

Report by - KJF Consultancy Ltd

Title - Bat Survey Report

Site address - 27 Orchard Avenue, Bishopstoke, Eastleigh SO50 8HN

Purpose - Advise the Local Planning Authority (LPA) of the findings and conclusion of presence/absence surveys (dusk emergence and dawn entry surveys)

Proposal - Remove tiles on side elevations and side dormers and reclad and alterations to bathroom window on first floor side elevation

LPA - Eastleigh Borough Council

LPA Reference - Not known at the time of this report

Architect - Not known at the time of this report

Client - Mr Martin Warne

Author - Karl Forkasiewicz MCIOB, CEnv, ACIEEM



Membership No. 1494354



Registration No. 4482



Membership No. 6484

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Quality Assurance

Report title	Bat Survey Report
Version	1
Report ref	BSR.27.OA.B.E
Report checked by	Jan Forkasiewicz BA (Hons) 
Date produced	08.05.22

Distribution List

Client	Mr Martin Warne
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Previous reports

Report title	Preliminary Bat Roost Assessment Report
Version	1
Report ref	PBRA.27.OA.B.E
Date produced	09.07.21

Statement for LPA registration

This report follows the Preliminary Bat Roost Assessment report by KJF Consultancy Ltd dated 09.07.21. The report was produced to advise the LPA of any further surveys that needed to be carried out before planning permission could be granted for planning application H/21/90607 (withdrawn). As recommended within the report, presence/absence surveys have been carried out; a dusk emergence survey was carried out 30.04.22 and a dawn entry survey was carried out 01.05.22. The surveys were carried out in accordance with [good practice guidelines](#)¹; no bats emerged or entered. No further surveys need to be carried out.

If planning permission is granted, a condition should be attached to the decision notice requiring compliance with the recommendations given within this report.

[1] [Good practice guidelines](#) - Bat Conservation Trust. Bat Surveys for Professional Ecologists. Good Practice Guidelines. 3rd Edition (2016). ISBN-13 978-1-872745-96-1).

Table of contents:

1.	Summary, findings and conclusion	Page 1
2.	Limitations	Page 2
3.	Recommendations	Page 2

References.

Appendix 1. Preliminary Bat Roost Assessment report.

Appendix 2. Author's credentials.

Appendix 3. Details of the presence/absence surveys.

1. Summary, findings and conclusion

1.1 This report follows the Preliminary Bat Roost Assessment report by KJF Consultancy Ltd dated 09.07.21; the report is attached at appendix 1. The report was produced to advise the LPA of any further surveys that needed to be carried out before planning permission could be granted for planning application H/21/90607 (withdrawn). As recommended within the report, presence/absence surveys have been carried out. The surveys were carried out by Karl Forkasiewicz; his findings and conclusion are below and his details are attached at appendix 2.

1.1.1 To comply with employment law, I carry out presence/absence surveys (dusk emergence/dawn entry surveys) alone. While carrying out these surveys, it is important to recognise a surveyor's Field of View (FoV) is very limited and not 'fixed;' bats emerging/entering can be missed and false positives can be recorded. In contrast, the FoV/recording area of a camcorder with a wide angle lens is far greater and constantly captures 2 sides of a building/roof as the FoV/recording area it is permanently 'fixed' during a survey. Therefore, to ensure bats emerging/entering are not missed, and to avoid recording a false positive, I record my surveys using a Canon XA40² Compact Professional UHD 4K Camcorder that has built in infrared capability and a 29.3 - 601mm wide angle lens. To enhance the infrared capability, I place a separate infrared LED light on the camcorder 'hot shoe;' when dark, I look at the 3.0-inch LCD camcorder screen. At the start and end of each survey, I record the ambient conditions (°C, relative humidity and wind speed) using a metre and take a photograph of the metre screen; any periods of rain are recorded. To record calls, I use an iPad with an Echo Meter Touch 2 Pro bat detector and record observations on a Dictaphone. Essentially, I do everything to ensure any bats emerging/entering are not missed and ensure the conclusion of my surveys provides a degree of certainty.

