Bat Survey Report

Bec House Outbuildings, Monxton, Andover, SP11 8AH

Surveys conducted August-September 2023

Document Control Sheet

Project Name: **Bec House Outbuildings, Monxton**
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Report Title: **Bat Survey Report**

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SUMMARY

An internal and external daytime inspection for evidence of bats and bat roosting potential was conducted by ecologist Lisha Price of Plan Ecology of the outbuildings at Bec House, Monxton on the 13th of June 2023.

As part of the proposed works Structure A will have a section of wall removed to allow access to the courtyard and a new garage access will be added to the opposite side of the structure.

Structure B will also have new glazing added to existing openings and the addition of new casement windows in the place of the section where structure C connects to structure B.

The plans also include the removal of structure C from structure B and the demolition of structure C to make way for a new timber clad building.

The proposed works seek to replace the existing plastic sheet roof and clay roof tiles of the summer house (Structure D) with a standing seam lead roof. In addition, the timber supports of structure D will be replaced with crittall windows and a door.

The proposed works would affect four outbuildings on the Site this have been labelled A, B, C and D for reference purposes only:

Structures A and C are single -storey, brick built, slate-roofed buildings and are attached to either side of structure B which is a thatch roofed building. All three structures have timber framed windows and doors. Structure D is a simple, brick-built structure with some timber supports and a plastic sheet roof and interlocking clay roof tiles.

The buildings were carefully inspected, and the potential features were examined in the accessible spaces using an endoscope.

Structure A was found to have bat roosting potential in the form of the gaps under the ridge tiles and broken roof tiles. The potential was assessed according to the scale negligible, low, moderate, or high and the structure was deemed to have moderate bat roosting potential. The loft space was not fully accessible so the area could not entirely be surveyed for evidence of bats.

Structure B had bat roosting potential in the form of the gaps beneath some of the timber frames and the gaps between the wall and the ceiling. The structure was deemed to have moderate potential. However, the upper area was too unsafe to be inspected for evidence of bats.

Structure C is an open simple structure with an unlined roof where both sides of the roof could be fully inspected. The structure was deemed to have negligible potential.

Structure D has an unlined roof and no other potential bat features. It was deemed to have negligible bat roosting potential.

Two bat activity surveys were carried out on structures A and B during optimal weather conditions to illustrate the use of the building as a bat roost over a period of time. The

surveys were conducted during a time of the year (August and September) when bats are generally fully active.

As per the interim guidelines from the bat conservation trust (2022) two dusks were carried out which is a suitable survey effort for a moderate potential building if used in conjunction with sufficient infra cameras. The night vision aids can vastly improve the detection of bats as they emerge from their roosts and reduce the need for dawn re-entry surveys where deemed appropriate.

No bat droppings or other evidence of bats was found during the surveys. No bats were noted to emerge from the buildings during the emergence surveys.

No evidence of bats roosting was found during this survey, it is recommended that the proposed works can proceed without any further bat surveys at this time.

The result of a survey can never completely rule out the presence of bats at a building as use may be obscure or occasional. If bats or evidence of bats such as bat droppings are discovered, the works must be paused, and you should seek advice from Plan Ecology or Natural England via the Bat Conservation Trust bat helpline Tel 0845 1300 228.

It is recommended that works only take place in the daytime to avoid any light or noise disturbance to bats or birds which may be nesting or foraging nearby.

1. INTRODUCTION

1.1 Site Description

Bec House, Monxton, Andover, SP11 8AH 1DA consists of a detached house with outbuildings. The proposed works would affect four outbuildings on the Site these have been labelled A, B, C and D for reference purposes only.

Structures A and C are single -storey, brick built, slate-roofed buildings and are attached to either side of structure B which is a thatch roofed building. All three structures have timber framed windows and doors. Structure D is a simple, brick-built structure with some timber supports and a plastic sheet roof and interlocking clay roof tiles.

The site is located within the village of Monxton in west Hampshire, approximately three miles west of Andover. The area immediately surrounding the site comprises other houses and businesses, arable and pastural fields and small wooded areas.

See Appendix 3 for Building references.

