



**No.111a FOXLEY LANE,
PURLEY, SURREY, CR8 3HQ
SUPPLEMENTARY BAT ACTIVITY SURVEY REPORT**



**October 2021
Barbarella Studio**

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Contents Record

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1. INTRODUCTION

- 1.1 Barbarella Studio was commissioned The Ash Partnership UK Ltd. to provide bat activity surveys at No.111a Foxley Lane in Purley, Surrey, CR8 3HQ, hereafter referred to as the 'Site'.
- 1.2 This Site consists of a single residential house set within a hardstanding area, with flowerbeds to the front and an extensive rear garden, as shown on *Existing Site Plan* Dwg. 4. The rear garden is mostly composed of mown lawn but has a former outdoor swimming pool and an area of fruit trees to the south.
- 1.3 This Report establishes the seeks to confirm whether there is a bat roost(s) associated with the House within this property and, if so, would be set out appropriate mitigation and enhancement measures should the property be developed.

2. METHODOLOGY

Building

- 2.1 The perimeter of the building was re-examined, particularly in the vicinity of the potential roost features. Evidence of bat activity can be indicated by the presence of adherent droppings on walls, window sills and glazing, underlying hardstanding and vegetation surfaces.

Bat Activity Surveys

- 2.2 As the building was assessed as having a Moderate Roost Suitability, it needs to be subjected to two activity surveys – one dusk emergence survey and a separate dawn re-entry survey (BCT, 2016, Table 7.3).
- 2.3 As a result, the following three surveys were undertaken:
- Dusk Emergence Survey on 1st August 2022, sunset at 20:48 hours; and
 - Pre-Dawn Re-Entry Survey on 16th August 2022, sunrise at 05:48 hours.
- 2.4 Both surveys consisted of one surveyor located in the front garden, i.e. north of the House and one in the rear garden, i.e. immediately south of the House.
- 2.5 All surveyors had hand-held Echo Meter Touch 2 Pro detectors and recorded any bat movements in accordance with S&H (seen and heard), SNH (seen and not heard) and HNS (heard and not seen). The species, number of bats and direction of movement were all recorded.

3. RESULTS

Building Survey

- 3.1 No droppings were noted on the built structure or on the underlying substrates on either of the two surveys.

Bat Activity Surveys

- 3.2 The results from the two activity surveys are presented in Tables 1 to 2.

Dusk Emergence Survey on 1st August 2022

- 3.3 The weather conditions were as follows:

- Temperature 22°C (start) and 21°C (finish);
- c.100% cloud cover;
- 8 mph from SSW and occasionally gusty;
- 68% humidity; and
- 1017 pHa pressure.

- 3.4 Potential food items noted during survey include numerous midges (Chironomidae), a few micro-moths (Lepidoptera) and noticeable concentrations of flying greenfly scattering from the cluster of lime trees.

- 3.5 Two species were recorded, these being Common Pipistrelle *Pipistrellus pipistrellus* and Noctule *Nyctalus noctua*. The latter was only recorded as a single late-flying individual at 30 minutes past sunset, so was not considered further.

- 3.6 No signs of bat emergence from the House were noted.

- 3.7 Up to two Common Pipistrelle individual were observed during the survey, and observations began at just 25 minutes past sunset, i.e. within the typical emergence period of this species. Activity levels kept going up to 76 minutes past sunset.

- 3.8 The two earliest observations at 21:13 and 21:15 appears to be associated with emerging bats and these appeared to be flying from the adjacent property No. 113.

Pre-Dawn Re-Entry Survey on 16th August 2022

- 3.9 The weather conditions were as follows:

- Temperature 17°C (start) and 17°C (finish);
- 90% cloud cover;
- 2mph from SE;
- 90% humidity (damp after slight rain previous evening and early morning; and
- 1006 pHa pressure.

- 3.10 Potential food items noted during survey include numerous midges (Chironomidae),

- 3.11 As previously occurred, two species were recorded during survey, these being Common Pipistrelle and Noctule.
- 3.12 No signs of bat re-entry into the House were noted.
- 3.13 Only a single Noctule was heard but this was noticeably at 4 minutes prior to sunrise, indicating that this must be associated with a roost in very close proximity to the Site. However, the location of this roost is not known.
- 3.14 Common Pipistrelle activity was noted from 52 minutes pre-sunrise until 10 minutes pre-sunrise, and most appeared to be associated with the adjacent No.113 property and its rear garden. The recordings up to 10 minutes prior to sunrise again suggest another nearby roost to the Site and the proximity of the flight activity to the house in the No.113 property suggests this is the likely location for the Common Pipistrelle roost.