1.1.2 I carried out a dusk emergence survey 30.04.22 and a dawn entry survey 01.05.22; no bats emerged or entered. The surveys were carried out in accordance with good practice guidelines; any limitations on the surveys are discussed at 2. My recommendations are given at 3. Relevant details of the surveys and the calls recorded are attached at appendix 3; 4 common species of bats were recorded that are found widespread throughout the UK. No further surveys need to be carried out.

1.1.3 Reasonable survey effort has been made with regard to bats and the proposed development; a new planning application has been submitted. The Preliminary Bat Roost Assessment report and the dusk emergence and dawn entry surveys have enabled me to predict any adverse impacts on bats through the proposed development with a degree of certainty.

1.1.4 If planning permission is granted, there will be no foreseeable adverse impacts on a bat roost through implement the planning permission. However, it must be understood that given the mobile/inquisitive nature of bats, they can roost on a building after surveys are carried out. Therefore, I have recommended the action that must be taken in the unlikely event of discovering a bat when works are carried out. Also, external lighting can adversely impact foraging bats; therefore, I have recommended any new external lighting on the dwelling must be suitable for bats.

[2] <https://store.canon.co.uk/canon-xa40-camcorder/3666C006>

2. Limitations

- 2.1 It is acknowledged that the dusk emergence survey was not strictly carried out during the optimal survey period (1st May to 31st August). However, the survey was carried out 30th April; only a few hours outside the optimal survey period. Therefore, not carrying out the survey 1st May is not considered relevant. The differing activities of bats at different times of the year are also acknowledged.

3. Recommendations

1. This report should be forwarded to the LPA.
2. If a bat is discovered at any time during works (considered unlikely); the work must stop immediately and KJF Consultancy Ltd must be contacted for advice on 07763-121432 or the Bat Conservation National Bat Helpline must be contacted on 0345 1300 228 (available between 9:30am to 4.30pm Monday to Friday) for advice. Natural England (the Statutory Nature Conservation Organisation - SNCO) can also be contacted on 020-80261089 (between 9:00am to 4.30pm Monday to Friday) for advice.
3. Any new external lighting must be suitable for bats:-
 - LEDs.
 - Dimmable lights or lights with motion sensors (PIR) on short timers.
 - Have a 0% upward light ratio.
 - Recessed lights/soffit lights.
4. If planning permission is granted but the works have not commenced by May 2023; further presence/absence surveys (a dusk emergence and dawn entry survey) must be carried out and a bat survey report must be produced that contains the findings and conclusion of the surveys, and recommendations.

References

A Field Guide to British Bats by Frank Greenaway and A. M. Hutson (Bruce Coleman Books, Middlesex - 1990).

Bat Conservation Trust (www.bats.org.uk).

Bat Conservation Trust. Bat Surveys for Professional Ecologists. Good Practice Guidelines. 3rd Edition (2016). ISBN-13 978-1-872745-96-1.

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

British Bat Calls: A Guide to Species Identification. Jon Russ. ISBN-13: 9781907807251. 2012.

BS 42020: 2013 Biodiversity - Code of practice for planning and development.

CIEEM (2013) Competencies for Species Survey: Bats.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management.

Environmental Law, 6th edition. Edited by Stuart Bell and Donald McGillivray. Oxford University Press. 2006. ISBN 0199260567.

Google Earth.

Government Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System.

Guidance Note 08/18, Bats and artificial lighting in the UK. Bat Conservation Trust and Institution of Lighting Professionals. 2018.

A Review of the Population and Conservation Status of British Mammals. Natural England, Peterborough. 2018.

Natural England Standing Advice regarding Bats (<https://www.gov.uk/guidance/bats-protection-surveys-and-licences>)

University of Bristol, School of Biological Sciences (www.bio.bris.ac.uk).

Appendix 1. Preliminary Bat Roost Assessment report.

