

**Chilterns,
Thames Drive,
Reading,
Berks,
RG10 9TP**

Phase 1 Daytime Bat Assessment

Dr.Jonty Denton FRES FLS MCIEEM CEcol

17th June 2022



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Summary

Consultant Chartered Ecologist Dr.Jonty Denton FRES FLS MCIEEM CEcol was commissioned by the owners to undertake a Daytime Bat Assessment (Phase 1) of Chilterns, Thames Drive, Reading, Berks, RG10 9TP

The Daytime Bat Assessment / Phase 1 Bat Survey was undertaken in accordance with the Bat Conservation Trust Guidelines (Collins, 2016) by Dr.Jonty Denton on 17th June 2022.

The house has numerous dormers with hang-tile facings with gaps into the undertile spaces. There are also enclosed voids which are not accessible.. Therefore, the property has high potential for bats and **a Phase 2 bat survey is recommended.**

INTRODUCTION

Background

I was contracted by the owners to undertake a Phase 1 Daytime Bat assessment at Chilterns, Thames Drive, Reading, Berks, RG10 9TP. This report presents the findings of the survey undertaken on the 17th June 2022; which is aimed at assessing the suitability of the house and grounds to support bats.

Site Setting and Description

Chilterns is a detached two-storey dwelling situated on the south bank of the Thames east of Reading. The oldest part of the house dates to the 1940s with numerous extensions.

The dwelling is situated along a private drive with detached properties with large mature gardens. The land to the east and south is open floodplain pasture. There are numerous large trees in the gardens. The area provides good foraging habitat for many bat species.

METHODS

Phase 1 Bat Survey Methods

The Daytime Bat Assessment / Phase 1 Bat Survey was undertaken in accordance with the Bat Conservation Trust Guidelines (Collins, 2016).

The Phase 1 Bat Survey was carried out on the 17th June 2022, and comprised of a daytime walkover of the site, internally and externally, to record evidence of any protected bat species.

Details of the survey methods are given below.

The property was investigated externally to identify potential bat access/egress locations and roosting areas such as gaps or holes between wooden cladding, roof tiles, fascias and soffits and to record direct evidence of bat presence such as droppings and urine staining. This was followed by a detailed investigation of all accessible internal spaces to record evidence of bat roosting activity such as droppings, feeding remains, live animals, corpses, urine staining and fur staining. The building was assessed as to its suitability for supporting roosting bats. The survey conformed to current Bat Conservation Trust guidelines (Bat Conservation, (2016) *Bat surveys for professional ecologists: Good practice guidelines* 3rd edition).

The details of the assessment criteria used to determine the ecological value of on-site attributes is outlined below. During the Phase 1 survey the assessment criteria are based on the potential for the site to support the species considered. However, in many cases Phase 2 surveys will be required to confirm presence /absence of any bat species and hence the importance of a population at the site, therefore the assessment of value should be considered as provisional.

Where possible, a provisional assessment of potential will be made although this may well require Phase 2 surveys to confirm status.

High Potential- High potential buildings are those that have features highly suitable for use by roosting bats, including gaps around soffits, hanging tiles, extensive roof spaces etc. High potential buildings are often, but not always, buildings of more historic construction. Further Phase 2 surveys will be required to confirm the presence/absence of bats.

Medium Potential- Medium potential buildings have a moderate number of features that may be utilised by bats for roosting, these may include loose fascias, roof spaces etc. Further Phase 2 surveys are likely to be required to confirm the presence/absence of bats.

Low Potential- Low potential buildings are those that provide limited bat roosting potential although some features that may be utilised by bats may be present. Further Phase 2 surveys are likely to be required to confirm the presence/absence of bats.

No/Negligible Potential – These are buildings that are extremely unlikely to support roosting bats due to the absence of suitable features. Further Phase 2 surveys are unlikely to be required for buildings with negligible potential.

Phase 1 Survey Equipment

During the Phase 1 survey the surveyor was equipped with 10 x 42 close focus binoculars and a high-powered torch.

