



**Bat Emergence Survey
Mount Vernon Hospital**

Report reference: R-3064-02.1
June 2018

Report Title:	Bat Emergence Survey Mount Vernon Hospital
Report Reference:	R-3064-02
Written by:	Kate Wright BSc(Hons), MSc, Grad CIEEM Assistant Ecologist
Technical Review:	Peter Brooks BSc (Hons), MA, MCIEEM, CEnv Managing Director
QA review:	Micah Duckworth BA, MSc Biodiversity Manager
Approved for issue:	Peter Brooks BSc (Hons), MA, MCIEEM, CEnv Managing Director
Date:	02.06.18



Unit A, 1 Station Road, Guiseley, Leeds, LS20 8BX
Phone: **01943 884451**
01943 879129
Email: admin@brooks-ecological.co.uk
www.brooks-ecological.co.uk
Registered in England Number 5351418



Summary Statement

Emergence survey demonstrated very low levels of activity across the Site, with no bats seen or suspected to emerge from any of the buildings.

It is concluded that the buildings on Site are very unlikely to support roosting bats, and that further survey effort is not required in support of this conclusion.

The proposed works can proceed with little risk of impacting on bats.

Introduction

1. Subsequent to the recommendations made in Brooks Ecological's Bat Roost Potential Survey (R-3064-01) dated November 2017, a detailed bat survey was commissioned at Mount Vernon Hospital, Mount Vernon Road, Barnsley S70 4DP (grid reference SE350047).
2. Information relating to local and legal status is provided in report R-3064-01 and is not repeated here. These two reports should be read together.

Method

3. Brooks Ecological specialise in bat surveys ranging from individual buildings through to complex sites requiring numerous visits with large teams. In terms of the survey effort, number of personnel required, and number of visits required to be able to properly evaluate the buildings' use by bats we refer to the Bat Conservation Trust, Survey Good Practice Guidelines (2016). However, these guidelines are not prescriptive and we approach each site individually as required using our professional judgement and significant experience base.
4. In this case, a single visit with a team of nine surveyors was deemed necessary to fully evaluate the potential use of the site for roosting. Surveyors were positioned around the building to cover all aspects where bats could potentially emerge, and to establish activity levels around the site.
5. The surveyors, using heterodyne detectors, were in place at least half an hour before dusk and left once all species of bat would be expected to have left a roost and patterns of activity within the site had been appraised. The conditions and date of the survey are summarised in Table 1 below:

Table 1: Survey Summary

Date of Survey	Temperature Start/End	Weather	Invertebrate Activity	Sunset Time
29.05.18	16°C / 15°C	Dry, overcast and humid with complete cloud cover and a light wind.	Low	21:20

6. Surveys were directed by Peter Brooks BSc (Hons) MA MCIEEM CEnv. Peter has many years experience of carrying out bat surveys in a professional capacity and is registered to use the Class Survey Licence WML CL18 (Bat Survey Level 2).

Results

7. No bats were seen during the survey.
8. The first bat heard was a common pipistrelle, briefly heard to the east of the Site close to the Mount Vernon Road entrance.
9. A second common pipistrelle was briefly heard moving along the tree-line to the north-west of the Site.
10. No bats were seen to emerge from the surveyed building.
11. Bats calls throughout the survey were recorded on an Anabat Express device. This confirmed that activity levels were very low, with just a single pipistrelle call being registered.

Figure 1 Bat emergence drawing



Evaluation and Recommendations

12. Following emergence survey work it is concluded that the building is very unlikely to support roosting bats and that further survey effort is not required in support of this conclusion.
13. The proposed works can proceed with little risk of impacting on bats.

General advice

14. Even where surveys have been carried out which demonstrate absence of roosting, site workers should always be aware that bats can move into buildings previously found not to support them. On this basis work should proceed with care and if a bat is found during the proposed demolition, works should stop immediately and a professional ecologist should be contacted.
15. The UK government's guidance on nature conservation in relation to development (NPPF) makes it clear that opportunities should be sought through their planning system to use development as an opportunity to enhance sites for wildlife where possible. Proposals for the renovation could incorporate areas that could be attractive to roosting bats, such as adapted roof tiles and ridges which can be cheaply and easily incorporated into new buildings.
16. Any post development proposed for the site should have a sympathetic lighting plan which demonstrates that light spill will be minimised since illumination of these areas could prejudice their use by bats. Impacts can be minimised by implementing the following (Stone, E.L. (2013):
 - Use of narrow spectrum lights with no UV or warm white light;
 - Direct lighting downwards;
 - Use of low level lighting (e.g. 2m high lighting columns);
 - Use of hoods and cowls to direct lighting onto required areas and not onto adjacent habitats;
 - Restrict hours of light.

References

Bat Conservation Trust (2016) Bat Surveys For Professional Ecologists – Good Practice Guidelines

Conservation of Habitats and Species Regulations 2010

English Nature (2004) Bat Mitigation Guidelines. English Nature, Peterborough.

JNCC (2004) The Bat Workers Manual. 3rd Edition.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System
<http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity>

Stone, E.L. (2013) Bats and Lighting. Overview of current evidence and mitigation