1.2 Proposed works

As part of the proposed works Structure A will have a section of wall removed to allow access to the courtyard and a new garage access will be added to the opposite side of the structure.

Structure B will also have new glazing added to existing openings and the addition of new casement windows in the place of the section where structure C connects to structure B.

The plans also include the removal of structure C from structure B and the demolition of structure C to make way for a new timber clad building.

The proposed works seek to replace the existing plastic sheet roof and clay roof tiles of the summer house (Structure D) with a standing seam lead roof. In addition, the timber supports of structure D will be replaced with crittall windows and a door.

1.1 Aims of the survey

A Phase 1 bat survey was carried out with the aim to look for evidence of bats roosting and for the presence of structures within the buildings which hold bat roosting potential. Bat roosting potential was identified, and Phase 2 emergence and dawn surveys were there carried out.

1.2 General information about bats and buildings

Loft spaces can potentially be utilised by bat species such as e.g. Brown Long-eared bats or Serotine bats which are known to commonly roost inside loft spaces. This can generally be discovered via droppings inside the loft as the droppings will stay protected from weather elements.

External features of the building can potentially be used as roosting sites by e.g. Pipistrelle bat species (*Pipistrellus* spp). Pipistrelle bats are the most common bats out of the British species and they are known to almost exclusively roost inside buildings

utilising areas such as cavity walls, soffits and fascia boards, and between tiles and roofing felt. It is not practical to carry out a full physical examination of such building features, which is why activity surveys must be done during summer months (May-September) when the bats are fully active.

Access points of 1-2 centimetres only are used by bats to enter and exit their roosting sites. Most buildings will have gaps of such size in roof areas as ventilation of the roof void would otherwise not be possible.

2. METHODOLOGY

The surveys were undertaken in accordance with the methods described in the Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn), Bat Conservation Trust (BCT). As per the interim guidelines from the bat conservation trust (2022) two dusks were carried out which is a suitable survey effort for a moderate potential building if used in conjunction with sufficient infra cameras. The night vision aids can vastly improve the detection of bats as they emerge from their roosts and reduce the need for dawn re-entry surveys where deemed appropriate.

2.1 External and internal inspection - Phase 1

The building was surveyed during the daytime on the 13th of June 2023 by Lisha Price (Natural England bat licence No. 11503-CLS) of Plan Ecology. Lisha has over 18 years of experience conducting ecology surveys.

The buildings were inspected for evidence of bats in the form of live or dead bats, droppings, urine staining and insect feeding remains such as moth and butterfly wings.A careful visual search using a Clulite torch was conducted in the loft space. An endoscope (Ridgid) was used for spot checks of internal and external gaps. The exterior of the building was surveyed for droppings on walls and window ledges.

See APPENDIX 1 for Photographs

2.2 Bat roosting potential – Phase 1

The buildings were examined internally and externally to identify structural features that hold bat roosting potential.

The bat roosting potential was assessed according to the scale negligible, low, moderate, high or confirmed:
Negligible: Negligible habitat features on site likely to be used by roosting bats. For example; a simple wooden garden shed, a corrugated iron barn or precast concrete modular garage may fit this category.
Low: A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost Sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate: A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status.
High: A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Confirmed: This category is used where evidence of bats such as live or dead bats or bat droppings are present, or where there are records of a bat roost in the building.

2.3 Emergence survey methodology - Phase 2

Emergence surveys of the buildings were conducted by Nick Kirke (Bat licence 2020-50736), Myfanwy Price (2019-40496), Ashley Johnson (2022-10735) and Lisha Price of Plan Ecology Ltd on 8th August and 4th September 2023. The survey started 15 minutes before the official sunset and were completed 1½ hour after sunset. Bat passes were recorded with EchoMeter Touch bat detectors. Infrared cameras (Sony AX53) and associated equipment was used to assist the surveys. A series of large infrared lights are used to light up areas for the camera once it is dark enough to use night mode.

2.5 Weather conditions

This information was taken from the BBC Weather online forecast for Monxton, to illustrate that the survey was conducted during suitable weather conditions. Bats are generally fully active in the months of May - September at temperatures above 10°C if there are favourable weather conditions such as no strong winds (less than 15 mph) and no overnight rain.