Report by - KJF Consultancy Ltd

Title - Preliminary Bat Roost Assessment Report

Site address - 27 Orchard Avenue, Bishopstoke, Eastleigh SO50 8HN

Purpose - Advise the Local Planning Authority (LPA) of any further surveys that need to be carried out before planning permission can be granted

Proposal - Remove tiles on side elevations and side dormers and reclad and alterations to bathroom window on first floor side elevation

LPA - Eastleigh Borough Council

LPA Reference - H/21/90607

Architect - Jem Musselwhite

Client - Mr Martin Warne

Author - Karl Forkasiewicz MCIQB, CEnv, ACIEEM



Membership No. 1494354



Registration No. 4482



Membership No. 6484

Evidence of bat activity found	No
Bats discovered	No
Further surveys required	*two presence/absence surveys

* Presence/absence surveys; these surveys are dusk emergence surveys (to look for bats emerging from a building) and dawn entry surveys (to look for bats entering a building).

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Quality Assurance

Report title	Preliminary Bat Roost Assessment Report
Version	1
Report ref	PBRA.27.OA.B.E
Report checked by	Jan Forkasiewicz BA (Hons) 
Date produced	09.07.21

Distribution List

Client	Mr Martin Warne
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Previous reports (not applicable)

Statement for LPA registration

Before planning permission can be granted, to comply with Part IV Conservation of Species Protected by Law, Par. 99, of [Government Circular 06/2005^{\[1\]}](#), and [good practice guidelines^{\[2\]}](#), two presence/absence surveys (dusk emergence or dawn entry surveys) must be carried out; a survey is required on each side elevation. The further surveys are required to determine the presence/absence of a bat roost and to ensure reasonable survey effort will be carried out with regard to bats and the proposed development.

On completion of the surveys, a Bat Survey Report will need to be produced that contains the findings and result of the surveys and recommendations. The report will need to be submitted to the LPA as supporting information for the planning application/proposed development.

[1] [Government Circular 06/2005](#): Biodiversity and Geological Conservation - Statutory Obligations and their impact within the Planning System.

[2] [Good practice guidelines](#) - Bat Conservation Trust. Bat Surveys for Professional Ecologists. Good Practice Guidelines. 3rd Edition (2016). ISBN-13 978-1-872745-96-1).

Summary

This report has been produced to advise the LPA of any further surveys that need to be carried out before planning permission can be granted for a proposed development at 27 Orchard Avenue, Bishopstoke, Eastleigh SO50 8HN.

The proposed development is:-

Remove tiles on side elevations and side dormers and reclad and alterations to bathroom window on first floor side elevation.

A Preliminary Bat Roost Assessment (PBRA) has been carried out, in accordance with good practice guidelines. Concrete hanging tiles are on the sides of the 2 dormer windows that are above the front elevation and on both side elevations. Gaps are present below some of the tiles; gaps are also present between uPVC fascia boards on the side elevations and tiles.

No evidence was found of bat activity; however, this does not mean a bat roost is not present. The gaps are potential entry/exit points for bats and Potential Roost Features (PRFs; features where bats roost), particularly for crevice dwelling bats. Having looked at the surrounding landscape on Google Earth, negligible habitats for foraging bats are within 25m of the dwelling. In my opinion, there is only a 'low likelihood' of a bat roost being present under a hanging tile. Therefore, only one presence/absence survey (a dusk emergence or dawn entry survey) must be carried out on the tiles on each side elevation; the tiles on the relevant sides of the dormer windows can be surveyed at the same time. The surveys must be carried out during the optimal survey period and under optimal conditions.

If a bat emerges or enters (depending on which surveys are carried out), in accordance with the good practice guidelines, two further surveys will need to be carried, which must be spaced at least two-weeks apart - one of the surveys must be a dawn entry survey.

On completion of the survey(s), a Bat Survey Report will need to be produced that contains the findings and result of the survey(s) and recommendations. The report will need to be submitted to the LPA as supporting information for the planning application/proposed development.

Table of contents:

1.	Introduction	Page 1
2.	Survey findings, result and discussion	Page 2
3.	Author's credentials	Page 3
4.	Limitations	Page 3
5.	Recommendations	Page 4

References.

