potential roosting features were noted. Taken collectively, the building is considered to offer a **negligible** bat roosting potential (with reference to Collins, 2016). Therefore, no further bat survey work will be required prior to the conversion of the building.

The building is also considered to offer a **negligible** potential to support nesting birds. All developments should aim to achieve a biodiversity net gain in accordance with Policy EN8 of the Cotswold District Local Plan 2011-2031. Enhancement measures have been detailed below for nesting birds and bats.

Conclusion and Recommendations

The following recommendations are made to ensure compliance with wildlife legislation, biodiversity legislation and best practice:

1. The site falls within approximately 15.3km of the Cotswold Beechwoods Special Area of Conservation (SAC). Cotswold District Council request that sites within 15.4km of this SAC are considered for their recreational impacts. The Local Authority should be consulted to see whether a financial contribution and/or assessment will be required for the proposed residential development.
2. The survey evidence to date indicates that the barn has a **negligible potential** to support roosting bats and a negligible potential to support nesting birds. No further survey work for bats or birds is required.
3. Any lighting should be kept to a minimum. A wildlife sensitive lighting scheme should be designed with reference to the Bat Conservation Trust and Institute of Lighting Professionals guidance (BCT and ILP, 2018).
4. In line with Government policy on biodiversity, a minimum of one bird box and one bat box should also be installed on the converted building or tree within the land ownership. Suggestions for bird boxes include integrated swift bricks (e.g., Vivara Pro Cambridge Brick Faced Swift Nest Box) and traditional bird boxes (e.g., Vivara Pro Seville 32mm WoodStone Next Box). Suggestions for bat boxes include Schwegler Bat Tube 1FR, Schwegler 3FS Colony Bat Box or Schwegler 2F Bat Box (or equivalent).
5. This report is valid for 12 months. Should you wish to commence any development after this time has elapsed, an update survey will be required to determine the status of the site in the intervening period.

I trust the above information is clear and satisfactory to requirements. Please do not hesitate to contact me should you require any additional information of clarification.

Kind regards

Katie Warren

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APPENDIX 1 – GUIDELINES FOR ASSESSING THE SUITABILITY OF STRUCTURES AND TREES FOR ROOSTING BATS

Table adapted from Collins (2016).

Suitability	Definition
Negligible	Negligible features on the structure or tree that are likely to be used by roosting bats.
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide appropriate conditions (i.e., space, protection, shelter) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be used as a maternity roost).
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their appropriate condition (i.e., size, shelter, protection) and surrounding habitat. However, it is unlikely to support a roost of high conservation value (with respect to roost type only).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their conditions (i.e., size, protection, shelter) and surrounding habitat.
Confirmed Roost	Structure or tree with a confirmed bat roost.

APPENDIX 2 – PHOTOGRAPHS

All photographs were taken on the 11th of August 2023.

Photograph 1: Western and southern elevation of stable block.

Photograph 2: Internal view of the stable block.

Photograph 3: Internal view of storage areas at the rear of the stable block.

Photograph 4: Eastern elevation of the stable block.

Photograph 5: Internal view of stable block.

Photograph 6: Southern elevation of stable block and modified habitats surrounding.

QUALITY ASSURANCE - QUALIFICATIONS AND EXPERIENCE

Katie Warren BSc (Hons) MSc MIEnvSc MRSB Mem.RES

Katie is an Ecologist with seven years of experience. Katie holds a first-class BSc (Hons) degree in Ecology and Environmental Science and a MSc in Applied Ecology (graded distinction) from the University of Gloucestershire. Katie has a Natural England survey licence for bats (Level 1), great crested newts (Level 1) and a survey licence for barn owls. Katie is a full member of the Institute of Environmental Sciences (MIEnvSc), Royal Entomological Society and Royal Society of Biology and she is currently in the process of applying for full membership of the Chartered Institute of Ecology and Environmental Management (CIEEM). She has worked on many projects for both residential and commercial developments (small to large developments and infrastructure projects) for clients in both the public and private sector. Her ecological expertise includes Preliminary Ecological Appraisals, Preliminary Roost Assessments (Phase 1 bat surveys), Ecological Impact assessments (EcIA) and surveying (and writing reports) for various notable and European Protected Species. Katie is skilled in the production of reports providing advice to ensure legal compliance and consistency with recognised best practice. Katie is a member of the BatAbility Club, Worcestershire Bat Group, Birmingham and Black Country Bat Group and Worcestershire Reptile and Amphibian Group. She is a committee member with the Worcestershire Mammal Group. Katie works in accordance with the Chartered Institute of Ecology and Environmental Management Code of Professional Conduct.

END OF LETTER REPORT

Prepared by Katie Warren

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N.B. Information on legally protected, rare or vulnerable species may appear in ecological reports. In such cases it is recommended that appropriate caution be used when circulating copies.