Survey date	Sunset/ Sunrise	Weather 22:00/04:00	Temp	Wind speed	Humidity
8th August 2023	20:42	Cloudy	17°C	5 mph	93%
4th September 2023	19:46	Clear	24°C	7 mph	58%

2.6 Sound Analysis

The recordings made during the surveys were analysed on kaleidoscope software. All bat call recordings were compared to published reference material such as British Bat Calls Jon Russ (2012) and to a private reference library of previous recordings made from known bat species.

3. RESULTS

3.1 External and internal inspection results – Phase 1

Bat roosting potential:

Structure A was found to have bat roosting potential in the form of the gaps under the ridge tiles and broken roof tiles. The potential was assessed according to the scale negligible, low, moderate, or high and the structure was deemed to have moderate bat roosting potential. The loft space was not fully accessible so the area could not entirely be surveyed for evidence of bats.

Structure B had bat roosting potential in the form of the gaps beneath some of the timber frames and the gaps between the wall and the ceiling. The structure was deemed to have moderate potential. However, the upper area was too unsafe to be inspected for evidence of bats.

Structure C is an open simple structure with an unlined roof where both sides of the roof could be fully inspected. The structure was deemed to have negligible potential.

Structure D has an unlined roof and no other potential bat features. It was deemed to have negligible bat roosting potential.

Evidence of bats: No bats or evidence of bats was found during the internal inspection.

See APPENDIX 1 for photographs

3.2 Emergence survey results – Phase 2

8th August 2023: Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*), Serotine (*Eptesicus serotinus*), Natterer's (*Myotis nattereri*) and Noctule (*Nyctalus noctula)* bats were recorded and observed foraging and commuting near the property.
No bats emerged from the buildings.

4th September 2023: Common pipistrelle, Serotine, Brown long eared (*Plecotis auritus*) and Noctule bats were recorded foraging and commuting in the area.

See Appendix 3 for activity survey details and an example of the visibility using the infra-red lights and camera setting as well as surveyor positions.
No bats emerged from the buildings.

3.3 Identified bat roosting areas

No bat access points, or roosts were identified during the survey.

4. ASSESSMENT

4.1 Constraints on study information

All accessible areas of the building could be surveyed without restrictions.

The phase 1 survey was carried out during the month of June. As such, seasonal variations could not be observed and potentially only a selection of all species that occur within the survey area will have been noted. The Survey therefore provides a general assessment of potential nature conservation value. However, it is considered that the combination of biological records from the desk study and the site visit provides an accurate representation of the various species and habitat types present or potentially present within the survey area.

Bat survey results are generally considered to be valid within two years of the survey date or until the next active bat season of May-September. The County Council Ecologists and/or Natural England may ask for updated surveys if the reports are older than one year.

4.2 Potential impacts on bat foraging and commuting habitat.

There will be no negative impact on bat commuting and foraging areas as the building will not increase significantly in footprint enough to have an effect.

4.3 Legislation and policy guidance

As population numbers have fallen, all bats and their roosts are protected under The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017.

Under this legislation it is an offence to:

deliberately capture (or take), injure or kill a bat;
intentionally, recklessly or deliberately disturb a bat (in relation to the Wildlife and Countryside Act 1981 (as amended) the offence applies whilst the species is occupying a structure or place which it uses for shelter or protection; in relation to the Conservation of Habitats and Species Regulations 2017 it applies anywhere);
damage or destroy the breeding or resting place (roost) of a bat;
possess a bat (alive or dead), or any part of a bat;
intentionally or recklessly obstruct access to a bat roost;
sell (or offer for sale) or exchange bats (alive or dead), or parts of bats.

Please refer to the original legislation for the definitive interpretation.

5. RECOMMENDATIONS

5.1 Discussion of results

No bat droppings or other evidence of bats was found during the surveys. No bats were noted to emerge from the buildings during the emergence surveys.

As no evidence of bats roosting was found during this survey, it is recommended that the proposed works can proceed without any further bat surveys at this time.

The result of a survey can never completely rule out the presence of bats at a building as use may be obscure or occasional. If bats or evidence of bats such as bat droppings are discovered, the works must be paused, and you should seek advice from Plan Ecology or Natural England via the Bat Conservation Trust bat helpline Tel 0845 1300 228.