RESULTS

Bats are fully protected under the Wildlife and Countryside Act 1981, as amended, and also receive additional protection via The Conservation of Species and Habitats Regulations (2010) from intentional killing and injury and from intentional damage, destruction or obstruction of access to a place of shelter. It is an offence to kill or injure a bat or interfere with any roosting or resting site. A bat roost is interpreted as "any structure or place used for shelter or protection" whether or not bats are present at the time or not. Barbastelle Bats, Bechstein's Bat, Noctule, Soprano Pipistrelle, Brown Long-eared Bat, Greater Horseshoe Bat and Lesser Horseshoe Bat are also UK BAP Priority Species and SPI.

According to the DEFRA's MagicMap, a bat license has been issued for a property 830m to the south.

The house was subject to a full Phase 1 bat survey outlined below.

Building Assessment

The roof has three single pitched dormers (see figures 1-4) with potential openings into the under-tile spaces. The larger dormer on the north-west elevation with a sloping roof has numerous gaps in the hang-tile facings on the sides (See figure 2).



Figure 2. Northern and western elevations looking north-east. Red arrows indicate potential access points into under-tile spaces.



Figure 3. Northern elevation looking east. Red arrows indicate potential access points into under-tile spaces.



Figure 4. Southern elevations looking north-west. Red arrows indicate potential access points into under-tile spaces.

Internal Assessment

The loft of the house is accessible via a hatch on the landing. It is boarded out and has been used for storage. The roof is lined with a thick layer of rockwool insulation. There were a few mouse droppings and a trapped corpse of a wood mouse *Apodemus* spp.

There was no evidence of bat activity.

There are enclosed voids which are not accessible in the dormers and some under-eaves sections.

Garage and workshops

The house is flanked to the south by an elongate single storey garage and workshop with a pitched roof of clay tiles.

EVALUATION, IMPACTS AND RECOMMENDATIONS

Phase 1 Bat Survey

The house has numerous dormers with hang-tile facings with gaps into the undertile spaces. There are also enclosed voids which are not accessible.. Therefore, the property has high potential for bats and **a Phase 2 bat survey is recommended.**

A programme of dusk emergence surveys is recommended to confirm whether bats are still utilising the property. These can be carried out in suitable weather between May and the end of September.

This would entail surrounding the structure with surveyors such that all potential entrance/exit points are covered. The structure is then watched from either 15 minutes before sunset to 2 hours after or 2 hours before dawn to sunrise.

All emerging or re-entering bats are recorded along with their flight path, their species and the time of flight.

An emergence survey would identify:

- Whether bats are present in a structure, the species and number involved
- Entrance and exit points for the roost
- The type of roost
- Actions needed to be taken to ensure legal compliance

References & Bibliography

Collins, J. (ed.)(2016) *Bat Surveys for Professional Ecologists: Good Practise Guidelines* (3rd edn). The Bat Conservation Trust, London.

Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment, London.

JNCC (2010) *Handbook for Phase 1 Habitat Survey: A technique for environmental audit*. JNCC, Peterborough

PHASE 2 BAT SURVEY

August 2022

The survey was conducted at dusk on the 7th & 21st July and 15th August 2022.

Surveyors were stationed to the east viewing the eastern elevations and garage to the north viewing the northern elevations and to the west viewing the western elevations and garage and north and west faces of main dormer. Canon XA40 HD digital camcorders with IR illumination were also employed at each station (see figure 1). Survey commenced 30 minutes before sunset and continued until 90 minutes after sundown. *EchotouchPro*, *Echotouch*, and *Batbox Duet* detectors were employed to monitor and record bat activity.