Appendix 1. Relevant photographs.

Appendix 2. Information regarding bats and the law.

1. Introduction

1.1 Site address and grid reference

1.1.1 27 Orchard Avenue, Bishopstoke, Eastleigh SO50 8HN. The grid reference at the centre of the roof is SU 47977 18337.

1.2 Instruction received

1.2.1 I was instructed to a) inspect hanging tiles for evidence of bat activity on the sides of the dormer windows at the frontage and on the side elevations, and b) provide a report.

1.2.2 To enable me to produce the report, I carried out a PBRA, in accordance with good practice guidelines, and from ground level only, with the use of a torch and binoculars.

1.2.3 A PBRA is a detailed assessment of the exterior and interior of a building, carefully looking for signs of bat activity and bats, potential entry/exit points for bats, and PRFs, as summarised below:-

External assessment looking for:-

- External evidence of bat activity and bats; and
- Potential entry/exit points for bats and PRFs.

Internal assessment looking for:-

- Roosting bats/internal evidence of bat activity.

1.2.4 My report is produced to advise the LPA of any further surveys that need to be carried out before planning permission can be granted for the planning allocation/proposed development described below.

1.3 Planning application/proposed development

1.3.1 The planning application reference is H/21/90607; the proposed development is "*Remove tiles on side elevations and side dormers and reclad and alterations to bathroom window on first floor side elevation.*" The LPA is Eastleigh Borough Council.

1.3.2 I was not provided with any plans; however, the client discussed the proposed development with me during my visit made the afternoon of 03.07.21.

2. Survey findings, result and discussion

- 2.1 The dwelling is a detached bungalow with a 'Dutch gable/truncated hip roof' that has concrete hip/ridge tiles and concrete interlocking roof tiles, uPVC fascia and soffit boards. Flat-roofed dormer windows are above the front and rear elevations that have concrete hanging tiles at the sides; concrete hanging tiles are also on both side elevations. There is one narrow roof space that is approx. 800mm in height that has a bituminous roofing membrane.
- 2.2 No evidence was found of bat activity (droppings/feeding remains/staining) and a bat was not discovered; however, this does not mean a bat roost is not present. Potential entry/exit points for bats and PRFs are present. These are gaps below some of the tiles on the dormers and the side elevations, and gaps between uPVC fascia boards on the side elevations and tiles.
- 2.3 Bats forage for insects above grassland, hedges/hedgerows, trees and waterways (foraging habitats). Having been on site, and viewed Google Earth; negligible habitats for foraging bats are within 25m of the dwelling. Bats will not forage close to the dwelling.
- 2.4 Relevant photographs are attached at appendix 1.
- 2.5 Buildings can contain bat roosts for void dwelling and crevice dwelling bats. Void dwelling bats hang from timbers within roof voids/roof spaces and roost in the corners where timbers meet. Crevice dwelling bats crawl into tight spaces (e.g. gaps under tiles) and roost there.
- 2.6 In my opinion, there is only a 'low likelihood' of a bat roost being present under a hanging tile. Therefore, only one presence/absence survey (dusk emergence or dawn entry survey) must be carried out on the tiles on each side elevation; the tiles on the relevant sides of the dormer windows can be surveyed at the same time. The further surveys are required to determine the presence/absence of a bat roost and to ensure reasonable survey effort will be carried out with regard to bats and the proposed development. The survey must be carried out during the optimal survey period (May to August) and during optimal conditions ($\geq 10^{\circ}\text{C}$, no rain or strong wind).
- 2.7 When providing bats survey reports, it is good practice to include information regarding bats and the law; this information is attached at appendix 2.
- 2.8 My credentials are given below; my recommendations are given at 5.

3. Author's credentials

3.1 Professional affiliations

- Professional Member of The Chartered Institute of Building (MCIOB);
- Chartered Environmentalist (CEnv);
- Professional Member of The Chartered Institute of Ecology and Environmental Management (ACIEEM);
- Licenced to Disturb and Handle Bats (Bat Survey Class Licence CL18); and
- Member of the Bat Conservation Trust.

