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Bat Emergence Survey Report

No. 3 and No. 5 King's Road, Headcorn

Client: DHA Planning
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Version: Bat Emergence Survey1.0
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Qualifications: BSc Hons and Bat survey Licences
Checked: Richard Ferrett
Approved: Richard Ferrett
References: 6479

Quality Assurance

The report has been prepared using all reasonable skill and care and has been written to largely follow the Chartered Institute of Environmental Management (CIEEM) guidelines.

Contents

Acknowledgements

Name	Company	Position	Telephone Number
Edward Clark	Fellgrove	Ecologist	01227 806547

1 Terms of Reference

This report considers the particular instructions and requirements of the client. Interpretations and recommendations contained in the report represent the author's professional opinion, using currently accepted industry practices at the time of reporting and based on current legislation. 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 largely follows best practice guidelines 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).

2 Executive Summary

This report has been prepared by Edward Clark Fellgrove for DHA Planning. This report describes emergence/re-entry surveys for bats carried out on two detached industrial buildings: Nos. 3 & 5 King's Road, Headcorn. TN27 9QT. The bat surveys are to inform a planning application for redevelopment of the site.

A total of four emergence or re-entry surveys were carried out during the peak activity season for bats. All surveys were carried out in favourable conditions by experienced bat surveyors and were carried out in accordance with the most recently published best practice guidelines.

During the surveys four different species of bat were recorded including Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Noctule *Nyctalus noctule*, and a long-eared bat likely to be Brown long-eared *Plecotus Auritus*.

All bats and their roosts are protected by law. Affecting the roosts either directly through modification or destruction or indirectly through increases in noise, vibration, human contact and lighting must either be avoided or mitigated against where appropriate.

Low numbers of Common Pipistrelle bats were observed emerging or re-entering both buildings. The roosts are all of low conservation status and therefore the provision of bat boxes is considered to be suitable mitigation and compensation for the roosts that will be affected. Suitable mitigation and compensation measures to ensure that development will not adversely affect the conservation status of local bat populations is required for the planning application to be approved by the Local Planning Authority (LPA).

Destruction or modification of the bat roosts will need to be carried out under the supervision of a suitably qualified ecologist and will require either a site-specific mitigation license to have been issued by Natural England or the work can be carried out under a CL21 'Low impact' license.

Please note: Bat boxes must be installed prior to the commencement of any works which will affect the roost.

3 Introduction

The principal author of the report was Edward Clark (Natural England class licence number 2018-33670-CLS-CLS). The grid reference for the approximate centre of no.3 King's Road is TQ 83304 44398 and for no. 5 King's Road is: TQ 83317 44413

This report has been prepared by Edward Clark on behalf of Fellgrove It provides the results of Bat Emergence Surveys associated with a planning application for a new development.

Fellgrove were approached to undertake bat emergence and re-entry surveys for two structures off King's Road, Headcorn. Both buildings have multiple Potential Roosting Features (PRF) and are well connected to favourable bat habitat in the wider area. They have at least moderate suitability for bats. Initially three surveys were commissioned to survey both buildings. After recording bats emerging from both buildings a fourth survey was commissioned in order to properly characterise the roosts present and to inform mitigation and a license European Protected Species Licence (EPSL) application as required.

4 Survey Objectives

The aim of the bat survey was to identify potential ecological constraints and opportunities in respect of roosting bats associated with the proposed development of the site. The objectives of the bat surveys were to:

- Ascertain presence or likely absence of bat roosts within the outbuilding and/or dwelling house
- If present, determine which species are present and the size and nature of the roost
- Evaluate the value of the structure for bats and provide recommendations for further survey, mitigation, compensation and enhancement measures and licensing requirements to satisfy legal and planning policy requirements where appropriate.

5 Site Description

The site consists of two detached, two-storey buildings.

No.3 King's Road (hereafter: No. 3) has a single apex roof with clay tiles. It is arranged as a large workshop on the ground floor with rooms above. There are large roller door access doors on the North and East elevations. The external walls are clad with hanging tiles and there is a substantial amount of vegetation covering the Western elevation which obscures much of the external wall beneath. The apex of the building runs from East – West.

No. 5 King's Road (Hereafter: No. 5) is an older and smaller building than No. 3 but is still substantial. It is arranged as a workshop to the ground floor which is currently being used for storage. There is a double apex roof with a lead-covered valley in between. The building is clad with hanging tiles, many of which are cracked or broken. There is some vegetative cover on the North-west corner of the building. The Eastern elevation is adjacent to the boundary hedgerow feature which runs the length of the site and connects to tree lines and linear countryside features that are present outside of the boundary of the site.

