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ECOLOGICAL CONSULTANTS

Bat Scoping Survey:
Stables at The Alders, Chinley

ISSUE RECORD

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The information and advice contained in this report has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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1 INTRODUCTION

1.1 Background

This report has been prepared by Peak Ecology Ltd on behalf of Poulter Architects. It provides the results of a Bat Scoping Survey associated with the conversion of a stable block from workshops into a residential dwelling. The purpose of this report is to:

- Confirm presence / likely absence of roosting bats (to currently accepted standards for confidence in a negative result);
- Provide outline recommendations for mitigation and/or avoidance measures where appropriate;
- Identify any likely need for licensing by Natural England; and
- Highlight opportunities for ecological enhancement in relation to bats where appropriate.

In relation to planning and development, this report should be read in conjunction with the reports for any other ecological survey work relating to the site.

The approach to this assessment follows best practice published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2015), the British Standards Institution (BSI, 2013) and the Bat Conservation Trust (Collins (ed), 2016). Details of individual survey methods and associated supporting information are provided in Section 2.

1.2 Site Description

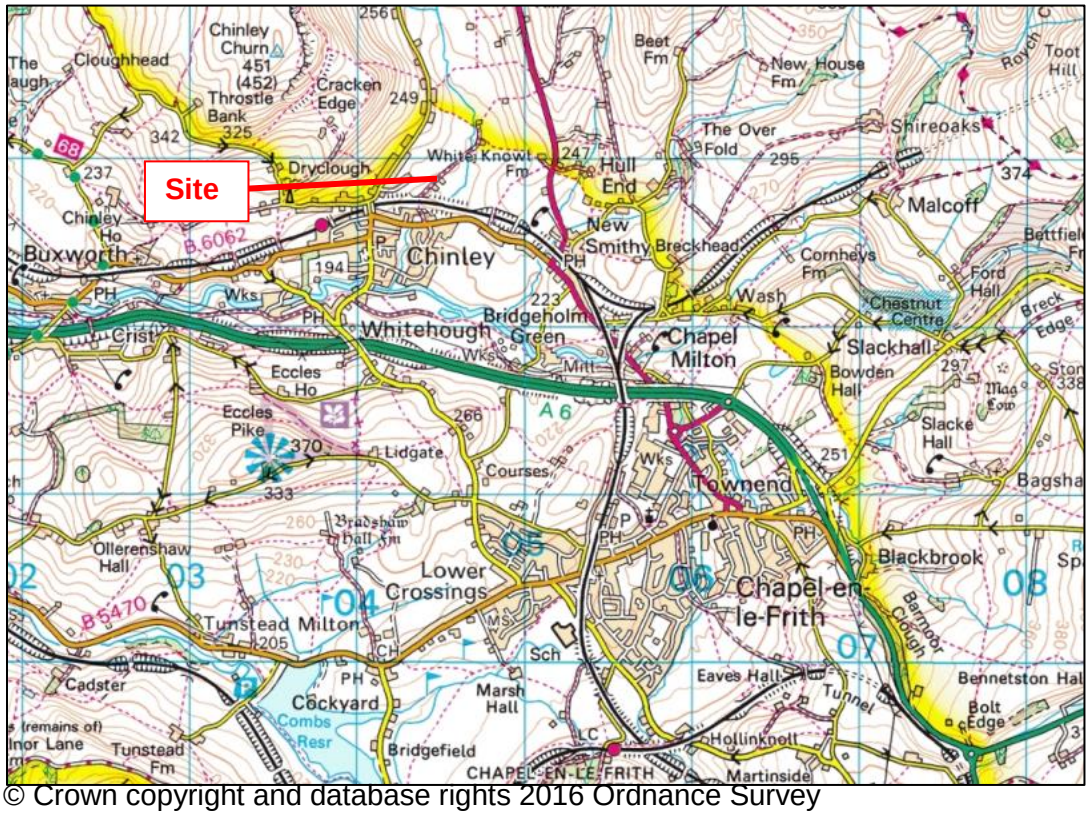
The site comprises a former stable constructed of breeze-block with stone facing, which lies approximately 100m to the south-west of The Alders, off Alders Lane to the north of Chinley in Derbyshire (central grid reference: SK 046 830).