3.2 Relevant experience

- 3.2.1 I have 9 years' experience as a Local Authority Woodland Conservation Officer. As a Woodland Conservation Officer, I carried out presence/absence surveys (dusk emergence/dawn entry surveys) on trees within woodlands and produced Woodland Management Plans that contained recommendations regarding bats.
- 3.2.2 I have been an Ecological Consultant since 2011. During my time as a Consultant, I have inspected many buildings for evidence of bat activity/bats and carried out many PBRA, presence/absence surveys (dusk emergence/dawn entry surveys) and bat activity surveys/dusk to dawn surveys. I have produced many reports regarding bats and proposed developments.
- 3.2.3 Details of my Insurance and Continual Professional Development for the last 2 years,' can be provided on request. If requested, some of the details within the information may be redacted to comply with the Data Protection Act.

4. Limitations

- 4.1 I did not submit a data request to The Local Environmental Records Centre to obtain any records of bat roosts at the property as I do not believe they will hold any records.
- 4.2 I did not inspect any gaps with an endoscope.
- 4.3 The differing activity patterns of bats at different times of the year are acknowledged. It is also acknowledged that not all potential entry/exit points for bats/PRFs are visible from ground level.

5. Recommendations

1. This report should be forwarded to the LPA as supporting information for the planning application/proposed development.
2. Before planning permission can be granted; a presence/absence survey (a dusk emergence or dawn entry survey) must be carried out on the hanging tiles on each side elevation and the sides of the dormer windows above the front elevation. If a bat emerges or enters (depending on which survey is carried out) two further surveys must be carried out, which must be spaced at least two-weeks apart - one of the surveys must be a dawn entry survey.
3. On completion of the surveys, a Bat Survey Report should be produced that contains the findings and conclusion of the surveys, and recommendations. The report should be submitted to the LPA as supporting information for the planning application/proposed development.

References

A Field Guide to British Bats by Frank Greenaway and A. M. Hutson (Bruce Coleman Books, Middlesex - 1990).

Bat Conservation Trust (www.bats.org.uk).

Bat Conservation Trust. Bat Surveys for Professional Ecologists. Good Practice Guidelines. 3rd Edition (2016). ISBN-13 978-1-872745-96-1.

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

British Bat Calls: A Guide to Species Identification. Jon Russ. ISBN-13: 9781907807251. 2012.

BS 42020: 2013 Biodiversity - Code of practice for planning and development.

CIEEM (2013) Competencies for Species Survey: Bats.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management.

Environmental Law, 6th edition. Edited by Stuart Bell and Donald McGillivray. Oxford University Press. 2006. ISBN 0199260567.

Google Earth.

Government Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System.

Guidance Note 08/18, Bats and artificial lighting in the UK. Bat Conservation Trust and Institution of Lighting Professionals. 2018.

A Review of the Population and Conservation Status of British Mammals. Natural England, Peterborough. 2018.

Natural England Standing Advice regarding Bats (<https://www.gov.uk/guidance/bats-protection-surveys-and-licences>)

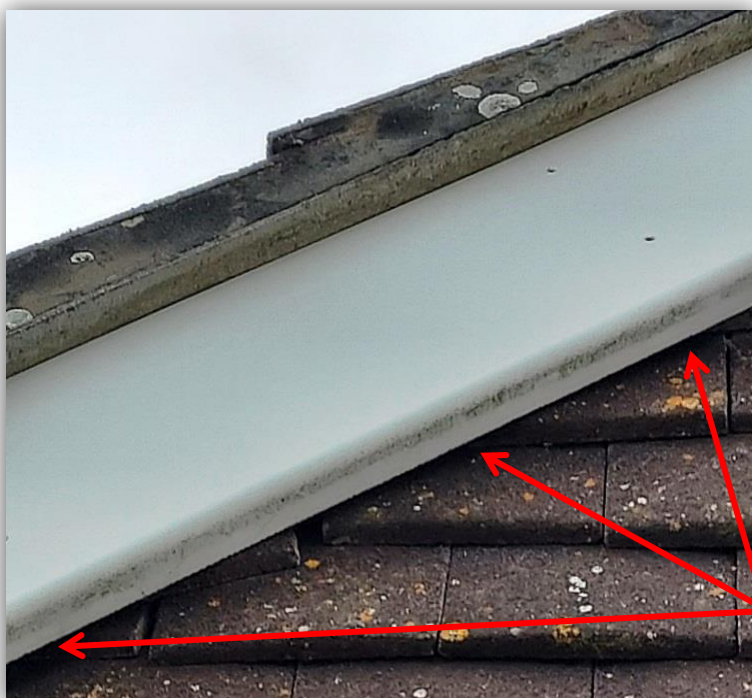
University of Bristol, School of Biological Sciences (www.bio.bris.ac.uk).



