PEAK VIEW

LONGRIDGE LANE

Bat Building Assessment and Nocturnal Survey

Client:

Richard Mundy Building Design Ltd

Report Reference:

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RammSanderson

ECOLOGY

FLOOD RISK

ARBORICULTURE

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1 INTRODUCTION AND BACKGROUND

1.1 Purpose and Scope of this Report

i RammSanderson Ecology Ltd was instructed by Richard Mundy Building Design Ltd to carry out Bat Building Assessment of Peak View, Longridge Lane, Peak Dale, to inform a planning application for residential redevelopment of the site. The surveys were required to determine the presence or likely absence of bat roosts at the site.

ii The study area is defined as shown in the enclosed Site Location Plan to include the Zone of Influence (see below) of the proposals (hereafter referred to as the "Site").

iii This appraisal is based on a review of the development proposals provided by the Client, and surveys of the Site. The aims of this survey and report are to:

- Investigate the presence / likely absence of bats on site or in the immediate vicinity;
- Identify potential impacts on bats (if present); and
- Provide outline recommendations for mitigation or compensatory measures where applicable.

iv This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RammSanderson Ecology Ltd.

v The surveys and desk based assessments undertaken as part of this review and subsequent report including the Ecological Constraints and opportunities Plan are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

1.2 Zone of Influence

i The Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. The Zone is determined by the nature of the development and also in relation to individual species, depending on their habitat requirements, mobility and distances indicated in any best practice guidelines.

ii In relation to great crested newts (GCN) for example, the zone of influence is considered to be up to 500m from the site boundaries, as this is the distance that Natural England would require to be considered in relation to GCN licensing.

1.3 Site Context and Location

i The site was located to the north-east of Buxton town. It comprised a single-storey structure and small areas of poor semi-improved grassland and hardstanding. The site was bounded by species poor hedgerows to the north-east and scattered trees and fence to the south-west.

ii In the wider landscape, the site was located in a rural context, with grassland grazing fields on all sides and a minor road immediately adjacent to the east.

Figure 1: Site Location Plan

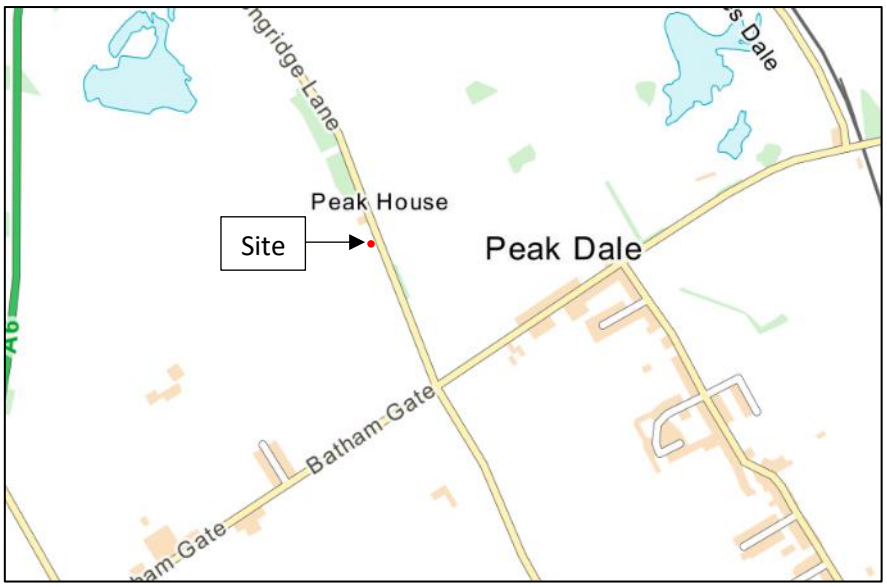


Figure 2: Site Context Plan

2 LEGISLATION AND PLANNING POLICY

2.1 General & Regionally Specific Policies

i Articles of British legislation, policy guidance and both Local Biodiversity Action Plans (BAPs) and the NERC Act 2006 are referred to throughout this report. Their context and application is explained in the relevant sections of this report. The relevant articles of legislation are:

- The National Planning Policy Framework (2012_
- ODPM Circular 06/2005 (retained as Technical Guidance on NPPF 2012)
- Local planning policies (Bolsover District Council)
- The Conservation of Habitats and Species Regulations 2010 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC;
- National Parks and Access to the Countryside Act 1949;
- The Countryside and Rights of Way Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- Local Biodiversity Action Plan for Lowland Derbyshire

2.2 Bats

i All species of 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;

ii This law is reinforced by the UK's transposition of the EU Habitats Regulations under *The Conservation of Habitats and Species Regulations* 2010 (as amended). 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 (roost);
- the possession or transport of bats or any other part of.

iii Under certain circumstances a licence may be granted by Natural England to permit activities that would otherwise constitute an offence. In relation to development, a scheme must have full planning permission before a licence application can be made.

iv All species of British bat 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*).

v Under the National Planning Policy Framework 2012 the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.