The single storey building sits under a concrete tiled pitched roof and is sited immediately to the east of a small brook surrounded by woodland, with unmanaged grassland surrounding the north, east and southern elevations.

Accessed through separate glass and timber doors (behind original stable doors), the eastern half of the building is split into two workshop/storage rooms. The western half, accessed through double doors in the northern elevation, comprises a garage, open to the rafters.

The site location is illustrated overleaf.

Figure 1: Location plan



1.3 Planning / Legislatory Context

All British bat species are European Protected Species under The Conservation of Habitats and Species Regulations 2010 (as amended). They are also listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are protected by Parts 4(b), 4(c) and 5 of Section 9 of that Act.

In net effect, it is an offence to:

- Deliberately capture, injure or kill bats;
- Intentionally or recklessly disturb bats in a place of shelter (roost);
- Intentionally or recklessly damage, destroy or obscure access to a breeding site or resting place (roost); and/or
- Possess, control, transport, sell or exchange a bat or any part of a bat, unless acquired legally.

NB. Because bats use roosts at different times of year and typically return to the same roosts annually, it is a legal opinion that a roost is protected whether bats are in occupancy at the time or not.

Under the National Planning Policy Framework (NPPF) 2012 the presence of a European protected species such as bats is a material planning consideration. When assessing a planning application, in order to satisfy the three Habitats Directive tests the Local Planning

Authority (LPA) requires sufficient information about impacts on the species that are likely to result from the proposals as well as any necessary mitigation or compensatory measures. The test relevant to this report is that which relates to the Favourable Conservation Status of the species.

In addition to this, county and borough/district councils typically have biodiversity policies within their Local Development Frameworks that they must also comply with.

2 METHODOLOGY

2.1 Preliminary Appraisal for Bats

A daytime site visit was carried out on the 27th July 2016, with the survey methods following current good practice guidelines published by the Bat Conservation Trust (Collins (ed), 2016).

The survey was carried out by Senior Ecologist Chris Turner BSc ACIEEM with assistance from Graduate Ecologist Charlotte Haylock, who worked under direct supervision at all times.

Chris has been a professional ecologist for over four years and has extensive experience in survey and site assessment for bats. He is registered to use a Level 2 Class licence to survey for bats, issued by Natural England (registration number: 2015-12878-CLS-CLS) and is appropriately qualified for the surveys based on the CIEEM competencies for species surveys (CIEEM, 2013).

The appraisal comprised an assessment of potential roosting sites as well as suitability of bat foraging and commuting habitats. Survey methods and assessment criteria are described in further detail under the sub-headings below.

2.1.1 *Preliminary Roost Assessment*

A visual inspection was made of the building, including any internal areas such as roof voids or cellars, using binoculars, ladders, high powered torches and endoscopes where necessary to facilitate more detailed inspection of individual features.

The locations and descriptions of any potential roost features (PRFs) such as holes, crevices or internal voids that could be used by roosting bats were recorded on a site plan and PRFs were photographed. A search was also made for any evidence of bat presence such as droppings or feeding remains and where bat droppings were discovered samples were collected for DNA analysis to confirm identification of species.

2.1.2 *Assessment Criteria*

Based on the number, location and type of any potential roost features, the structures and trees were categorised as having **negligible**, **low**, **moderate** or **high potential** for roosting bats, or **confirmed roost** where direct evidence of bat presence was encountered. NB. The overall roost category assigned to a structure must be determined by the most suitable feature present, so that a structure with lots of very poor features would be categorised as negligible or low potential but if there is also one very suitable feature it would be categorised as moderate or high potential.

Evaluation of roost potential is necessarily subjective and relies on the professional judgment of the surveyor.

2.1.3 *Survey Method*

It should be noted that while a surveyor may be able to confirm presence of a bat roost where evidence such as droppings or feeding remains are found in accessible areas, it is not always possible to rule out presence of bats based on a daytime survey alone. Pipistrelle species in particular tend to roost in small crevices within walls or the roof structure so that evidence of their presence would not be found without carrying out a more destructive search of potential roost features.