Dormer windows above the front elevation, side (west) elevation and hanging tiles.



Side (east) elevation and hanging tiles.



Gaps between tiles and fascia board.

Example of gaps present.



Aerial photograph (courtesy of Google) showing negligible foraging habitats for bats.

Appendix 2. Information regarding bats and the law.

All UK species of bats and their roosts (even if no bats are present) are LEGALLY protected under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (and as amended). The law relating to bats and bat roosts also applies to demolition and Permitted Development - works that do not require planning permission.

It is offence to:-

- Deliberately take, injure or kill a wild bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a place used by bats for breeding or resting (roosts), even if bats are not present at the time;
- Possess or advertise/sell/exchange a bat of a species found in the wild in the EU (dead or alive) or any part of a bat;
- Intentionally or recklessly obstruct access to a bat roost.

Professional affiliations

- Professional Member of The Chartered Institute of Building (MCIOB);
- Chartered Environmentalist (CEnv);
- Professional Member of The Chartered Institute of Ecology and Environmental Management (ACIEEM);
- Licenced to Disturb and Handle Bats (Bat Survey Class Licence CL18); and
- Member of the Bat Conservation Trust.

Relevant experience

I have 9 years' experience as a Local Authority Woodland Conservation Officer. As a Woodland Conservation Officer, I carried out presence/absence surveys (dusk emergence/dawn entry surveys) on trees within woodlands and produced Woodland Management Plans that contained recommendations regarding bats.

I have been an Ecological Consultant since 2011. During my time as a Consultant, I have inspected many buildings for evidence of bat activity/bats and carried out many Preliminary Bat Roost Assessments, presence/absence surveys (dusk emergence/dawn entry surveys) and bat activity surveys/dusk to dawn surveys. I have produced many reports regarding bats and proposed developments.

Details of my Insurance and Continual Professional Development for the last 2 years,' can be provided on request. If requested, some of the details within the information may be redacted to comply with the Data Protection Act.

Appendix 3. Details of the presence/absence surveys.

Details of the presence/absence surveys

Property 27 Orchard Avenue, Bishopstoke, Eastleigh SO50 8HN

Surveys carried out a dusk emergence survey and a dawn entry survey

Date of dusk emergence survey 30.04.22

Sunset (Eastleigh) 20:25

Start of survey 20:10 **Cloud cover** <10%, clear sky

Recorded ambient conditions

Start of survey



End of survey 22:00 **Cloud cover** <10%, clear sky

Recorded ambient conditions

End of survey



The survey started ≥ 15 min before sunset and continued for ≥ 1.5 hrs after.

Optimal conditions (or better than) were recorded at the start and end of the survey.

There were no periods of rain or strong wind.

Observations no bats emerged. The only bats seen were a Noctule passing at 20:35 and 20:36 at approx. 30m. Almost dark at 21:10.

4 common species of bats found widespread throughout the UK were recorded; the calls recorded, the species recorded and the length of the calls are below.