3 METHODOLOGY

The overall value of the site and its connectivity to the wider countryside was assessed with habitats and species recorded. As well as the daytime assessment for bats, the survey considered presence of nesting birds and took account of the likelihood of other protected species occurring on site.

3.1 Impact Appraisal

In appraising any impacts, the review considers the Client's Site proposals and any subsequent recommendations made are proportionate and appropriate to the site and have considered the Mitigation Hierarchy as identified below:

- **Avoid:** Provide advice on how the development may proceed by avoiding impacts to any species or sites by either consideration of site design or identification of an alternative option.
- **Mitigate:** Where avoidance cannot be implemented mitigation, proposals are put forward to minimise impacts to species or sites as a result of the proposals. Mitigation put forward is proportionate to the site.
- **Compensate:** Where avoidance cannot be achieved any mitigation, strategy will consider the requirements for site compensatory measures.
- **Enhance:** The assessment refers to planning policy guidance (e.g. NPPF) to relate the ecological value of the site and identify appropriate and proportionate ecological enhancement in line with both national and local policy.

3.2 Daytime Bat Building Assessment

On 30th June 2017, the buildings present on the site were assessed following bat survey guidelines. All defects or features of the building considered as potentially suitable entry / exit points for bats such as holes and crevices were recorded. Evidence of bat presence, such as droppings or feeding remains, was sought and recorded where present. The buildings were assessed both internally and externally by a licensed bat ecologist then graded according to the Bat Conservation Trust's *Bat Surveys: Good Surveys Guidelines* (Collins J (*eds*) 2016).

Table 1: Criteria for bat roost potential assessment of buildings and trees

Roost Potential	Description	Surveys Required (Buildings)
Confirmed roost	Evidence of roosting bats found during initial daytime inspection.	3 – including 1 dawn as a minimum
High *	Structures with one or more features suitable for bat roosting, with obvious suitability for larger numbers of bats.	3 – including 1 dawn as a minimum
Moderate	Structure with one or more potential roost sites that could be used due to size, shelter and protection but unlikely to support a roost of high conservation status.	2– including 1 dawn as a minimum

Low	Structure with one or more potential roosting sites used by individual bats opportunistically. Insufficient space, shelter or protection to be used by large numbers of bats.	1 Survey
Negligible	No or negligible features identified that are likely to be used by roosting bats	None

** Unless it is a confirmed roost, additional surveys are required of buildings to assess presence / likely absence of a roost. The number of surveys are indicative to give confidence in a negative result, i.e. where no bats are found, confidence in a result can be taken.*

3.3 Nocturnal Surveys

i Following the daytime survey of the site, a single nocturnal dusk emergence bat survey was carried out of the site's residential building (B1). This was carried out on 17/07/2017 by two surveyors, positioned to monitor all aspects of the building. The surveyors utilised Bat Box Duet bat detectors and Anabat Express recording devices. This survey commenced 15minutes before sunset and proceeded until all species of bat would be expected to have left the building and was followed by an internal inspection to ensure not bats were present flying within. This survey was undertaken during optimal weather conditions within the bat active period.

3.4 Limitations

i It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

3.5 Accurate lifespan of ecological data

i The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for approximately 2 years, notwithstanding any considerable changes to the site conditions.

4 RESULTS

4.1 Surveyors

i The daytime Bat Building Assessment was carried out by Mike Sims BSc ACIEEM (Class 2 bat licence holder: 2015-10617-CLS-CLS) on 30th June 2017. Mike has been a professional ecologist since 2011 and is appropriately qualified to carry out this type of survey.

ii The dusk emergence survey was carried out by Jenny Wheeldon BSc (Hons) MSc MCIEEM (bat class 2 licence number 2015-12340-CLS-CLS) on 17th July 2017. Jenny has been a professional ecologist for fifteen years and was assisted by an additional surveyor. The survey was completed during suitable conditions as detailed in the table below.

