Bat Emergence Survey Report

Stables

Holders

Furners Lane

Henfield

BN5 9HX

NGR: TQ 22882 16104

31st May 2025

Sylvatica Ecology Ltd

Company Registration Number: 07705793

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It should be borne in mind that the behaviour of animals can be unpredictable and may not conform to standard patterns recorded in scientific literature. Therefore, this report cannot predict with absolute certainty that animal species will occur in apparently suitable locations or habitats, or that they will not occur in locations or habitats that appear unsuitable.

In order to minimise the likelihood of adverse effects on protected animal species over time, it is accepted good practice, in accordance with Natural England (NE) (formerly English Nature) guidance for ecological surveys to be repeated should works be deferred for over 12 months from the date of initial survey.

It is the duty of the landowner, developer and operations managers to act responsibly and to comply with current environmental legislation if protected species are suspected or found prior to, or during works.

The recommendations and information contained within this report are based on the information provided on the development works prior to the surveys being carried out. Should the development proposals change then the findings and recommendations contained within would potentially require revision.

The findings within this report do not constitute legal advice. Should this be required, then a suitably qualified professional practitioner should be contacted.

Author	Signed	Contact
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1.0 SUMMARY

1.1 A bat emergence survey was conducted on the Stables at Holders, Henfield, following an earlier assessment which identified the structure as having moderate potential to support roosting bats. The survey, completed on 8th and 29th May 2025, confirmed the presence of a small day roost used by a single common pipistrelle. On both visits, an emergence was observed from the same location—between the tiles on the gable end of the eastern apex, midway down the left side. This consistent emergence point indicates a confirmed roost site within the building structure. Additionally, foraging activity by common pipistrelle was recorded in the surrounding treelines and garden, and two high-flying noctule passes were detected on each night, consistent with occasional commuting use of the area.

1.2 The building was a single-storey former stable block constructed of horizontal timber cladding with a clay-tiled pitched roof. Several tiles were displaced or warped, creating small crevices suitable for bat access. A large undisturbed loft void lined with traditional bitumen felt and exposed rafters provided a stable and dark environment conducive to roosting. Although no droppings or feeding remains were noted internally, the structural features and observed emergence confirmed its use by bats.

1.3 In addition, an active swift nest was present within the loft space. This nest was affixed to the underside of the roof lining and showed clear signs of current use. Swifts are protected under the Wildlife and Countryside Act 1981, and active nests must not be disturbed during the breeding season.

1.4 To comply with legal requirements and protect the confirmed bat roost, a mitigation licence from Natural England would be required before any works proceed. This should include a method statement covering supervised hand-removal of roofing materials, retention of traditional felt, installation of two bat boxes in nearby trees, and creation of permanent replacement roost features (e.g. bat tiles or bricks). Lighting should follow best practice guidance to minimise disturbance to foraging and commuting bats.

1.5 To compensate for the swift nest, at least one replacement box should be installed close to the original location, above 5 m where possible, and with a clear, unobstructed flight path. Works should avoid the swift breeding season (May to August) unless under appropriate ecological supervision.