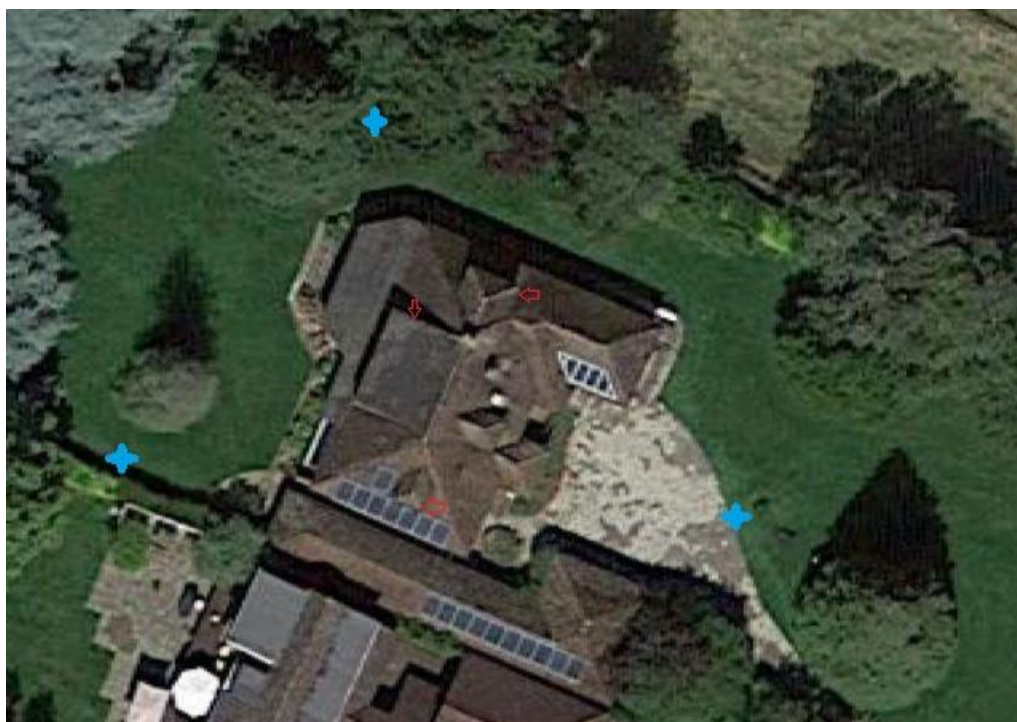


Figure 1. Positions of viewers, cameras (blue crosses).

Red arrows indicate emergence points by soprano pipistrelles

Aerial photograph courtesy of Google.

RESULTS

The nights were all suitable for bats being dry and mild with a minimum temperature of 15°C.

SPECIES ENCOUNTERED

Soprano Pipistrelle

Emerged on all three surveys with singleton on 7th July and two from same points on 21st July and 15th August.

Common Pipistrelle

Brief pass to west of house on 7th July.

Serotine

Single passes on 21st July and 15th August.

CONCLUSIONS

The house supports multiple day roosts of soprano pipistrelles, the level of mitigation must reflect this. As such a like for like mitigation strategy, alongside timings restrictions, must be made.

LIGHTING

As a number of bats were observed commuting across the site, lighting must also be considered as part of the proposal. Lighting can be detrimental to roosting, foraging and commuting bats and many bats.

Any new lighting around the building must be focused away from the tree lines to the rear and hooded or baffled to ensure minimal light spillage. Lamps of greater than 2000 lumens (150 W) must not be installed.