Table 2: Summary of conditions during survey

Abiotic Factor	Survey 1	Survey 2
Survey type	Bat Building Assessment	Dusk Emergence
Date completed	30.06.2017	17.07.2017
Temperature	14°C	17°C
Wind speed (Beaufort Scale)	4	3
Cloud cover	60%	50%
Precipitation	0	0

4.2 Habitat Connectivity Analysis

i In assessing the site, a review of online resources and desk study data was undertaken to assesses the site with respect to its connectivity to the wider environment, particularly along linear features (rivers, railways, canals etc.) and any designated or protected sites. Figure 3 below highlights the site and any such habitat connectivity. This assessment allows the evaluation of how significant a development proposal could potentially be, in context of the wider environment, and for any species which may utilise the site.

ii Peak View is located to the west of Longridge Lane and is surrounded on all sides by grassland grazing fields. These fields are largely marked by boundary stone walls, with individual broad-leaved trees scattered along them in some areas. Due to the very open nature of the surrounding habitats, as well as the site's high position in the landscape, the area is poorly connected to semi-natural habitats that might be used by terrestrial and aerial fauna. The site is likely to be used by small numbers of common farmland birds, although bats, reptiles and amphibians are likely to be scarce or absent. Larger mammals, such as badgers or foxes, may opportunistically pass through the area if they occur nearby, although the site itself is unlikely to be a focus of any foraging or commuting activity.

Figure 3: Site Habitat Connectivity

4.3 Site Description

i As described in Section 4.2, Peak View was located in an isolated position, with grassland fields on all sides; see Figure 4. The plot contained a disused single-storey residential building (B1), a wooden shed (B2), an area of poor semi-improved grassland, areas of ornamental planting and a hardstanding driveway.

Figure 4: Site overview

ii B1 was a single-storey building with a pitched roof; see Figure 5. The walls were constructed from cavity wall blockwork with a rendered finish. The roof was clad with bitumen felt.

Figure 5: B1 Exterior

iii The windows and doors of the building had been removed, exposing the cavity between the layers of blockwork and exposing the building interior; see Figure 6. As a result of these removed windows and doors, the building interior was draughty and there was evidence of rain water ingress. It is understood these windows were removed within the last 6 months.

Figure 6: B1 Window aperture

iv Internally, the building's timbers were exposed; see Figure 7. These were machine cut and tightly joined together. The interior blockwork was also partially exposed, with some large gaps present between the blocks; see Figure 8.

Figure 7: B1 interior

Figure 8: Crevice in internal blockwork of B1

v B2 was a wooden shed with tightly fitted wooden walls and roof; see Figure 9. The roof itself was pitched with a bitumen felt liner, found to be in good state of repair.

Figure 9: B2 exterior

4.4 Daytime Bat Survey Results

i B1 was assessed as being 'Low' potential bat roosting habitat. This was due to the presence of exposed cavities in the blockwork of the walls, in locations where windows and doors had been removed. The building interior was assessed as offering very poor potential bat roosting habitat, largely as a result of the building's draughty nature and lack of available roosting niches. As such, a single nocturnal bat survey was scheduled to follow this daytime assessment. It was considered that had the buildings windows been in palce, this building would have had negligible potential for roosting bats.

ii No bat field signs, such as droppings, urine staining, or bats themselves, were discovered within B1 during the daytime survey.

iii B2 was assessed as being 'Negligible' potential bat roosting habitat, due to its well-sealed nature and absence of potential access point.

iv The trees located at the site were all of semi-mature age, with no features potentially suitable for roosting.