Between the buildings is an area of hardstanding and variously the buildings are surrounded by either intensively managed areas of improved grassland and/or areas of hardstanding for vehicular access and parking.

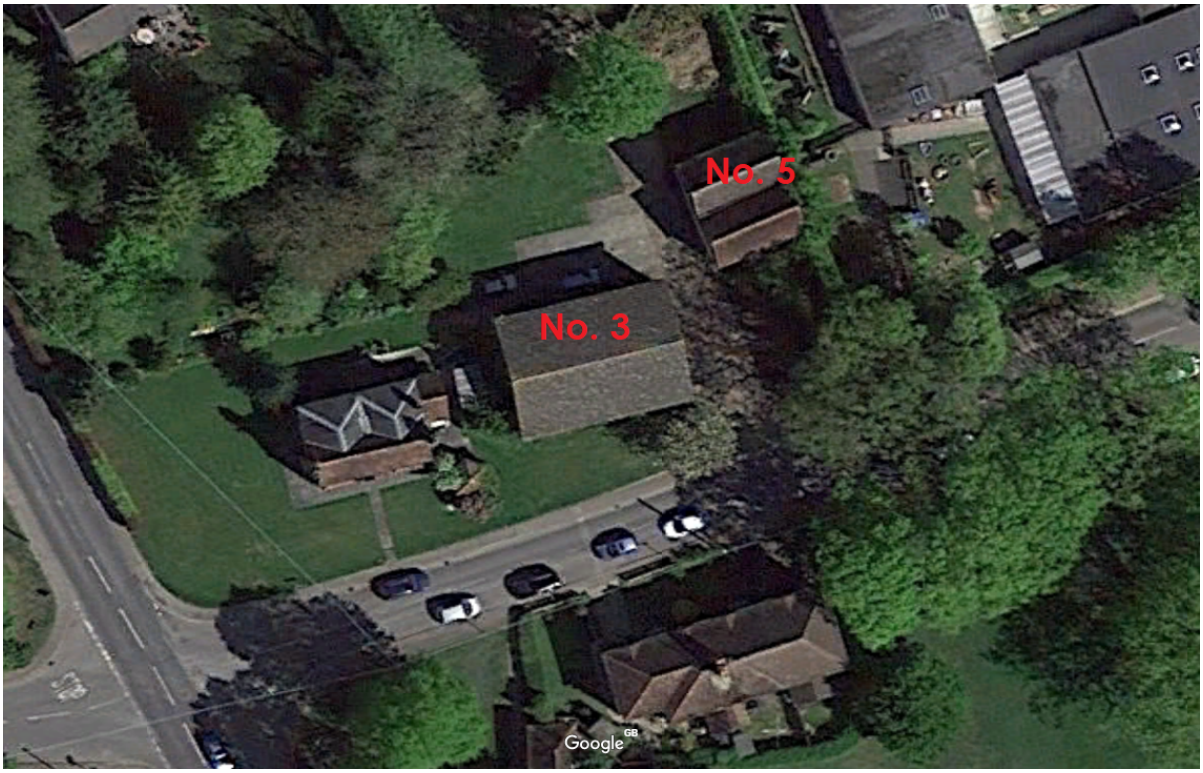

Figure 1: Overhead of site layout

6 Method

The bat emergence and activity surveys were undertaken in accordance with good practice guidance (Collins, 2016) which state that two separate survey visits are required, either dusk emergence or dawn re-entry surveys (on separate dates) to establish probable absence of a building deemed to have moderate potential for roosting bats.

The surveys were carried out as follows:
- No 3. 29/07/2019 dusk emergence survey and 14/08/2019 dawn re-entry survey
- No 5. 07/08/2019 dusk emergence survey and 19/08/2019 dawn re-entry survey

Emergence surveys were carried out from 20 minutes before sunset until 90 mins after. Re-entry surveys were carried out from 95 minutes before sunrise until 15 minutes after.
Three experienced surveyors lead by Edward Clark carried out the surveys using Batlogger M, EMtouch pro (connected to an Android tablet device) and Em-touch (connected to an Ipad tablet device) detectors. PRF were identified prior to survey during a site 'walk-around' and were discussed and agreed by all surveyors. Surveyors were positioned so that all aspects of the building and roofline could be seen during the survey. The surveyors used Motorola T82 Extreme Walkie Talkies to keep in contact with one another to help identify whether bats had emerged or had been visible from another surveyor's position prior to appearing.

