



# Bat Emergence Survey Report

## **136 Hever Avenue, Sevenoaks, Kent**

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## 1 Executive Summary

ECOassistance were commissioned to undertake a single bat emergence survey of No. 136 Hever Avenue in Sevenoaks, Kent. The survey objective was to determine whether bats of any species were roosting in the building and outline the constraints and mitigation requirements therein.

The survey results indicate that bats do not use the structure for roosting.

Two species of bat were recorded commuting and/or foraging near to the property; this occurred mostly to the south and above the rear garden.

Neither of the species foraging and commuting near to the site are light averse and therefore additional measures for external artificial lighting are not required.

The addition of a bat box will provide a simple enhancement to improve the site for the species of bat known to be present to ensure the development results in a net gain for bats.

### Disclaimer

This bat survey and report considers the instructions and requirements of the client and is not intended for and should not be relied upon by any third party.

The results contained within this report can be relied on for decision-making purposes without the need to be updated for twenty-four months providing there is no significant change in land use or land management in that time.

Interpretations and recommendations contained in this report represent the author's professional opinions. They are based on currently accepted industry practices and personal experience. This is a working document and must be updated if development proposals change, or new information become available.

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## 2 Introduction

ECOassistance were instructed by Mr. Lee O'Brien (Hereafter: the client) to undertake a single bat emergence survey (BERS) of a detached bungalow at 136 Hever Avenue. The survey will inform a planning application for demolition of the bungalow which is to be replaced with flats. The grid reference for the approximate centre of the bungalow (hereafter referred to as: the site) is: TQ574640.

The surveys follow a preliminary roost appraisal (PRA) carried out by ECOassistance as part of a preliminary ecological appraisal (PEA) in August 2021<sup>1</sup>. The PRA deemed the site to have low bat roost potential (BRP) in line with the Bat Conservation Trust guidelines (2017).

The surveys were led by Jack Clark and assisted by experienced bat field surveyor Charlie Birch. Jack has more than 7 years professional and voluntary experience surveying for bats. Charlie has been undertaking BERS for more than 2 years.

All native species of bat are protected under both The Conservation of Habitats and Species Regulations 2017 and the 1981 Wildlife & Countryside Act (as amended). For more information on the relevant legislation refer to the appendix of this document.

The key objectives of the survey undertaken were to:

- Assess the presence or likely absence of bat roosts within the site and its local environs.
- Characterise the roost size and type if present and detail what further measures are required.

This report describes the survey findings.

## 3 Methodology

A dusk emergence survey was carried out on 20/08/21. The survey was carried out in accordance with good practice guidance (Collins, 2016) from 15 minutes before sunset until 90 minutes afterwards and in favourable weather conditions.

The surveys were carried out using a Batlogger M bat detector an EM touch and EM touch 2 pro ultrasonic modules with android/ipad tablets. Surveyors were positioned to ensure as many aspects of the building as possible could be seen and that bats entering or exiting the structure would be readily observed. Surveyor positions are shown in figure 1 below.

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<sup>1</sup> Preliminary Ecological Appraisal & Preliminary Roost Assessment **136 Hever Avenue, Sevenoaks, Kent. ECOassistance**

Figure 1: Surveyor positions with field of view and approximate red line boundary of the site



Each surveyor was provided with a Motorola Talkabout walkie talkie to discuss activity and to enable surveyors to collaborate in real time and better ensure emergencies from or returns to the structure were not missed.

The location, appearance, flight characteristics and time of sightings of bats were recorded on ECOassistance BERS results forms to gain more information on how bats are using the site. The survey results forms are presented in Appendix 2.

Bat calls were automatically recorded by the detectors to enable sound analysis where needed and post-operative sound analysis was carried out by Edward Clark using Bat explorer and kaleidoscope software.

#### 4 Constraints and Limitations

Surveys such as this provide a snapshot of activity and in conjunction with the PRA are designed to determine presence or likely absence of roosting bats. The BERS were carried out within the main activity season and in line with good practice guidance and the findings are in line with those of the PRA. Whilst the survey effort is therefore not exhaustive it fulfils and follows the criterion set by the planning authority.

One of the surveyors recorded a slight reduction in visibility as a result of external artificial lighting already in place at the site. However, no 'possible' emergencies were recorded and therefore the surveyor was confident nothing that nothing had been missed.

#### 5 Results

During the survey a total of two bat species were recording flying over or near to the site but none were observed emerging from or entering the structure.

The species recorded were: common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*. Of these, common pipistrelle were the most numerous.