It is recommended that works only take place in the daytime to avoid any light or noise disturbance to bats or birds which may be nesting or foraging nearby.

5.2 Survey Effort

The buildings were assessed as having moderate bat roosting potential and two activity surveys were carried out. Each survey took place in accordance with the Bat Conservation Trust Bat Survey Guidelines. These guidelines are used by Local Planning Authority ecology team during the planning application process to determine the level of survey effort that is needed.

Two bat activity surveys were carried out during optimal weather conditions to illustrate the use of the building as a bat roost over a period of time. The surveys were conducted during a time of the year (August and September) when bats are generally fully active.

As per the interum guidelines from the bat conservation trust (2022) two dusks were carried out which is a suitable survey effort for a moderate potential building if used in conjunction with infra cameras. The night vision aids can vastly improve the detection of bats as they emerge from their roosts and reduce the need for dawn re-entry surveys where deemed appropriate.

As no evidence of bats roosting was found during this survey, it is recommended that the proposed works can proceed without any further bat surveys at this time.

7. REFERENCES

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

Mitchell-Jones A J & McLeish A P (Ed.), 2004. *The Bat Workers' Man*ual. JNCC, Peterborough, United Kingdom.

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Parsons, K *et al* (Ed.) 2007. *Bat Surveys - Good Practise Guidelines.* Bat Conservation Trust, London, United Kingdom.

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Russ, J. 1999. *The Bats of Britain and Ireland*. Alana Books, Alana Ecology Ltd. United Kingdom.

APPENDIX 1: Photographs

Photograph 1: Structure A.

Photograph 2: Structure A with gaps in slate roof tiles

Photograph 3: Building A- Gaps under roof tiles.

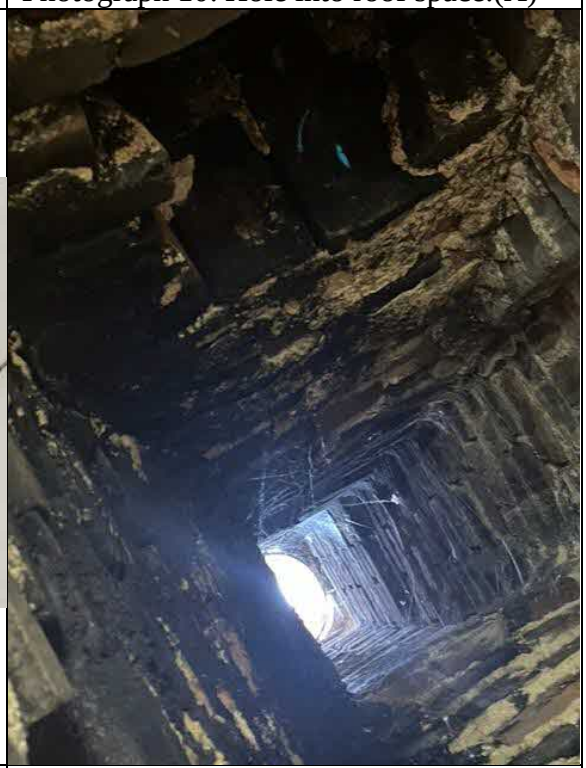
Photograph 4: Building A- Gaps under ridge tiles.

	
Photograph 5: Structure A- Gaps beneath guttering.	Photograph 6: Structure A.
	
Photograph 7: Structure A gaps in roof tiles.	Photograph 8: Structure A.

Photograph 9: Structure A- Interior.

Photograph 10: Hole into roof space.(A)

Photograph 11: Hole in structure A ceiling.



Photograph 12: Chimney A.

Photograph 13: Structure B.