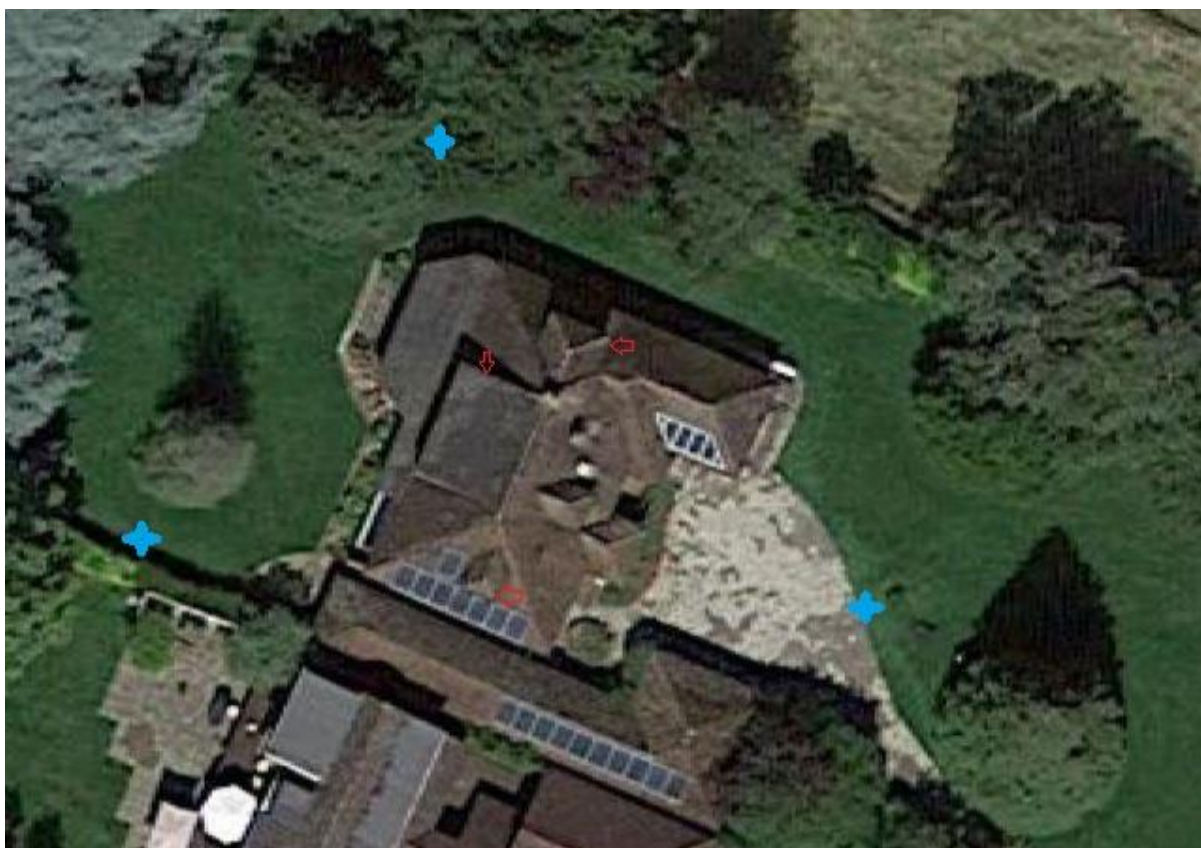


Figure 1. Positions of viewers, cameras (blue crosses).

Red arrows indicate emergence points by soprano pipistrelles

Aerial photograph courtesy of Google.

APPENDIX 1. FIELD DATA

Project		Start time	20.45	Finish	22.50	Temperature	18 C at start 15 C at finish
7 th July 2022	JD RD AS			sunset	21.16	Weather 0% cloud beaufort 0-1	
Bat passes heard							
Station no.	Start time		No.	passes	comments		
E, N	21.33	Soprano pip.	1	1	Flew from south to east of house		
E, N	21.35-40	Soprano pip.	2	2	Foraging over lawn to east of house		
W	21.46	Soprano pip.	1	1	Emerg ed from west dormer flew north		
E, N	21.43-end of survey	Soprano pip.	3-5	100+	3-5 foraging over north and east where large midge swarms had gathered.		
W	22.11	Common pipistrelle	1	1	HNS		
E, N	22.33	Noctule	1	1	HNS		

Project		Start time	20.38	Finish	22.38	Temperature	17 C at start 15.5 C at finish
21 st July 2022	JD RD AS	21.7.22		sunset	21.07	Weather 20% cloud beaufort 0	
Bat passes heard							
Station no.	Start time		No.	passes	comments		
E, N	21.24	Soprano pip.	1	6+	Foraging over lawn to east of house		
N	21.27	Soprano pip.	1	1	Emerg ed from east face of north dormer		
N	21.49	Soprano pip.	1	1	Emerg ed from west face of east dormer		
E, N	21.49- end of survey	Soprano pip.	3	20+	3 foraging to south and east of house		
E, N	21.57	serotine	1	1	Brief pass to north		

Project	JD RD LD	Start time	19.50	Finish	22.05	Temperature	23 C at start 19 C at finish
15 th August 2022				sunset	20.25	Weather 90% cloud beaufort 0	
Bat passes heard							
Station no.	Start time		No.	passes	comments		
W	20.37	Soprano pip.	1	1	Flew from house to south over garage and off to northwest.		

E, N	20.41-43	Soprano pip.	1	6+	Foraging over lawn to east of house
N	20.44	Soprano pip.	1	1	Emerged from west face of east dormer and chased after passing Soprano headed north
N	20.47	Soprano pip.	1	1	Emerged from east face of north dormer
E, N	20.46-50	Soprano pip.	3	20+	3 foraging around south and east of house with lots social calls
W	21.51	Soprano pip.	1	2	Foraging over lawn to west of house
E, N	20.52	serotine	1	1	Strong low pass to east
E, N	20.54-21.04	Soprano pip.	2	10+	foraging around south and east of house with lots social calls