



Bat Emergence Survey
Upper Hoyland Road, Barnsley

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Summary Statement

Following emergence survey work it is concluded that the buildings on Site are unlikely to support roosting bats and further survey effort is not required in support of this conclusion. The proposed works present little risk of impacting on bats.

Introduction

1. Subsequent to the recommendations made in Brooks Ecological's Preliminary Ecological Appraisal (R-3576-01), detailed bat survey was commissioned by Riva Homes at Upper Hoyland Road, Barnsley, West Yorkshire (grid reference SE361012).
2. The Preliminary Ecological Appraisal and this report should be read in conjunction for full context. Information regarding the legal status of bats and their roosts is provided in the appendix.

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 and number of visits required to be able to properly evaluate the building(s) 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, 2 visits with a team of up to 5 surveyors was deemed necessary to fully evaluate the potential use of the site for roosting. The surveys were carried out on the 16th August and 4th September 2018 with surveyors positioned around the buildings 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. Conditions and dates are summarised in table 1 below:

Table 1 Survey summary.

Date of Survey	Temperature- Start/End	Weather	Invertebrate Activity
16.08.18	16°C / 15°C	30% cloud cover, light wind.	Low
04.09.18	16°C / 13 °C	30% cloud cover, dry, still.	Low

6. Both surveys were led by Victoria Baker BSc (Hons) MSc Grad CIEEM, who has over 4 years' experience conducting bat surveys in a professional capacity having received extensive in-house training covering all aspects of bat survey work. All surveys were directed by Sam Kitching BSc (Hons) Grad CIEEM, Sam has over 6 years' experience carrying out bat surveys in a professional capacity, he is registered to use the Bat Survey Class Licence (level 2) and is an active member of the West Yorkshire Bat Group.

Results

Survey – 16th August 2018

7. The first bat seen was a common pipistrelle at 21:05, 32 minutes after sunset. This bat was seen on the eastern Site boundary foraging between building 2 to the east and the residential house found off Site.
8. The next bat, observed at 21:15, entered the Site from the north and foraged in the courtyard before leaving the Site southwards.
9. The last bat recorded was a single common pipistrelle seen foraging to the north-east area of the Site, close to the surveyor at 21:17.
10. No bats were seen or suspected to emerge from the surveyed buildings.

Figure 1 Bat emergence drawing- 16th August.



Survey – 4th September 2018

11. The first bat seen was a common pipistrelle at 20:05, 19 minutes after sunset, flying from the north into the Site and foraging around the east of buildings 1 and 2. For the majority of the survey, 2 common pipistrelles were observed foraging within the off-Site gardens in this area.
12. The surveyor in the courtyard noted a common pipistrelle commuting through the Site at 20:10 from the north towards the south-east of the Site.
13. A single soprano pipistrelle was seen at 20:19 flying from the north along the western elevation of building 3 and foraging around the Site before returning the same way.
14. Bat activity was more frequent than the previous survey as a common pipistrelle was clearly seen at 20:20 flying from the east (where previously foraging) into the opening on the southern elevation of building 2 where windows used to be. It foraged inside the barn for the rest of the survey.
15. No bats were seen to emerge from the surveyed buildings.

Figure 2 Bat emergence drawing- 4th September 2018



Evaluation and Recommendations

16. Following emergence survey work it is concluded that all buildings on Site are unlikely to support roosting bats and that further survey effort is not required in support of this conclusion.
17. The proposed works present little risk of impacting on bats.

General advice

18. 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.

Enhancements

19. 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.
20. Proposals for the new builds will incorporate areas that are attractive to roosting bats, such as adapted roof tiles and ridges which can be inexpensively and easily incorporated into buildings.

References

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

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>

Conservation of Habitats and Species Regulations 2010

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

Appendix 1

Box 1 *Legal background*

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Conservation of Habitats and Species Regulations 2010 which means that it is important for detailed and well-designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

Box 2 *Bat roosts*

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

Transitional roosts

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.