



114 Southcote
Lane,
Reading,
Berkshire,
RG30 3AF

Dusk Activity Survey Report

August 2019



Ref: 19-6061

QUALITY STANDARDS CONTROL

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Revision	-	B
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Note

The advice which we have prepared and provided within this report is in accordance with the CIEEM Code of Professional Conduct. We confirm that the opinions expressed are our true and professional opinions. Opinions and information provided in the report are based on Syntegra Group Ltd using reasonable skill, care and diligence in the preparation of the same in compliance with the CIEEM Code of Professional Conduct.

Validity of Data

The findings of this study are valid for a period of 12 months from the survey date. If the approved works have not commenced within the 12 months, it may be necessary to have an updated survey carried out to allow for any changes in the status of bats on site to be assessed and to inform any mitigation or recommendations.

LIMITATIONS

Syntegra Consulting Ltd ("SC") has prepared this report for the sole use of the **client, Mr Lloyd Anthony**, in accordance with the agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by SC.

The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by SC has not been independently verified by SC, unless otherwise stated in the report.

The methodology adopted and the sources of information used by SC in providing its services are outlined in this report. The work described in this report was undertaken in **2019** and is based on the conditions encountered and the information available during the said period of time. The scope of this report and the services are accordingly factually limited by these circumstances.

Where assessments of works or costs identified in this report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

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No allowance has been made for changes in prices or exchange rates or changes in any other conditions which may result in price fluctuations in the future. Where assessments of works or costs necessary to achieve compliance have been made, these are based upon measures which, in SC's experience, could normally be negotiated with the relevant authorities under present legislation and enforcement practice, assuming a proactive and reasonable approach by site management.

Forecast cost estimates do not include such costs associated with any negotiations, appeals or other non-technical actions associated with the agreement on measures to meet the requirements of the authorities, nor are potential business loss and interruption costs considered that may be incurred as part of any technical measures.

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Appendix I: 4th July 2019 Dusk Echolocation Results

1 Introduction

1.1. Syntegra Group was commissioned by Mr Lloyd Anthony, to conduct a dusk echolocation survey at 114 Southcote Lane, Reading, Berkshire, RG30 3AF (Grid Ref: SU 694 216). The survey was carried out on the 26th August 2019.

1.2. The proposals are to subdivide the current dwelling and placement of a two-storey side extension and a rear single storey extension.

1.3. The initial daytime survey was carried out in 13th August 2019, by Syntegra Group. Potential access points and crevice spaces were noted within the rear roof and rear soffit boards. The internal inspection found no confirmed signs of roosting bats in the form of marks, stains, droppings and or debris. The building was deemed as low roosting potential.

1.4. In line with BCT Guidelines (2016), buildings with low potential require either one dusk echolocation or dawn activity study carried out during the active season (May to August inclusive) to rule out the likely absence or confirmed presence of bat roosts. The further studies will inform the mitigation strategy required for the site proposals.

Table 1: Adapted from Collins (2018), Classification of Roosts Within Structures

Category	Description of Roosting Habitat	Number of Surveys Required
Negligible	Little to no suitable locations for roosting - not ideal for supporting bats	No further surveys
Low	A structure with one or more potential roosting spaces that could be used by opportunistic individuals. The features and surrounding habitats do not provide enough suitable conditions and/ or space for use as a maternity or hibernation roost	One survey carried out between May and August (dusk or dawn)
Moderate	A structure with one or more potential roosting spaces that could be used by individuals based on features present (size, shelter, conditions and surrounding habitat), but unlikely to support a roost of high conservation value	Two further surveys (one dusk and one dawn spaced two weeks or more apart) between May to September with one survey between May and August
High	A structure with one or more potential roosting spaces that are suitable for regular use and/ or larger numbers of bats for a more prolonged period due to the conditions and surrounding habitats	Three further surveys (at least one dawn) carried out between May to September with two undertaken between May and August.
Confirmed	Positive evidence of bats i.e. droppings, individuals or bat records	The surveys must be undertaken two weeks apart; spaced surveys are preferred

2 Limitations

- 2.1. This report only applies to plans drawn up at the time of survey. Any alterations to plans may render the report void and/or require further surveys and should be communicated to the ecologist at the earliest opportunity.
- 2.2. The dusk echolocation survey was carried out in August an active period for bats at a time when individuals are within established summer/maternity roosts and at a time when adult females are starting to leave maternity roosts as swarming season is starting (BCT 2016). The dusk echolocation is a snapshot of one evening and with buildings of low roosting potential can conclude likely absence.
- 2.3. The dusk echolocation surveys were undertaken during August, which is within the optimal survey period stated in published guidance from the Bat Conservation Trust (Collins, 2016).
- 2.4. The survey was undertaken when sunset temperatures were 10°C or above, and when no strong winds or rain occurred, which are the recommended survey parameters stated within guidance from the Bat Conservation Trust (Collins, 2016). As such there are no limitations associated with the timing and weather conditions of the surveys.
- 2.5. The client is responsible for reading and understanding the advice given in this report. The client must ensure that, where recommended, precautionary measures and or mitigation is followed through.