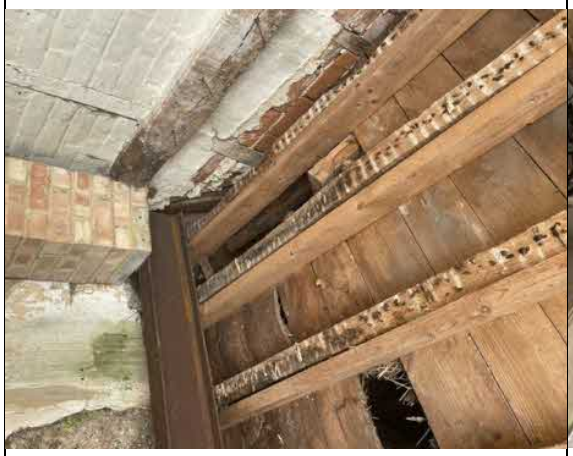
Photograph 14: Structure B- Thatched roof and wooden window with gaps into upper area.

Photograph 15: Gap below wooden cladding.

Photograph 16: Large gap between the wall and the ceiling.

Photograph 17: Hole in ceiling.

Photograph 18: Hole in ceiling.



Photograph 19: Ceilings in a state of disrepair with holes into upper area.

Photograph 20: Structure B- Interior with a wooden plank ceiling and brick and wood walls.

	
Photograph 21: Hole into upper area.	Photograph 22: Hole into upper area- unable to inspect.
	
Photograph 21: Structure B.	Photograph 22: Structure B.

Photograph 23: Structure C- Brick built stables with slate roof.

Photograph 24: Structure C.

Photograph 25: Structure C.

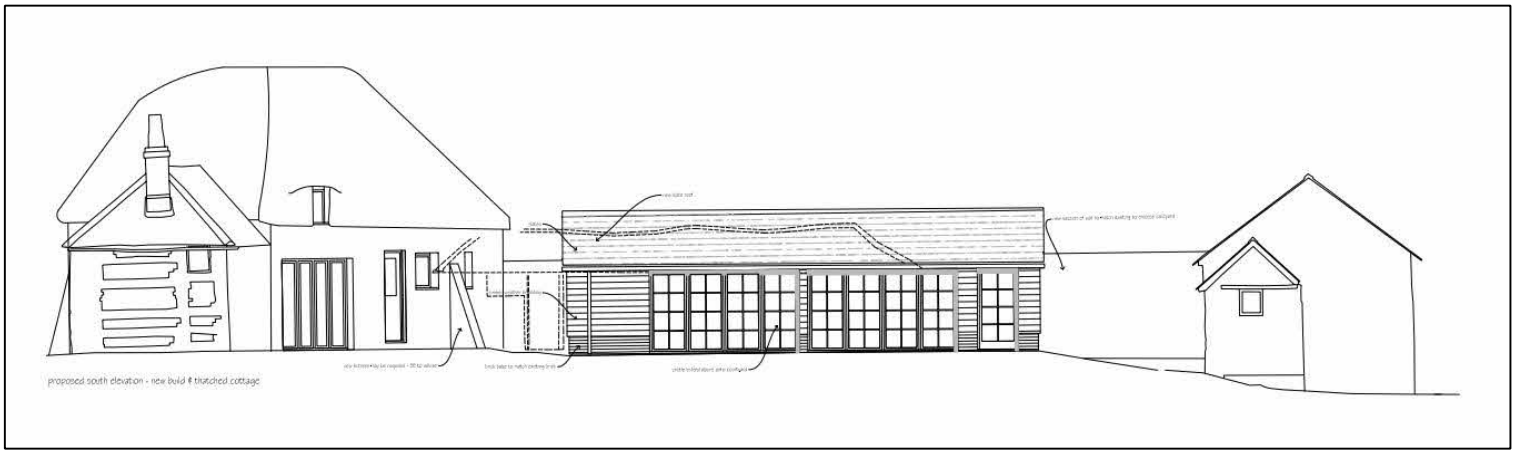
Photograph 26: Interior of structure C- An open simple structure with no roof liner.

	
Photograph 27: Structure C- Interior.	Photograph 28: Structure C- Roofing with no liner.
	
Photograph 29: Structure C.	Photograph 30: Structure D- A brick built, open structure.

	
Photograph 31: Structure D with a plastic sheet roof.	Photograph 32: Structure D- Interior.
	
Photograph 33: Structure D- plastic sheet roof.	Photograph 34: Structure D.