4. EVALUATION

Legal Status

- 4.1 **All species of bat are protected in the UK on Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended by the Countryside and Rights of Way Act, 2000), and on Schedule 2 of the Conservation (Natural Habitats &c.) Regulations, 1994. The latter further implements European legislation protecting bats. Bats are also protected from cruel ill-treatment by the Wild Mammals (Protection) Act, 1996.**
- 4.2 **Bats are highly protected species, the protection being conferred on a population and their roosting habitat. Live bats do not need to be present to confer protection on the roost habitat and confirmation of a bat roost can be made on the basis of relatively fresh droppings and/or combined with roost potential.**

Evidence of Roosting Bats

- 4.3 No evidence of roosting bats has been detected either inside the roof void, or on the exterior of the House.
- 4.4 There are Moderate Potential features of the building exterior that could allow bats to enter the House either (i) beneath the ridge tiles via the ventilator tiles or (ii) exploit the gap along the eaves. If the ventilator tiles do not have screens fitted, then bats could potentially access the space between the ridge tiles and the underlying roofing membrane. These would be suitable for external crevice-dwelling species such as pipistrelle.
- 4.4 The two surveys were undertaken in accordance with BCT (2016) guidance, neither found evidence of roosting activity associated with the House but, interestingly, did identify potential Common Pipistrelle *Pipistrellus pipistrellus* roosting associated with the adjacent No.113 property.
- 4.5 For these reasons, it is concluded that there are no roosting bats at the No.111a property, and the proposed refurbishment of this property can proceed without further consideration of these species.
- 4.6 This refurbishment is, however, subject to no intervening period without occupation occurring, i.e. when vandalism/lack of maintenance could lead to additional potential roosting features appearing.
- 4.7 Further mitigation proposals are set out in the *Combined PEA & Arboricultural Assessment Report* (TAP, October 2022).

TABLES

TABLE 1 - POST-SUNSET BAT EMERGENCE SURVEY ON 1ST AUGUST 2022

TIME	TIME BEFORE SUNSET (Mins)	NOCTULE <i>Nyctalus noctua</i>		COMMON PIPISTRELLE <i>Pipistrellus pipistrellus</i>	
		Front Garden	Rear Garden	Front Garden	Rear Garden
		Surveyor 1	Surveyor 2	Surveyor 1	Surveyor 2
20:15	Start (-33)	-	-	-	-
20:48	0 (Sunset)	-	-	-	-
20:58	+10	-	-	-	-
21:08	+20	-	-	-	-
21:13	+25	-	-	2 x S&H - Flying as a pair. Possibly emerged from property No.113 , flew east across the northern frontage of the House then exited into front garden to the east.	-
21:15	+27	-	-	1 x S&H - Appeared to have emerged from property No. 113 and flew east across frontage of House into front garden of property to east.	1 x HNS - 1 pass
21:16	+28	-	-	-	1 x HNS - 1 pass
21:17	+29	-	-	1 x S&H - flew west towards property No.113 at approximately 4m height, then disappeared.	-
21:18	+30	1 x HNS	-	-	1 x HNS - 1 pass
21:24	+36	-	-	1 x S&H - flew overhead towards Property No.113 to the west	-
21:28	+40	-	-	-	-
21:39	+51	-	-	1 x S&H - flew north along eastern boundary into trees along Foxley Lane.	-
21:40	+52	-	-	1 x S&H - flew north along western boundary into trees along Foxley Lane.	-
21:41	+53	-	-	-	1 x S&H - flew east from property No.113, then south-east into rear garden before disappearing.
21:44	+56	-	-	1 x S&H - flew east to west over front garden at approximately 6m height.	-
21:45	+57	-	-	1 x HNS - 2 passes	-
21:51	+63	-	-	1 x HNS	-
22:02	+74	-	-	1 x HNS	1 x HNS - 1 pass
22:04	+76	-	-	1 x HNS	-
22:18	+90	-	-	-	-

TABLE 2 - PRE-DAWN BAT RE-ENTRY SURVEY ON 16th AUGUST 2022

TIME	TIME BEFORE SUNRISE (Mins)	NOCTULE <i>Nyctalus noctua</i>		COMMON PIPISTRELLE <i>Pipistrellus pipistrellus</i>	
		Front Garden	Rear Garden	Front Garden	Rear Garden
		Surveyor 1	Surveyor 2	Surveyor 1	Surveyor 2
04:33	Start (-75)	-	-	-	-
04:56	-52	-	-	-	1 x S&H - flew NW overhead towards property No.113.
05:04	-44	-	-	-	1 x HNS - 1 pass
05:10	-38	-	-	1 x HNS - 1 pass	-
05:17	-31	-	-	-	1 x HNS - 1 pass
05:24	-24	-	-	-	1 x S&H - flew SE from property No.113 around conifer tree beside House, then SW over boundary into rear garden of No.113.
05:33	-15	-	-	-	1 x HNS - probably in rear garden of Site - 2 passes
05:36	-12	-	-	-	1 x HNS - 1 pass
05:38	-10	-	-	-	1 x HNS - 1 pass
05:44	-4	1 x HNS - 1 pass	-	-	-
05:48	Sunrise (0)	-	-	-	-
06:18	Stop (-305)	-	-	-	-

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