3 Methodology

- 3.1. On the 26th August 2019, the dusk echolocation study was carried out. The survey was led by Patricia Holden MSc MCIEEM (bat licence: 2016-20440-CLS-CLS) with her assistant, both experienced ecologists who have undertaken numerous bat surveys and have undergone professional training in bat surveying techniques. The dusk studies followed survey guidelines set by the Bat Conservation Trust Bat Surveys Good Practice Guidelines (Collins 2016).
- 3.2. The dusk activity surveys were undertaken in suitable weather conditions by two experienced bat ecologists positioned around the site from fifteen minutes prior to sunset and remained on site for ninety minutes post sunset. The ecologists had view of the potential features noted within the initial daytime bat survey and the dwelling had adequate cover during the activity surveys. The surveyors used Batbox Duet Bat Detectors to listen for echolocation calls and any bat passes were also recorded in frequency division and later analysed using 'Bat Scan'. Any bat sightings were noted including the time, location, behaviour and call.

4 Results

4.1. Dusk Echolocation

- 4.1.1. The dusk activity survey was carried out on the 26th August 2019, with sunset at 20:04. Conditions were suitable with light winds (2 mph), 0 % cloud cover and 25°C. End survey conditions were 0 % cloud cover, light winds (1mph) and 22°C. The survey times followed BCT guidelines

(Collins 2016) with the survey commencing at 19:49 and ending at 21:34. One surveyor was located at the central rear of dwelling and the second surveyor was located to the rear gable end. The surveyors had full view of the potential access/crevice features and roof space.

4.1.2. The central surveyor noted traversing foraging and traversing common pipistrelle, soprano pipistrelle and noctule. The rear surveyor noted foraging and traversing common pipistrelle, soprano pipistrelle and noctule. The results of the survey are noted within Appendix I. The Figure below detail the observed flight paths during the dusk survey.

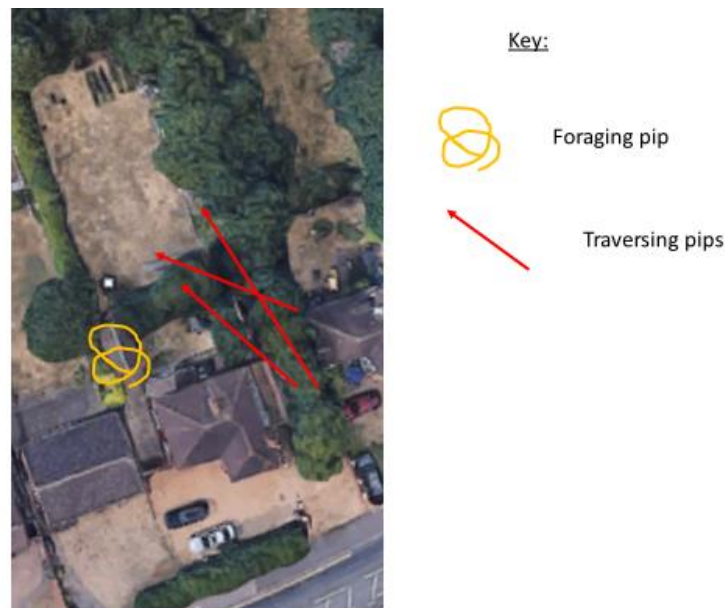


Figure 1: Observed Flight Paths

5 Discussion

5.1. The initial daytime bat inspections carried out on the 13th August 2019, assessed the dwelling to have lifts within the rear elevation roof spaces and gaps within the single story extensions soffit boards. The internal inspection found no evidence of roosting bats. The dwelling was deemed as low roosting potential.

5.2. The dusk echolocation survey was carried out in late August with the surveys carried out in line with BCT survey guidelines with two surveyors used to cover the buildings potential crevice/access points.

5.3. A MAGIC search for any Granted European Protected Species Applications within 2km of the site returned four known EPSL Applications for bats. The closest application is within 500 metres of the site for the damage and destruction of a known breeding site for soprano pipistrelle bats in 2010. The further three EPSM ranged between 2013 to 2017 for common pipistrelle and brown long-eared bats.

5.4. Based on the snapshot activity survey, it is considered that noctule, common and soprano pipistrelle roosts are within the local landscape, but not within the dwelling. The tree line boundaries of the site support traversing and foraging grounds for a small number common and soprano pipistrelle bats. The site itself has mature trees within the boundaries, and when viewed on google earth, these trees lines also run along the neighbouring properties which further extend to deciduous woodland and wood pasture and parkland, this would constitute as a linear feature and would provide good traversing grounds for local bats.

5.5 The dusk survey noted that the grounds around the dwelling and adjacent landscape provide traversing and foraging grounds for a small number of common pipistrelle, soprano pipistrelle, and noctule bats. The dusk survey has found a likely absence of an active roost(s) within the dwelling.