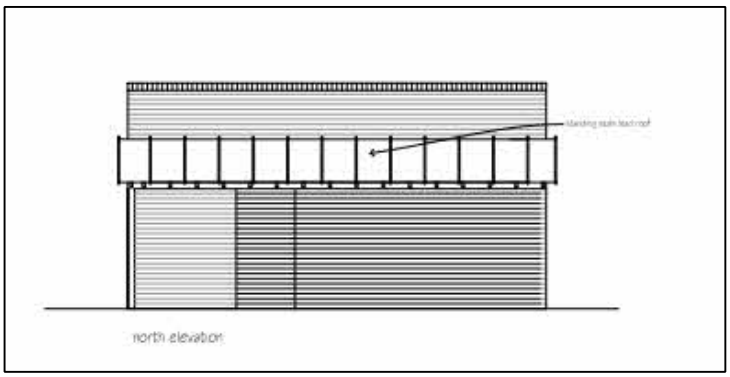
	
Photograph 35: Structure D- Interior.	Photograph 36: Interlocking clay roof tiles.

APPENDIX 2: Proposed Elevations



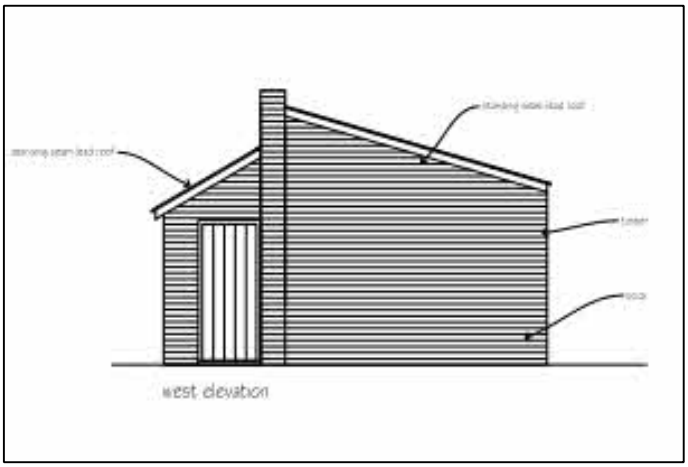
South-east elevation.

West elevation

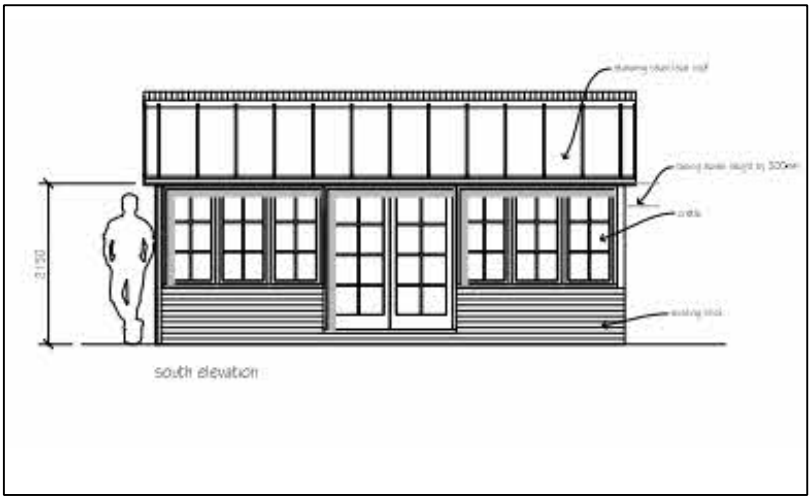


North elevation of proposed garden office.

East elevation of proposed garden office.



West elevation of proposed garden office.



South elevation of proposed garden office.

