



JM ECOLOGY

MR JOHN MARTIN

29 SAPCOTE ROAD

BURBAGE

BAT EMERGENCE SURVEY REPORT

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FIGURES

Figure 1-1: Site Context and Surveyor/Infrared Locations

Figure 4-1: IR Samples From Survey



1. BACKGROUND INFORMATION

- 1.1 This bat emergence survey report has been undertaken on behalf of Mr John Martin in respect of the Site 29 Sapcote Road, Burbage, Hinckley. It has been produced to inform proposed residential re-development of the Site.
- 1.2 This report follows a Preliminary Ecological Appraisal by a previous consultant; Brindle and Green in 2023 (Ref: BG23.124) written for the Site. The report recommended the nocturnal bat surveys detailed within this report. As such this report should be read in conjunction with the previous work complete by Brindle and Green. For consistency, building numbering remains the same (B1 and B2).

Site Context

- 1.3 The Site is located at SP 44236 93554 on the eastern fringe of Hinckley with residential properties bordering north, west and south. The site is well connected to the surrounding landscape via a network of arable fields bound by mature hedgerows, tree lines and broadleaved woodland.
- 1.4 Blue polygons below denote locations of surveyors and Infrared cameras during the bat emergence survey.

Figure 1-1: Site Context and Surveyor/Infrared Locations



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Purpose of Report

- 1.5 The purpose of this assessment is to determine the presence/likely absence of roosting bats within the two buildings (B1 and B2; as above) on-Site via emergence survey



2. LEGISLATION AND POLICY

Bats

- 2.1 British bats are fully protected within UK Law under Wildlife and Countryside Act 1981 (as amended) through their inclusion in Schedule 5. Under the Act, they are protected from:
- Intentional or reckless killing, injury, taking;
 - Damage to or destruction of or, obstruction of access to any place of shelter, breeding or rest;
 - Disturbance of an animal occupying a structure or place;
 - Possession or control (live or dead animals);
 - Selling, bartering or exchange of these species, or parts of.
- 2.2 This law is reinforced by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These Regulations also prohibit:
- the deliberate killing, injuring or taking of bats;
 - the deliberate disturbance of any bat species in such a way as to be significantly likely to affect:
 - their ability to survive, hibernate, migrate, breed, or rear or nurture their young; or
 - the local distribution or abundance of that species.
 - damage or destruction of a breeding site or resting place;
 - the possession or transport of bats or any other part of.
- 2.3 In addition, seven British bat species are listed as Species of Principal Importance (SPI) under the Natural Environment and Rural Communities (NERC) Act, 2006. These are barbastelle (*Barbastellus barbastellus*), Bechstein's (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*), greater horseshoe (*Rhinolophus ferrumequinum*) and lesser horseshoe (*Rhinolophus hipposideros*).
- 2.4 The Wild Mammals Act 1996 (as amended) also affords protections to wild mammals.



3. METHODOLOGY

Preliminary Bat Roost Assessment

- 3.1 This was complete by the previous consultant and is detailed in their report. Both B1 and B2 were assessed as providing 'Low' suitability to roosting bats. As such one nocturnal survey on each building was recommended.

Bat Emergence Survey

- 3.2 Nocturnal survey was complete on the 12th September 2023. Survey was led by Joe McLaughlin BSc (hons) MCIEEM. Joe has over 10 years' experience in survey and site assessment for bat species and is appropriately qualified for the surveys based on the CIEEM competencies for carrying out species surveys (CIEEM, 2017). Joe is registered to use a level 2 personal bat licence (2016-26529-CLS-CLS), acts as the named ecologist on numerous mitigation licences and is one of a small number of consultants nationwide registered under the Bat Mitigation Class Licence (RC210); all of which further demonstrates his competence to lead this type of work.
- 3.3 The second licensed person present during the survey has been a professional ecologist for over 15 years, has a personal bat survey licence (2015-18825-CLS-CLS) and is named on numerous bat mitigation licences. They are also registered under the Bat Mitigation Class Licence Scheme (RC205) and a member of CIEEM. Two other appropriately experienced assistant ecologists were also present during the survey and ensured an adequate coverage of potential roosting features by the surveyors. For specific surveyor locations see Figure 1.1 above.
- 3.4 Survey was complete with due consideration for most up to date best practice available at the time of survey ^{1,2}. Surveyors were equipped with the following equipment:
- Title Chorus/ Anabat Scout full spectrum bat recording devices;
 - Magenta 5 Heterodyne detectors;
 - Nightfox Red infrared night vision goggles as a visual aid; and,
 - Nightfox XB5 infrared torches (2x torches, tripod mounted, per surveyor at least).
- 3.5 The survey started approximately 15 minutes before sunset and finished 1.5-2 hours after sunset. Surveyors were positioned to observe all prospective roosting features recording the time, flight paths, species, behaviours, height, number of bats as well as emergence/re-entry locations of any roosting bats.
- 3.6 Bat calls were recorded in full spectrum on the Chorus/Scout detectors and then analysed after the survey using Anabat Insight with the findings cross referenced against survey forms. Additionally, recordings made on the Nightfox Red night vision goggles were analysed as necessary to identify any potential roosting bats noted by surveyors.

¹ Collins, 2016. Bat Surveys for Professional Ecologists 3rd Edition. Bat Conservation Trust.

