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Bat Survey Report

Land at 2 Shawfield Road, Havant

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Report Summary

1. The Ecology Co-op undertook a bat scoping assessment of two buildings at 2 Shawfield Road, in June 2018. The pool house was assessed as having 'moderate' potential to support roosting bats, based on the presence of a number of gaps between hand-made clay tiles across the gable roof and a potential access point to the wooden soffit on the western face.
2. Based on the above assessment and in line with Bat Conservation Trust Guidelines, two bat emergence survey visits were carried out in July 2018 to determine the presence of roosting bats and evaluate the conservation importance of the site for bats. The purpose of this survey work was to determine presence of roosting bats and provide advice to inform a planning application which includes the demolition of this building and redevelopment of the site to support a new residential property.
3. No bats were seen to emerge from the pool house during either emergence survey.
4. Bat activity was low across the two surveys. Five species; common pipistrelle, soprano pipistrelle, common noctule, serotine and *Myotis sp.* were detected foraging and commuting in close proximity to the building and within the garden space across the survey visits.
5. As no bats have been identified emerging from the building during any of the surveys, it is considered unlikely that a bat roost is present. Bats are transient and can often move roost regularly and therefore it can be difficult to confirm absence, however given the low bat activity across the surveys it is considered less likely that bat roosts would be formed.
6. In the unlikely event that any bats are identified during the removal of roof tiles, work would have to stop until appropriate mitigation measures were put in place through preparation and submission of a European Protected Species (EPS) licence to Natural England.

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CONTENTS PAGE

1 INTRODUCTION.....	4
1.1 Background.....	4
1.2 Purpose of the Report	4
2 LEGAL PROTECTION	4
3 METHODOLOGY.....	4
3.1 Limitations to emergence surveys	5
4 RESULTS	6
4.1 Bat Emergence Surveys.....	6
4.3.1 Survey conditions.....	6
4.3.2 Bat emergence results	6
5 th July 2018	6
23 rd July 2018.....	6
5 DISCUSSION AND RECOMMENDATIONS.....	7
APPENDIX 1 – LEGISLATION AND POLICY.....	8
APPENDIX 2 - REDUCING IMPACTS OF ARTIFICIAL LIGHT.....	9



1 INTRODUCTION

1.1 Background

In relation to a proposed development, The Ecology Co-op undertook a combined Preliminary Ecological Appraisal and bat scoping assessment at 2 Shawfield Road, Havant. The bat scoping assessment identified one of the buildings, the pool house, as having several features that were suitable to support roosting bats¹.

The proposed development involves the demolition of this existing structure and redevelopment of the site which will include one new residential property with associated parking and landscaping.

Overall, the pool building was assessed as having 'moderate potential' to support roosting bats and in accordance with current best practice guidelines², a minimum of two emergence surveys were recommended to determine the presence of roosting bats and evaluate the conservation importance of the site for bats.

1.2 Purpose of the Report

In accordance with these recommendations, this report presents the results of two bat emergence surveys carried out on the 5th and 23rd of July 2018. These were led by Nick Gray, a graduate member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and licensed bat surveyor (bat licence number 2017-32546-CLS-CLS) and Briony Hill GradCIEEM and license bat surveyor (bat licence number 2018-34640-CLS-CLS). The grid reference for this site is SU 72371 06038.

The purpose of this survey work was to determine presence of roosting bats and where necessary prescribe further surveys and/or appropriate mitigation advice to inform the planning application for the proposed development.

This survey and report was carried out at the request of Howard Pollard.

2 LEGAL PROTECTION

Details of legislation and legal protection afforded to all species of British bats are given in Appendix 1.

The results of this survey will be used to determine the need for an appropriate mitigation strategy to ensure compliance with UK and EU wildlife legislation.

3 METHODOLOGY

Two emergence surveys were undertaken on pool house on the 5th and 23rd July 2018, using the methodology set out in the best practice guidelines prepared by the Bat Conservation Trust.

¹ The Ecology Co-op (2017) Preliminary Ecological Appraisal – Land at 2 Shawfield Road, Havant.

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). Bat Conservation Trust, London.



The surveys focused upon the handmade clay roof tiles covering the gable roof and the potential access point to the soffit. The two surveyors were positioned according to Figure 1. From these positions surveyors could see all features potentially suitable for roosting bats that were identified during the initial bat scoping survey.