5.6. If the disturbance to the roosts are considered to fall below the threshold for the Habitat Regulations, no licence is necessary. Precautionary measures may result in limiting the impact of the disturbance such that it is not significant enough to come within the offence in regulation 39. The proposed demolition works will not destroy/damage known roost spaces and works can proceed under standard precautionary measures.

5.7. The site has identified local populations of common pipistrelle, soprano pipistrelle, and noctule bats to use the habitats on and directly adjacent to the site for foraging and traversing. The site has been identified from the further activity survey to hold **site** importance for the local bats. It is recommended to offset any future impacts from lighting, that a lighting plan is in place that ensures minimal disturbance to the local bat population. Artificial lighting has been found to exert negative impacts on bats, including modification of behaviour, disturbance to flight paths and the disruption to the diurnal and season movements of bats (BCT, 2018).

6 Mitigation Measures

6.1. The following is a guide and could be subject to change should a lapse of 12 months occurs between the survey and proposed works given the identified features on site and population of crevice bats within the local landscape.

6.2. Within 1 month of the start of works, one bat box is to be placed in a suitable tree onsite, preferably within the rear eastern boundary of the site, given the identified traversing activity during the surveys. It is recommended that either a Schwelger 2F bat box or Vincent Pro Bat Box is used. This box is to be hung at least 3 metres and facing southerly. This box will remain on site post works and will provide a future roosting space for local bats.

6.3. It is recommended that standard precautionary measures are in place for the roof works with the work staff carefully stripping back the soffit boards, tiles and any timber batten/beams. As an active roost was not found on site, no time restrictions are in place, however it is always advised that demolition works are carried outside of the active roosting season (May to August inclusive).

6.4. As the echolocation surveys noted the eastern boundary of the site provides traversing grounds for common and soprano pipistrelle bats, the future light proposals must ensure the

continuation of bats utilising the site and boundaries. It is recommended that lighting proposals within the eastern boundary ensure limited light spill. Any new lighting on site must be direct, pointed downwards not upwards or outwards, hooded design, low lux, and wherever possible motion sensor. No lighting is to be directed towards the eastern boundary tree line to ensure continuation of this area as traversing grounds by local bat species.

6.5. In line with section 15 of the National Planning Policy Framework (NPPF) (DfCLG, 2018), the development of the site must increase its ecological value and provide net gains to biodiversity and in line with EN12: Biodiversity and the green network of the Draft Reading Borough Local Plan to identify and incorporate opportunities for net gains in biodiversity (Reading Borough Council 2018). In order to have this net gain, it is recommended that either the extension incorporates a crevice roosting space (soffit boards offset by 25cm) or installation of swift bricks or integrated sparrow nest box under the eaves and away from windows.

6.6. The ecologist will remain on call during all stages of the works.

References:

Bat Conservation Trust. 2018. Bats and Artificial Lighting in the UK, Guidance Note 08/18 – Bats and the Built Environment Series. London. Bat Conservation Trust

Collins (2016) Bat Surveys: Good Practice Guidelines, 3rd edition, Bat Conservation Trust.

Mitchell-Jones, A. J. Bat Mitigation Guidelines. Jan 2004. English Nature.

Reading Borough Council. Submission Draft Reading Borough Local Plan. Accessed:

http://www.reading.gov.uk/media/8649/LP001-Submission-Draft-Local-Plan/pdf/LP001_Submission_Draft_Local_Plan.pdf

Appendix I: 26th August 2019 Dusk Echolocation Survey Results

Results – Rear/Gable End Elevation surveyor

Time	Spp/Freq	Observed	Behaviour
21:00-21:06	Com Pip/45	Seen and Heard	Foraging in and around garden hedge and garage
21:07	Sop Pip/55	Heard not Seen	Traversing
21:10	Sop Pip/55	Heard not Seen	Traversing
21:11	CP/45	HNS	Traversing
21:12	SP/55	HNS	Traversing
21:13	CP/45	HNS	Traversing
21:27	CP/45	HNS	Traversing
21:28	Noc/22	HNS	Traversing
21:29	CP/45	HNS	Traversing

Results- Central Rear Elevation Surveyor

Time	Spp/Freq	observed	behaviour
20:29	SP/55	Seen and Heard	Traversing across the site high from E boundary tree line to rear of site
20:30	SP/55	HNS	Foraging
20:30	CP/45	H/S	Traversing from E tree line to rear
20:32	Sop Pip/50	HNS	Foraging
20:32	Noctule/20	HNS	Traversing
20:33 - 20:34	SP/55	HNS	Foraging
20:44 - 20:49	CP/45	HNS	Foraging intermittent
20:57	SP/55	HNS	Traversing
21:05	SP/55	HNS	Foraging
21:07	SP/55	HNS	foraging
21:11	CP/45	HNS	Traversing
21:12	SP/55	HNS	Traversing
21:13	CP/45	HNS	Traversing
21:27	CP/45	HNS	Traversing
21:28	Cp/45	HNS	Foraging