APPENDIX 3: Outbuildings Locations

APPENDIX 4: Activity Survey & Sound Analysis Results

Emergence 1 Survey 8th August 2023

Surveyors Myfanwy Price, Ashley Johnson and Ciaran Johnson

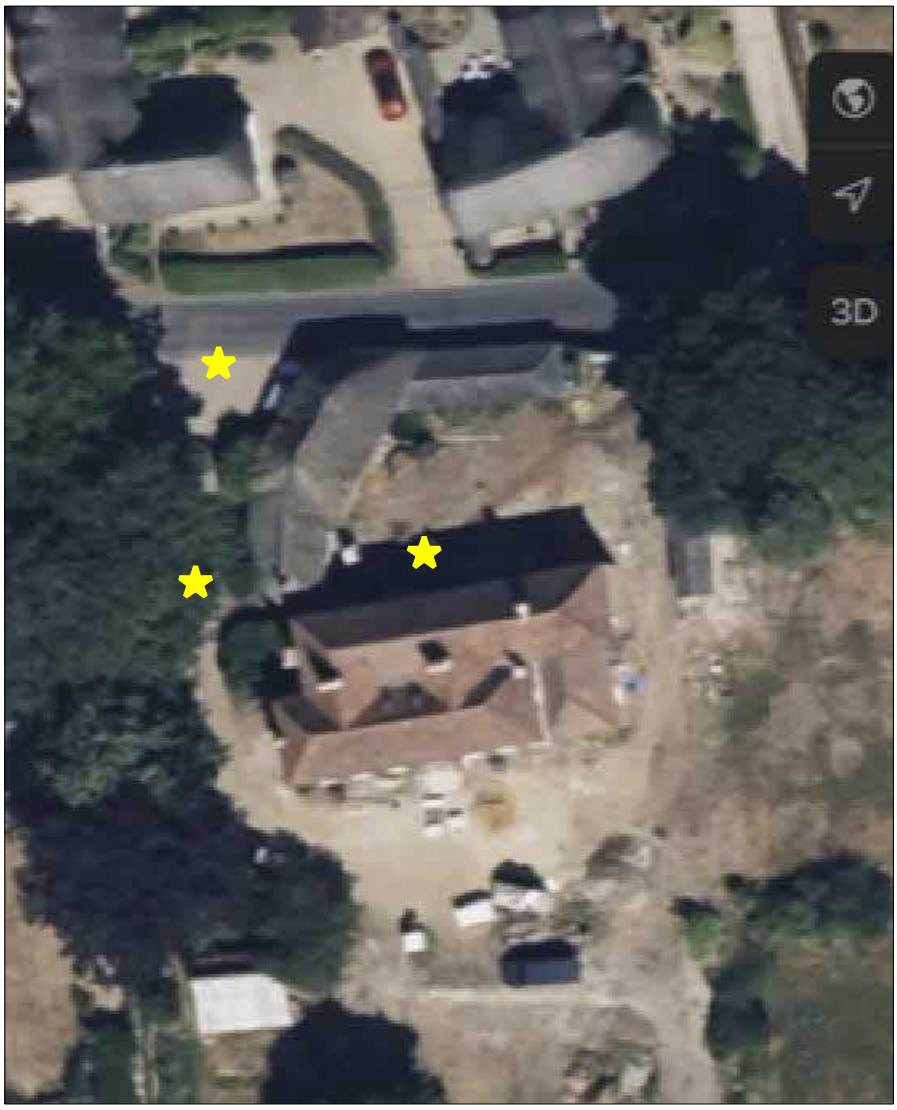
Time	Species	Activity	Flight Direction
20:27	Survey start		
20:42	Official sunset		
20:58	Soprano pipistrelle	Commuting over building	E-W
20:58-21:54	Noctule	Foraging (S)	
21:04-21:06	Common pipistrelle	Foraging around house and garden	
21:06-22:03	Common pipistrelle	Foraging (S)	
21:43-21:48	Natterers myotis	Foraging	
21:49	Serotine	Foraging (S)	
21:54	Serotine	Foraging	
22:12	Survey Finish		

Emergence 2 Survey 4th September 2023

Surveyors Nick Kirke, Ashley Johnson and Lisha Price

Time	Species	Activity	Flight Direction
19:31	Survey start		
19:46	Official sunset		
20:10	Noctule	Foraging next to building	
20:11	2 Common pipistrelles	Foraging around beech tree west of building	
20:14	Serotine	Commuting up drive	S-N
20:24	Common pipistrelle	Foraging around courtyard area	
20:30	Common pipistrelle	Foraging up and down driveway	
20:37	Brown long eared	Foraging	
21:16	Survey Finish		

Surveyor and camera positions



Building after dark- view from camera.