Daytime surveys should be considered a means of identifying the suitability of a site for use by roosting bats and determining the scope of any more detailed follow-up surveys, rather than necessarily comprising the full extent of survey that may be required.

2.1.4 *Fieldwork*

It was not possible to view the internal face of the southern gable wall owing to the amount of insulation boards present on top of roof trusses. However, a clear view of the roosting site described in Section 3 was gained from the exterior, through the air vent found near the apex.

2.1.5 *Lifespan of Data*

The results and recommendations contained within this report are considered to be valid for up to two years from the date of survey. After that period, an update may be required in order to inform ecological constraints to development proposals and/or accompany a planning submission.

3 RESULTS

3.1 Overview

Two roosting sites, identified by the presence of bat droppings were found, one at either gable end of the building. Bat access points were noted in areas of missing mortar at both gable ends and within an air vent on the southern gable end.

3.2 Preliminary Roost Assessment

The building offered a number of potential access points for bats through gaps between stonework in the northern elevation, gaps around timber of the overhanging roof on the eastern elevation and gaps where mortar had fallen away near the apex of the southern elevation. The gaps around timber of the eastern elevation led to large, open voids behind blockwork which were considered too open to offer the sheltered conditions sought out by roosting bats.

Photograph 1: North elevation showing overhang

Photograph 2: Gap in stonework on north elevation

Gaps where mortar had fallen away at the apices and along the roof edges of the north and south elevations led to voids which showed evidence of use by roosting bats. Small aggregations of up to 50 bat droppings consistent with those deposited by pipistrelle bats *Pipistrellus* sp. were recorded resting on tile battens between roofing felt and roof tiles. A few larger droppings were also recorded indicting that another species may also use the building for roosting.

These droppings were of varying ages with some relatively dark, moist and fresh, with others being much paler and beginning to lose their form. This indicated that the roosting sites had been used over a number of years, though not extensively.

Photograph 3: Roost entrance – north elevation

Photograph 4: Bat droppings between felt and roof tiles

In addition to a crevice roosting site identified by bat droppings beneath the roof tiles at the southern apex, bat droppings were recorded inside the gable wall, with the most likely bat access point being the rectangular 'air vent'. Bat droppings were recorded within cobwebs in this area and a further aggregation was recorded within the building, against the gable wall.

Photograph 5: South elevation showing air vent

Photograph 6: Bat dropping within air vent

Photograph 7: View of southern gable wall. Roost site between rafter and wall – note bat dropping adhered to wall

Photograph 8: Bat droppings below roost site

The roost site, though not accessible from the interior was assessed using an endoscope and camera through the air vent. A perching point was noted within the narrow gap present between the last rafter and the internal blockwork of the gable wall. Further bat droppings were recorded within cobwebs in this area and a mixture of fresh and much older droppings were recorded, again indicating use of the site over a number of seasons. Bat droppings were probably deposited by more than one species, indicating that pipistrelles and a bigger bat, possibly brown long-eared Plecotus auritus have used the site for roosting.

Though a small void was present which extended northward from the gable end, this was not considered suitable for loft dwelling bats as it measured less than 30cm from ridge board to insulation and was blocked by insulation boards a short way along its length.

No bats were seen at the time of survey.

Photograph 9: View north from southern gable end

Photograph 10: View south from northern end showing piles of insulation boards

The interior of the building offered little in the way of bat roosting potential, despite good access being recorded at the eaves along the western elevation. Large gaps were present between rafters at the wall plate along the western wall, but many of these gaps contained bird nests.

	
Photograph 9: Eastern room	Photograph 10: Access at eaves of western elevation – note bird nest

The eastern rooms were decorated and well-sealed, offering no potential ingress points from either the exterior or from the garage and the western half (garage), though open to the rafters, contained piles of insulation boards filling the void beneath the roof pitch, thus significantly impeding access to perching points within the roof structure.

Furthermore, blockwork was intact internally and the building was generally light and airy and lacked suitably sheltered crevices sought out by roosting bats. No scattered droppings were recorded to indicate that bats had flown within the building, though a number of rodent droppings were recorded throughout.