PLEAUR_20220430_214506	30/04/2022 21:45	00:00:05
PIPPYG_20220430_214215	30/04/2022 21:42	00:00:10
PIPPYG_20220430_214143	30/04/2022 21:41	00:00:05
NYCNOC_20220430_214016	30/04/2022 21:40	00:00:03
NYCNOC_20220430_211408	30/04/2022 21:14	00:00:14
PIPPIP_20220430_211241	30/04/2022 21:12	00:00:10
PIPPIP_20220430_211113	30/04/2022 21:11	00:00:09
PLEAUR_20220430_211040	30/04/2022 21:10	00:00:07
PIPPIP_20220430_211029	30/04/2022 21:10	00:00:08
PIPPIP_20220430_210917	30/04/2022 21:09	00:00:14
PIPPIP_20220430_210709	30/04/2022 21:07	00:00:14
NYCNOC_20220430_205910	30/04/2022 20:59	00:00:13
NYCNOC_20220430_205311	30/04/2022 20:53	00:00:08
NYCNOC_20220430_205137	30/04/2022 20:51	00:00:14
NYCNOC_20220430_203616	30/04/2022 20:36	00:00:14
NYCNOC_20220430_203539	30/04/2022 20:35	00:00:12

NYCNOC *Nyctalus noctula* (Noctule); PIPPIP *Pipistrellus pipistrellus* (Common pipistrelle)

PLEAUR *Plecotus auritus* (Brown long-eared bat)

PIPPYG *Pipistrellus pygmaeus* (Soprano pipistrelle)

Date of dawn entry survey 01.05.22

Sunrise (Eastleigh) 05:39

Start of survey 04:00 **Cloud cover** <10%, clear sky

Recorded ambient conditions

Start of survey



End of survey 06:00 **Cloud cover** <20%, slightly overcast

Recorded ambient conditions

End of survey



The survey started ≥ 1.5 hrs before sunrise and continued for ≥ 15 min after.

Optimal conditions (or better than) were recorded at the start and end of the survey.

There were no periods of rain or strong wind.

Observations no bats entered. The only bats seen were a Common pipistrelle passing at 04:44, 04:45 and 04:57 at approx. 5m. Almost light at 05:20.

3 of the species recorded during the dusk survey were recorded; the calls recorded, the species recorded and the length of the calls are below.

	PLEAUR_20220501_051024	01/05/2022 05:10	00:00:09
	PLEAUR_20220501_050929	01/05/2022 05:09	00:00:07
	PLEAUR_20220501_050809	01/05/2022 05:08	00:00:07
	PLEAUR_20220501_050704	01/05/2022 05:07	00:00:10
	PIPIPI_20220501_050629	01/05/2022 05:06	00:00:07
	PLEAUR_20220501_050523	01/05/2022 05:05	00:00:03
	PIPIPI_20220501_050413	01/05/2022 05:04	00:00:09
	PLEAUR_20220501_050356	01/05/2022 05:04	00:00:08
	PLEAUR_20220501_050226	01/05/2022 05:02	00:00:05
	PLEAUR_20220501_050110	01/05/2022 05:01	00:00:05
	PLEAUR_20220501_050032	01/05/2022 05:00	00:00:05
	PLEAUR_20220501_045942	01/05/2022 04:59	00:00:05
	PLEAUR_20220501_045830	01/05/2022 04:58	00:00:06
	PIPIPI_20220501_045725	01/05/2022 04:57	00:00:12
	PIPIPI_20220501_044823	01/05/2022 04:48	00:00:09
	PIPIPI_20220501_044733	01/05/2022 04:47	00:00:12
	PIPIPI_20220501_044619	01/05/2022 04:46	00:00:08
	PIPIPI_20220501_044506	01/05/2022 04:45	00:00:08
	PIPIPI_20220501_044445	01/05/2022 04:44	00:00:08
	PIPIPI_20220501_043422	01/05/2022 04:34	00:00:14
	PIPIPI_20220501_043342	01/05/2022 04:33	00:00:14
	PIPIPI_20220501_043239	01/05/2022 04:32	00:00:05
	NYCNOC_20220501_040...	01/05/2022 04:05	00:00:05

My locations with the camcorder etc. during the surveys are shown below.



Aerial photograph courtesy of Google

Location during the dusk survey

Location during the dawn survey

Illustrations of the FOV/recording areas are also shown