² Bat Conservation Trust, 2022. Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys



Zone of Influence

- 3.7 The 'zone of influence' for a project is the area over which ecological features may be affected by changes as a result of the proposed project and associated activities.
- 3.8 For bats, the zone of influence may extend beyond the Site boundaries as far as 30km depending on the proximity of International Sites designated for bat species and if those qualifying species occur on the project Site. For this Site however, the zone of influence is unlikely to extend far beyond the ownership boundary.

Assessment of Effects

- 3.9 In order to assess the significance of effects, ecological features that could potentially be affected by the development have been identified and the potential effects quantified (e.g. extent, magnitude and duration).
- 3.10 For this assessment a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives or for biodiversity in general. Conservation objectives may be specific (for a designated site) or broad (for a national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity) (CIEEM, 2019).
- 3.11 Only where significant effects are predicted has mitigation been proposed. Additionally, precautionary measures have been included and these are detailed within this document for robustness. The potential for mitigation and enhancement measures were then considered to avoid, reduce or compensate for any significant adverse effects, where possible in accordance with the principles of the mitigation hierarchy (CIEEM, 2019).
- 3.12 The current guidelines identify various bat species/roost characteristics and their associated habitat features likely to be important to bat conservation. In the context of bat work these include:
- Bat roost size and class;
 - Bat species that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
 - size of bat population, particularly large populations of bat species or concentrations of species considered uncommon or threatened in a wider context;
 - bat species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change;
 - ecosystems and their component parts, which provide the habitats required by bat populations and/or assemblages; and
 - habitat connectivity and/or synergistic associations;

Significance Criteria

- 3.13 Significance of effects is defined using geographical context. Which is adapted on a project by project basis to suit the location of the assessment to accommodate regional variation in species/habitat distribution. These include international, national, regional, county; and, local.



Limitations

- 3.14 Nocturnal survey in September are largely considered sub-optimal. However, owing to warmer than usual weather in September this year and due to the extremely limited suitability of B1 and B2 to roosting, a single nocturnal survey complete in September is considered sufficient to assess the buildings as potential roosts.
- 3.15 Despite efforts made during the field survey to provide a comprehensive account of the site, it is important to acknowledge that no investigation can guarantee complete characterisation and accurate prediction of the natural environment. Moreover, it is crucial to recognise that habitats are dynamic entities prone to changes, including the potential colonisation of species subsequent to the surveys complete as part of this report.
- 3.16 In line with standard guidance, the results and recommendations within this report are valid for one year from the date of survey, assuming there are no significant changes to the survey Site or its immediate surroundings. Updated survey work may be required to support any future planning applications outside of this time period.
- 3.17 Specific guidance on the valid period of ecological survey data can be found at:

<https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>



4. BASELINE DATA

Bat Emergence Survey 12.09.2023

- 4.1 The evening emergence survey started at 19:03 and finished at 20:50; sunset was at 19:17. The conditions were dry, calm and the temperature was 15°C.
- 4.2 No emerging bats were seen during the survey. Species recorded and heard or seen include common pipistrelle *Pipistrellus pipistrellus* (most frequent), brown long-eared bat *Plecotus auritus* and noctule *Nyctalus noctula*.
- 4.3 The first bat recorded was a common pipistrelle at 19:57 which was heard not seen. Bat activity was limited on the east side of the buildings with occasional foraging within the rear garden of the property (western side) noted by surveyors. A maximum of two bats were seen at any one time foraging along the edge of the buildings, both common pipistrelle bats.

Figure 4-1: IR Samples From Survey





5. DISCUSSION AND RECOMMENDATIONS

Roosting Bats

- 5.1 No roosting bats were encountered using B1 or B2. As such roosting bats do not present a major constraint to the development. As bats are highly transient, contractors should exercise caution when stripping either structures roof (if required) and in the extremely unlikely event a bat is found works should stop, the area should be re-dressed carefully with the bat left in Situ and JM Ecology should be contacted for further advice.

Foraging Bats

- 5.2 Any new lighting associated with the development should follow best practice guidelines outlined in Bats and Artificial Lighting in the UK (2023) to maintain suitable foraging habitats. No artificial light spill should occur towards any other buildings, trees or hedgerows (both on and off-Site).
- 5.3 Where no new lighting is installed or a bat friendly lighting strategy is implemented effectively potential adverse effects are reduced to negligible levels.

Enhancement Opportunities

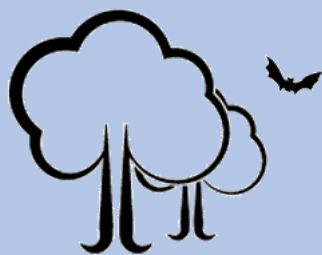
- 5.4 A total of two bat box features should be installed on-Site as part of development. These features should include boxes such as the '*Improved crevice Bat box*' and be wall or tree mounted 3-5m high and away from any artificial light spill.
- 5.5 Improved crevice bat box available at: [Improved Crevice Bat Box | NHBS Practical Conservation Equipment](#)



6. REFERENCES

- Bat Conservation Trust (2023) Bats and Artificial Lighting in the UK – Guidance Note 08/23
- Brindle and Green 2023 29 Sapcote Road, Burbage Preliminary Ecological Appraisal BS23.124
- British Standards Institution (2013) BS42020:2013 Biodiversity – code of practice for planning and development. BSI Standards Ltd, London.
- Chartered Institute of Ecology and Environmental Management (2019) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. CIEEM, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017) Guidelines for Ecological Report Writing. CIEEM, Winchester.
- Collins J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust, London.
- Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework.
- Multi-Agency Geographic Information for the Countryside Website <http://www.magic.gov.uk/>





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