3.3 Foraging and Commuting Habitats

The small brook to the west of the building offered ideal foraging and commuting for bats and the grassland surrounding the rest of the site offered excellent foraging habitat with an abundance of invertebrate prey likely to be present.

3.4 Nesting birds

A number of old bird nests were recorded on the western wall-top with access afforded at the eaves in this area. No active nests were discovered.

4 EVALUATION AND RECOMMENDATIONS

4.1 Bat Roosts

Two roost sites were located, comprising crevice roosts between roof tiles and sarking felt at either gable end, and a narrow gap between rafter and gable wall on the southern elevation, accessed through an air vent in the southern gable end. Though the roosts are unlikely to be of high conservation significance, most likely comprising occasionally used roosting sites for individual or small numbers of non-breeding bats, all roosting sites are protected by law.

As the building contains bat roosts, development work may result in the following impacts, all of which would be an offence under current wildlife legislation:

- Disturbance of bats in a place of shelter;
- Modification or destruction of a bat roost; and
- Risk of causing harm to individual bats.

In order to fully ascertain the use of the site by roosting bats, including number and species, further survey work is recommended.

4.2 Further Surveys

Based on current the current guidelines issued by the Bat Conservation Trust (Collins 2016), for a building with high bat roosting potential or a confirmed roost, three bat activity surveys are recommended to fully ascertain the use of the site by bats. These surveys would be carried out at dusk or dawn and should ideally be spread at least two weeks apart, during the bat activity season which runs from May to September inclusive.

In order to view all potential access points and roosting sites, Peak Ecology recommends that two surveyors, equipped with electronic bat detectors, will be required.

4.3 Suitability of Foraging / Commuting Habitats

The immediate surroundings are ideal for foraging and commuting bats and though the extension and conversion of the building is unlikely to have a significant impact on the surrounding habitat, an increase in exterior lighting may act as a barrier to foraging and commuting for local bat populations. Following further survey work, more specific recommendations will be provided as to the design of exterior lighting (if required).

4.4 Licence

Though it is likely that the roosts recorded on site comprise occasional summer day roosting for individual, non-breeding common pipistrelle bats, if impacts to the roosts are unavoidable, a development licence will be required from Natural England, to derogate from an offence being caused under the legislation. Depending upon the results of the further surveys, it may be that the proposals are of sufficiently low impact that a full EPS (Bats) licence may not be required.

The site may fulfil the criteria to be registered under the low impact class licence, issued by Natural England. Jessica Eades MCIEEM, of Peak Ecology, is a registered consultant who is able to register sites under this site specific licence.

Though the level of detail required remains the same as for a full EPS development licence application, Natural England aim to register sites under the low impact scheme within a much shorter timeframe*, thus reducing costly delays.

The site registration form (which is used by the registered consultant (Jessica Eades) to register the site with Natural England under the terms of the Class Licence WML-CL21) includes information as follows:

- Application form;
- Survey details and species, roost type and impacts;
- Mitigation/Compensation under the licence;
- Reasoned Statement – Statements supporting the 'Purpose Test' (regulation 53(2)(e)), The 'No Satisfactory Alternative' test (regulation 53(9)(a); and
- Licence declarations.

* Natural England aim to process standard EPS licence applications within 30 working days of receipt; however, during busy periods this review period may be extended. The Bat Low Impact Class Licence process aims to have a turnaround of 10 working days upon submitting the site registration form.

4.5 Mitigation

Full details of the required mitigation would only be possible following the further survey work recommended in Section 4.2 above.

4.6 Nesting Birds

As a number of old bird nests were recorded, it is recommended that works commence outside the bird nesting season which runs from March to August inclusive. Though unlikely, it is possible the birds may raise chicks outside this period and therefore a check for nesting birds must be made prior to commencement of works. This could be carried out during the supervised works regarding bats. However, if an active nest was discovered, works must pause and may not continue until all chicks had fledged.

Owing to the number of alternative nesting sites present within the surrounding habitats, it is considered that the loss of nesting opportunities on the building will have a negligible effect on the ability for birds to nest on site. However, enhancements could include the installation of standard bird boxes on the exterior of the building or on trees to the west of the building.

5 REFERENCES

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