Each building was surveyed on two occasions at dusk and at dawn. If emergence or re-entry activity was observed on the building not being surveyed this was also recorded.

The location, appearance, flight characteristics and time of sightings of bats were noted on recording forms to gain a better understanding of how all bats were using the site. Bat calls were automatically recorded by the detectors to enable sound analysis where needed.

Sound analysis was carried out by Edward Clark post survey where required.

7 Constraints and Limitations

Most of the valley section between the two apex rooves of No.5 was not visible from the ground. On the second survey a surveyor was positioned up in the valley of the two roof structures to ensure no bat activity had been missed in the first survey.

The call parameters for some British bat species overlap and it is not always possible to differentiate some Myotis species even when good quality recordings have been taken. For this reason, the two Myotis bats recorded are referred to as Myotis sp.

Long-eared bats have comparatively good eyesight and hearing and often will not echolocate, meaning they are often under-recorded.

Members of the public often stopped to talk to the surveyor(s) positioned by the road.

8 Results

A total of four Common Pipistrelle night roosts were recorded; three of these contained just one individual, in the other two animals were found to be present.

Two separate roosts each containing an individual bat were recorded in No.3. Two separate roosts, one containing two bats and one containing a single animal were recorded in No.5.

The roost locations are shown in the figures below:

Figure 2: Eastern elevation of No. 3 with roost location

Figure 3: Western elevation of No. 3 with roost location

Figure 4: Western elevation of No. 5 with roost location

Figure 5: Northern elevation of No. 5 with roost location

In total, activity from four bat species was recorded on or near the site. These were: common Pipistrelle *Pipistrellus pipistrellus*, Noctule *Nyctalus noctula*, Serotine *Eptesicus serotinus* and Brown long-eared bat *Plecotus auritus*. Of these, Common Pipistrelle were by far the most numerous.

9 Discussion and Recommendations

Bats are legally protected under EU (Conservation of Habitats and Species Regulations 2017) and domestic legislation (Wildlife and Countryside Act 1981 (as amended). For more information on the relevant legislation refer to the appendix of this document.

The surveys have shown that bats are present and using the site for foraging and commuting although the highest activity recorded was always behind the surveyor nearest the roadside. There is an area of amenity grassland to the South of the site containing mature standard Oak *Quercus robur* trees. There was more activity recorded on the edges of this area than in the whole of the site.

There are bat roosts in both buildings, and these are likely to be disturbed by the development proposal. In the absence of proportionate mitigation this could lead to damage, death or encasement of any bats in situ, along with destruction of the roost.

Proportional mitigation according to English Natures Bat Mitigation Guidelines (Mitchell-Jones, 2004) is dictated by the ecological impact of the development. This depends on the conservation significance of the roosting site which is determined by the species present, population size and roost status.

Of the bats found to be present within the structure:

- Common Pipistrelles are considered to be widespread and common, with an estimated UK population of 2.4 million (Bat Conservation Trust 2010). For individuals or low numbers of Common Pipistrelles roosting provision can be provided by bat boxes and suitable access points to new structures as appropriate. Woodcrete bat boxes should be sited within suitable trees as close to the current roosts as is practicable.

Therefore, the mitigation design will need to include provisions within the planning application for:

- The installation of four woodcrete bat boxes similar in design to the Schwegler 2f multi-purpose bat box prior to any works being carried out
- Disturbance to bats to be minimised through appropriate timing of the proposed works (outside of the main activity season)
- A suitably qualified ecologist to be present and demolition to be carried out by hand on all areas with suitable PRF on the roof and with hanging tiles, beginning with the four roost locations.
- All bats found to be moved to the bat boxes as soon as possible.

The roosts present are likely to undergo either modification or replacement when the site is redeveloped and therefore if planning permission is granted a European Protected Species license (EPSL) will need to be granted by Natural England before works can begin or the work will need to be carried out under the new Low impact class licence CL21 as the roosts fit the criterior.

The hedgerow along the Eastern boundary should be retained as this offers a commuting corridor for bats between the preferred foraging area to the South of the site and the wooded areas and pasture North of the site.

All lighting for the proposed development should be of the minimum level that is necessary and there should be no light spill onto roost entrances (bat boxes) or commuting corridors. The lighting strategy for the site must take into account the findings of this report.

Please note: After installation, bat boxes can only be moved or inspected by a suitably licensed bat worker (Level 2 survey license minimum).

The construction design should incorporate at least two external wall mounted bat boxes similar in design to the Schwegler 2FE to enhance the site further for local bats.

10 References

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