The surveyors recorded any bat activity on or around the potential roosting entry/exit features identified during the scoping survey, using full spectrum hand held bat detectors (Echo meter touch) to identify species through call frequencies. The bat calls were logged and recorded as sonograms for later confirmation of species where necessary.



Figure 1. An aerial image showing the location of the site. The pool house, subjected to emergence surveys, is shown with a blue shaded outline. The positions of two surveyors are indicated with orange dots. The approximate site boundary is outlined in red. Images produced courtesy of Google maps (Map data ©2018 Google).

3.1 Limitations to emergence surveys

In accordance with best practice guidelines, two survey visits were undertaken during the peak period in bat activity and during good weather conditions. The results presented here are therefore considered to be an accurate representation of the general use of the building by roosting bats.

Nevertheless, bats can use roosting features intermittently throughout the year and may be present in larger or smaller numbers depending on their breeding cycle, weather conditions, and in response to disturbance. These surveys record the emergence of bats at the time of the survey visits and therefore



only provide a snapshot of bat roosting activity at the site at that time. Bats may be present at other times and the results should therefore be viewed with caution.

4 RESULTS

4.1 Bat Emergence Surveys

4.3.1 Survey conditions

The dates, times, weather conditions, temperatures and personnel for each survey visit are presented in table 1 below:

Table 1: Details of surveys undertaken, timings weather conditions and personnel.

Date	Survey start time/end time	Temp. degrees centigrade, weather conditions throughout survey	Surveyors
5 th July 2018	Start time: 21:02 Sunset: 21:17 Finish time: 22:47	Max/Min temp: 21 - 23°C. 0% cloud cover, light breeze (BF0-1) and dry.	Nick Gray Sophie Bradfield
23 rd July 2018	Start time: 20:47 Sunset: 21:03 Finish time: 22:33	Max/Min temp: 19.5 - 22°C. 0% cloud cover, BF1, dry.	Briony Hill Emma Baker

4.3.2 Bat emergence results

The following descriptions summarise bat activity and emergences from the building for each survey visit.

5th July 2018

No bats were recorded emerging from the pool building at any time.

General bat activity was relatively low. Three species; common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and common noctule *Nyctalus noctula* were recorded foraging and commuting between 21:48 and 22:45. A common pipistrelle commuted south west over the pool at 22:21. This species was heard intermittently, but not seen, on two occasions during the survey period. Soprano pipistrelles were heard but not seen six times during the survey period. A common noctule was heard faintly at 22:45.

23rd July 2018

No bats were recorded emerging from the pool building at any time.

General bat activity was generally low throughout the survey period. Four species; common pipistrelle, soprano pipistrelle, serotine *Eptesicus serotinus* and *Myotis sp.* were recorded foraging and commuting between 21:35 and 22:22. Soprano pipistrelles commuted north to south over the western garden space at 21:58 and 22:35. A common pipistrelle commuted north to south along the eastern face of the building at 21:39 and commuted west to east over head of the building at 21:44. This species was heard but not seen at 22:08. A serotine was heard but not seen at 21:57 and a strong *Myotis sp.* call was heard at 22:22 however the individual was not seen.



5 DISCUSSION AND RECOMMENDATIONS

As no bats have been identified emerging from the building during any of the surveys, it is considered unlikely that a bat roost is present. Bats are transient and can often move roost regularly and therefore it can be difficult to confirm absence, however given the low bat activity throughout the two surveys it is considered less likely that bat roosts would be formed. In the unlikely event that any bats or signs of bats (such as droppings) are identified during the removal of roof tiles and demolition, an ecologist must be contacted immediately.

If at any time bats are identified, demolition works would have to stop until appropriate mitigation measures were put in place through preparation and submission of a European Protected Species (EPS) licence to Natural England.

If this building is to be demolished more than 18 months following this assessment, a repeat survey may be necessary.

Bats are known to commute and occasionally forage within the garden space of 2 Shawfield Road with five species; common pipistrelle, soprano pipistrelle, common noctule, serotine and *Myotis sp.* recorded across the two surveys. The use of artificial lighting inappropriately can result in significant disturbance to bats. The detailed design should include a lighting scheme that minimises these impacts by following the Bat Conservation Trust's guidance on lighting, reproduced in Appendix 2 of this report.

Should you need any further advice on the information provided above, please do not hesitate to contact The Ecology Co-op.