Bats were recorded using the row of trees adjacent to the south of the site for commuting and foraging. Foraging was also recorded and observed over the rear garden of the site.

## 6 Conclusion and Recommendations

1. The emergence and re entry surveys undertaken indicate that bats are not using any part of the structure for roosting.
2. Neither of the bat species recorded are considered to be light averse.

No further survey effort or action is required at this stage in relation to the programme of works as bats are deemed likely absent from the structure in line with current guidance.

Bat sensitive lighting at the site is not required as no light averse species of bat have been recorded. Where possible however it is recommended that any new external lighting be restricted to low level downlights such as downward facing bollard lighting and /or activated by motion sensors to keep non-essential lighting to a minimum. This is because reducing non-essential artificial lighting has been shown to have a beneficial effect on nocturnal wildlife in general.

There is no impact to roosting sites and negligible impact to commuting and foraging habitats. A net gain for bats at the site can be achieved by providing simple habitat enhancements for the species known to be present.

- 1 x woodcrete type bat boxes suitable for pipistrelle bats to be hung from a mature tree or affixed to the south facing elevation of the new property post construction is recommended. Suitable bat box designs for illustrative purposes are provided in the appendix<sup>2</sup>.

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<sup>2</sup> the product shown is from the NHBS website: [www.nhbs.com](http://www.nhbs.com)

## 7 References

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- Bat Conservation Trust (2009) Bats and Lighting in the UK: Bats and the Built Environment Series Collins, J. (ed.) (2016).

### Appendix 1: Review of Protected Species UK Legislation and Policy

The level of protection afforded to protected species varies dependent on the associated legislation. A full list of protected species and their specific legal protection is provided within the Schedules and/or Sections of the associated legislation. Case law may further clarify the nature of the legal protection afforded to species.

The legal protection afforded to protected species overrides all planning decisions. European Protected Species (EPS) - and the Conservation of Habitats and Species Regulations 2010 (as amended)

European Protected Species (EPS) are afforded the highest level of protection through the Conservation of Habitats and Species Regulations 2017. EPS are also afforded legal protection by parts of the Wildlife and Countryside Act 1981 (as amended).

In general, any person and/or activity that:

- Damages or destroys a breeding or resting place of an EPS. (This is sometimes referred to as the strict liability or absolute offence);

Deliberately captures, injures or kills an EPS (including their eggs);

Deliberately disturbs an EPS, and in particular disturbance likely to impair animals' ability to survive, breed or nurture young, their ability to hibernate and migrate and disturbance likely to have a significant effect on local distribution and abundance; intentionally or recklessly disturbs an EPS while occupying a structure or place used for shelter and/or protection (Wildlife and Countryside Act 1981)1 (as amended); and

Intentionally or recklessly obstructs access to any structure or place that an EPS uses for shelter or protection (Wildlife and Countryside Act 1981) (as amended). may be guilty of an offence.

The legislation applies to the egg, larval and adult life stages of great crested newts and to bat roosts even when they are not occupied.

Actions affecting multiple animals can be construed as separate offences and therefore penalties can be applied per animal impacted.

Under certain circumstances licences can be granted by the Statutory Nature Conservation Organisation (Natural England in England) to permit actions that would otherwise be unlawful.

There are some very specific defences associated with the Conservation of Habitats and Species Regulations 2017. However, these are unlikely to apply to construction related projects. The Sections of the Regulations provide further details of these defences.

The Wildlife and Countryside Act (1981) includes defence for those aspects of the legislation that apply to an EPS. These defences are unlikely to apply to construction related projects and do not apply to those acts included in the Conservation of Habitats and Species Regulations 2010 (as amended). The Schedules of the Act provide further details of defences.

Local authorities have obligations under sections 40 and 41 of the Natural Environment and Rural Communities Act (NERC) 2006 to have regard to the purpose of conserving biodiversity in carrying out their duties. The majority of EPS are listed on Section 41 the NERC Act.

The Natural Environment and Rural Communities Act 2006 (as amended)

Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act (2006) requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers, including local and regional authorities, in implementing their duty under Section 40 of the act to have regard to the conservation of biodiversity in England when carrying out their normal functions. S41 lists 56 habitats and 943 species of principal importance. Section 42 of the NERC Act relates to Wales.

Wildlife and Countryside Act 1981 (as amended)

The level of protection afforded to species listed on the Wildlife and Countryside Act 1981 (as amended) varies considerably.