4.4.2 Dusk Emergence Survey Results - Building 1: 17th July 2017

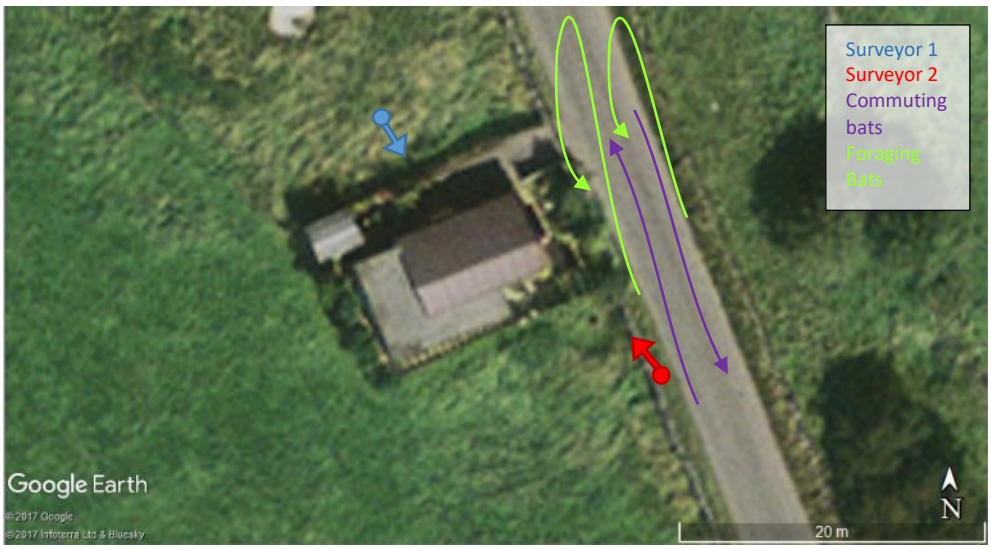
v Sunset: 21:26. Survey start: 21:12. Survey finish: 23:00.

vi Two surveyors were optimally positioned to survey Building 1; see Figure 10. No bats were observed emerging from Building 1 during this survey, and very low bat activity was recorded during this survey.

vii The first bat recorded was at 21:57, which was a common pipistrelle *(Pipistrellus pipistrellus)* observed commuting along the road east of the site, from south to north.

viii A further two common pipistrelle bats were observed commuting along the road during this survey, at 22:21 and at 22:26. Single common pipistrelle bats were also recorded foraging over the road on three occasions during this survey, the last occurring at 22:36.

Figure 10: 17.07.2017 - Bat Survey Plan



4.5 Other Notable Fauna

i No evidence of nesting birds was recorded within B1 during surveys of the site, although the open nature of the building does potentially allow this activity to take place. The semi-mature trees and shrubs at the site could also potentially be used for nesting. The nesting bird season extends from March to September.

ii No evidence of other notable or protected fauna was recorded during surveys of the site, and due to the isolated nature and small size of the site, it has been assessed that there is very limited potential for these species to occur there.

5 DISCUSSION & RECOMMENDATIONS

5.1 Bats

5.1.1 Roosting Bats

i No bats were found to be roosting during the dusk emergence survey of the site, and there was also very low levels of bat activity recorded during the survey. Although there were features of the building which could theoretically be used by roosting bats, it has been assessed that the likelihood of this taking place is extremely low. It is also considered that it is the removal of the windows which exposed the cavities that created the features. Had the windows been retained the buildings structure offered negligible ptotential as a result of its external construction and materials. It has been assessed that there will be no need to for further surveys to determine the absence of bats from the site or to apply for a Natural England European Protected Species Licence to legitimise proposals. No further survey or mitigation is proposed or considered necessary.

5.1.2 Bat Activity

ii All bat activity during the nocturnal survey of the site was concentrated over the road to the east, with no foraging observed taking place over the site itself. As such, it is recommended that safeguards are put in place to prevent impacting upon this bat activity outside of the site to the east, with the implementation of a bat friendly lighting scheme in this area. This should follow the guidelines set out in Bats and Lighting in the UK (BCT, 2009). Therefore**,** associated site lighting proposals must consider the following:

- Avoid lighting where possible;
- Install lamps and the lowest permissible density;
- Install lamps with the shortest permissible column height;
- Lamps should be fitted with light spill accessories directing light to the road and avoiding upward spill and spill onto the neighbouring properties, new pond, any newly planted trees/ hedgerows or the green corridor;
- Use of low intensity bulbs to minimise light intensity and impacts to bats;
- The use of timers and dimmers to avoid lighting areas of the site all night is recommended.

5.2 Nesting Birds

i All species of bird, whilst nesting, are protected under the Wildlife and Countryside Act (1981) as amended. Therefore, site demolition and clearance works should avoid the bird nesting season which runs from March to September inclusively. Works within this period should be preceded by an inspection for nesting birds by an ecologist. Where active nests are found, working restrictions would be put in place until follow up survey can demonstrate that all chicks have fledged.

6 REFERENCES

i Chartered Institute of Ecology and Environmental Management, 2012. *Competencies for Species Survey.* Winchester: CIEEM.

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v Office of the Deputy Prime Minister, 06/2005. *Government Circular: Biodiversity and Geological Conservation - Statutory Obligations and their impact within the planning system.* London: ODPM.