APPENDIX 1 – LEGISLATION AND POLICY

All species of British bat are fully protected under the Wildlife and Countryside Act 1981 as amended through inclusion in Schedule V. All bat species in the UK are also included in Schedule II of the Habitats Regulations 2010 which transpose Annex II of the Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora ("EC Habitats Directive") which defines European protected species of animals.

Bat species are afforded further protection by the Natural Environment and Rural Communities Act 2006.

Under the above legislation it is an offence to:

- kill, injure or take an individual;
- possess any part of an individual either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by these species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb these species whilst using any place of shelter or protection; or
- deliberate disturbance in such a way as to be likely to impair their ability to:
 - survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong;
- keep (possess), transport, sell or exchange, or offer for sale or exchange, any live or dead bat, or any part of, or anything derived from a bat.

It is also an offence to set and use articles capable of catching, injuring or killing bats (for example a trap or poison), or knowingly cause or permit such an action. In the case all species of British bat there is also protection under Schedule 6 of The Wildlife and Countryside Act 1981 (as amended) relating specifically to trapping and direct pursuit of these species.

A European Protected Species Mitigation License (EPSM) is required from Natural England for any work that would result in an otherwise unlawful activity (e.g. damage to a bat roost). A license can only be issued to permit otherwise prohibited acts if Natural England are satisfied that all of the following three tests are met:

- The proposal is for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- There is no satisfactory alternative; and
- The action authorised by the license will not be detrimental to the maintenance of bat populations at a favourable conservation status in their natural range.

A bat roost is defined as "any structure or place, which any wild bat uses for shelter or protection." Bats tend to re-use the same roosts; therefore, legal opinion is guided by recent case law precedents, that a roost is protected whether or not the bats are present at the time. This can include all summer roosts, used for breeding, resting or sheltering and all winter roosts used for hibernating.



APPENDIX 2 - REDUCING IMPACTS OF ARTIFICIAL LIGHT

Bright external lighting can have a detrimental impact upon foraging and commuting bat flight paths, but more importantly can also cause bats to remain in their roosts for longer. Artificial lighting can also cause significant impacts on other nocturnal species, most notably moths and other nocturnal insects. It can also result in disruption of the circadian rhythms of birds, reducing their fitness. Guidelines issued by the Bat Conservation Trust³ should be considered while designing the lighting scheme. This includes the following measures:

Do not:

- provide excessive lighting. Use only the minimum amount of light needed for the task.
- directly illuminate bat roosts or important areas for nesting birds

Avoid:

- installing lighting in ecologically sensitive areas such as: near ponds, lakes, rivers, areas of high conservation value; sites supporting particularly light-sensitive species of conservation significance (e.g. glow worms, rare moths, slow-flying bats) and habitat used by protected species.
- using reflective surfaces under lights.

Do:

- consider employing a competent lighting designer who will apply the principals of providing the right light, in the right place, at the right time and controlled by the right system.
- minimise the spread of light to at, or near horizontal and ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required.
- consider the height of lighting columns. It should be noted that a lower mounting height is not always better. A lower mounting height can create more light-spill or require more columns. Column height should be carefully considered to balance task and mitigation measures.
- consider no lighting solutions where possible such as white lining, good signage, and LED cats eyes. For example, light only high-risk stretches of roads, such as crossings and junctions, allowing headlights to provide any necessary illumination at other times.
- use temporary close-boarded fencing until vegetation matures, to shield sensitive areas from lighting.
- limit the times that lights are on to provide some dark periods. The task being lit often varies, for example roads are less used after 23.00hrs and car parks are empty. A lighting designer can vary the lighting levels as the use of the area changes reducing lighting levels or perhaps even switching installations off after certain times. This use of adaptive lighting can tailor the installation to suit human health and safety as well as wildlife needs.

³ Bat Conservation Trust (2014) Artificial Lighting and Wildlife - Interim Guidance: Recommendations to help minimise the impact artificial lighting. Available at: http://www.bats.org.uk/pages/bats_and_lighting.html



Further reading:

Buglife (2011) *A review of the impact of artificial light on invertebrates*.

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CPRE (2014) *Shedding Light: A survey of local authority approaches to lighting in England*. Available
at: <http://www.cpre.org.uk/resources/countryside/dark-skies/item/3608-shedding-light>

Planning Practice Guidance guidance (2014) When is light pollution relevant to planning? Available
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Institution of Lighting Professionals (2011) *Guidance Notes for the Reduction of Obtrusive Light*
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