'Fully protected species', such as water vole, are afforded the highest level of protection. Any person who intentionally kills, injures, or takes 'fully protected species', or who intentionally or recklessly damages or destroys a structure or place used for shelter and/or protection, disturbs the animal whilst occupying a structure and/or place used for shelter and protection, or obstructs access to any structure and/or place used for shelter or protection is likely to have committed an offence.

Other species, such as common reptiles, are afforded less protection and for these species it may only be an offence to intentionally or recklessly kill or injure animals.

All active bird nests, eggs and young are protected from intentional destruction. Schedule 1 listed birds are also protected from intentional and reckless disturbance whilst breeding.

Schedule 9 of The Wildlife and Countryside Act lists plant species for which it is an offence for a person to plant, or otherwise cause to grow in the wild. Schedule 9 also lists animals for which it is an offence to release into the wild.

The National Planning Policy Framework

Planning policy requires new developments to take into consideration our local and national wildlife. With the objective to maintain or increase the viability of the site for wildlife. The existing proposals are considered to determine whether Habitat enhancements are offered and whether they are adequate to meet the policy requirements. Again, national, regional, county and borough policies are considered.

The National Planning Policy Framework states that the planning system should contribute to and enhance the natural and local environment by minimizing impacts on biodiversity and delivering net gains in biodiversity where possible.

Ecological habitat enhancements measures need to be over and above any mitigation measures.

## Appendix 2: Survey results forms and Photos

Site Name/Survey visit	Hever Ave		Date	20/08/2021
Start Time	19 56		Surveyor	Charlie Birch
Sunset/ Sunrise Time	20 11		Detector number	E2C01558
Finish Time	21 41		Position Relative to Structure	SE
Weather Conditions pre sunset/post sunrise	wind 0 cloud 60% rain 0		Equipment Used	Echo meter pro
Air Temperature Start	19		Air Temperature end	17
Brief summary (fill out at end of survey)	Commuting p45 activity between 2 neighbouring tree lines with intermittent Foraging inbetween			
*Shorthand: Common Pipistrelle = P45; Soprano Pipistrelle = P55 Brown/Grey long eared = LE; All Myotis = myo followed by single letter; Greater Horseshoe - GHS; Greater Noctule = Noc; Leislers Noctule = Leis; Serotine = ser				
**Shorthand - 'NS' = not seen; 'SNH' = seen not heard; 'E' = emergence; 'R' = return; 'F' = foraging; 'C' = commuting.				
Time	Species*	Activity**	Notes including flight direction (if seen)	
20:17	p45	HNS		
20:21	p45	HNS		
20:25	p45	C	S Tree line - neighbouring bunch (NE)	
20:29	p45	HNS		
20:31	p45	HNS		
20:31	p45	F	Above S tree line/ garden	
20:32	p45	C	3 p45's from S tree line to NE	
20:33	p45	C	NE tree line - S	
20:33	p45	F	Intermittent continuation for 24 minutes between tree lines/ over garden	
21:00	p55	HNS		
21:06	p45	HNS		
21:14	p45	HNS		

Site Name/Survey visit	Hever Ave	Date	20/08/2021
Start Time	19 56	Surveyor	Jack Clark
Sunset/ Sunrise Time	20 11	Detector number	E2B00251
Finish Time	21 41	Position Relative to Structure	NW Corner
Weather Conditions pre sunset/post sunrise	wind 0 cloud 60% rain 0	Equipment Used	Echo meter touch
Air Temperature Start	19	Air Temperature end	17
Brief summary (fill out at end of survey)	up and down lighters slight reduced visibility, tree line behind property reducing night vision further		
*Shorthand: Common Pipistrelle = P45; Soprano Pipistrelle = P55 Brown/Grey long eared = LE; All Myotis = myo followed by single letter; Greater Horseshoe - GHS; Greater Noctule = Noc; Leislars Noctule = Leis; Serotine = ser			
**Shorthand - 'NS' = not seen; 'SNH' = seen not heard; 'E' = emergence; 'R' = return; 'F' = foraging; 'C' = commuting.			
Time	Species*	Activity**	Notes including flight direction (if seen)
20:29	p45	c	HNS 1 pass
20:31	p45	c	HNS 1 pass
20:41	p45	c	HNS 1 pass
20:59	p45	c	HNS 1 pass very distant
21:11	p45	c	HNS 1 pass
21:20	p45	c	HNS 1 pass very distant
21:23	p45	c	HNS 5 passes distant
21:27	p45	c	HNS 1 pass
21:30	p45	c	HNS 1 pass
21:40	p45	c	HNS 1 pass