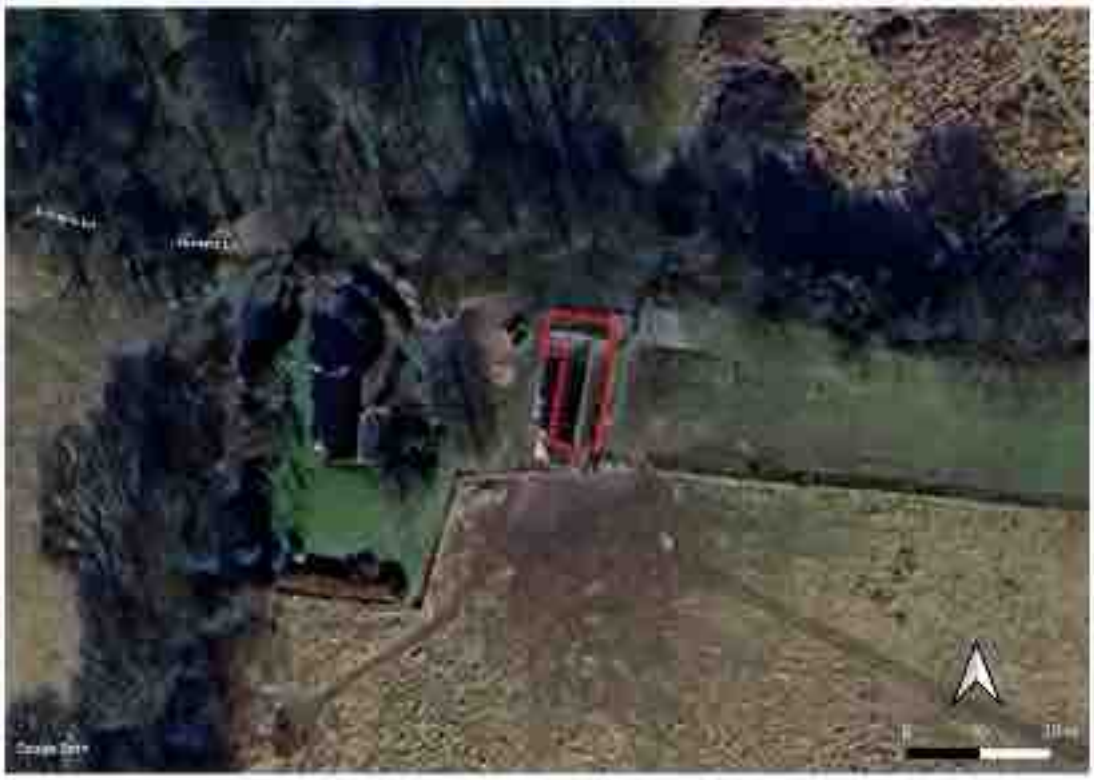
1.6 The survey confirmed that the barn supported a single day roost for a common bat species and one active swift nest. With appropriate licencing and mitigation in place, development of the building could proceed lawfully while maintaining ecological continuity.

2.0 INTRODUCTION

Aims and Objectives of this Study

2.1 This report presents the findings of two bat evening emergence surveys carried out on the Stables located at the property of Holders, Furners Lane, Henfield BN5 9HX, NGR: TQ 22882 16104. A planning application is to be made to carry out development works at this location. This L-Shaped barn has previously been categorised as having a moderate potential to support roosting bats. Therefore, two bat emergence surveys were conducted to further validate this application.

2.2 ***Figure 1: Site Location in Wider Landscape (Red Line Area Surveyed)***



Legal Status of Bats

2.3 The potential presence of bat roosts within a proposed development site has to be considered as all eighteen of the UK's bat species are protected under Section 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended). The WCA states that '*a person is guilty of an offence if intentionally or recklessly they disturb [a bat] while it is occupying a structure or place which it uses for shelter or protection; or he obstructs access to any structure or place which [a bat] uses for shelter or protection'.*

2.4 Bats are also protected under the Conservation of Habitats and Species Regulations 2017. Bats are listed as European protected species under which it is an offence if;

- *a person deliberately captures, injures or kills any wild animal of a European protected species;*

- *deliberately disturbs wild animals of any such species;*
- *damages or destroys a breeding site or resting place of such an animal.*

2.5 Disturbances of animals include in particular any disturbance which is likely to impair their ability to;

- *survive, breed or reproduce, or to rear or nurture their young;*
- *in the case of animals of a hibernating or migratory species, to hibernate or migrate; or*
- *to affect significantly the local distribution or abundance of the species to which they belong.*

3.0 METHODOLOGY

3.1 The survey work used the guidance detailed within Bat Surveys Guidelines for Professional Ecologists – Good Practice Guidelines (BCT 2023a) and the Interim Guidance Note on Surveys and Night Vision Equipment (BCT 2022) as the basis to the survey methodology.

Lead Surveyor

3.2 The survey work and reporting has been led by Richard Law BSc MRes CEnv MCIEEM FLS. Richard has been undertaking ecological survey work within the last 20 years on, a number, of differing locations throughout the United Kingdom for a variety of protected species, including bats (Class 2 2015-12576-CLS-CLS) and birds including barn owl (*Tyto alba*) (licence CL29/00236).

Equipment Used Bat Roost Potential Survey

3.3 A high-power torch (1 million candle power) was utilised to illuminate any external areas of interest, with a less intrusive head torch used for assessing internal spaces. Crevices were checked using a PCE300 Endoscope and Nikon Monarch binoculars were used to assist in ground level inspection of any higher-level features.

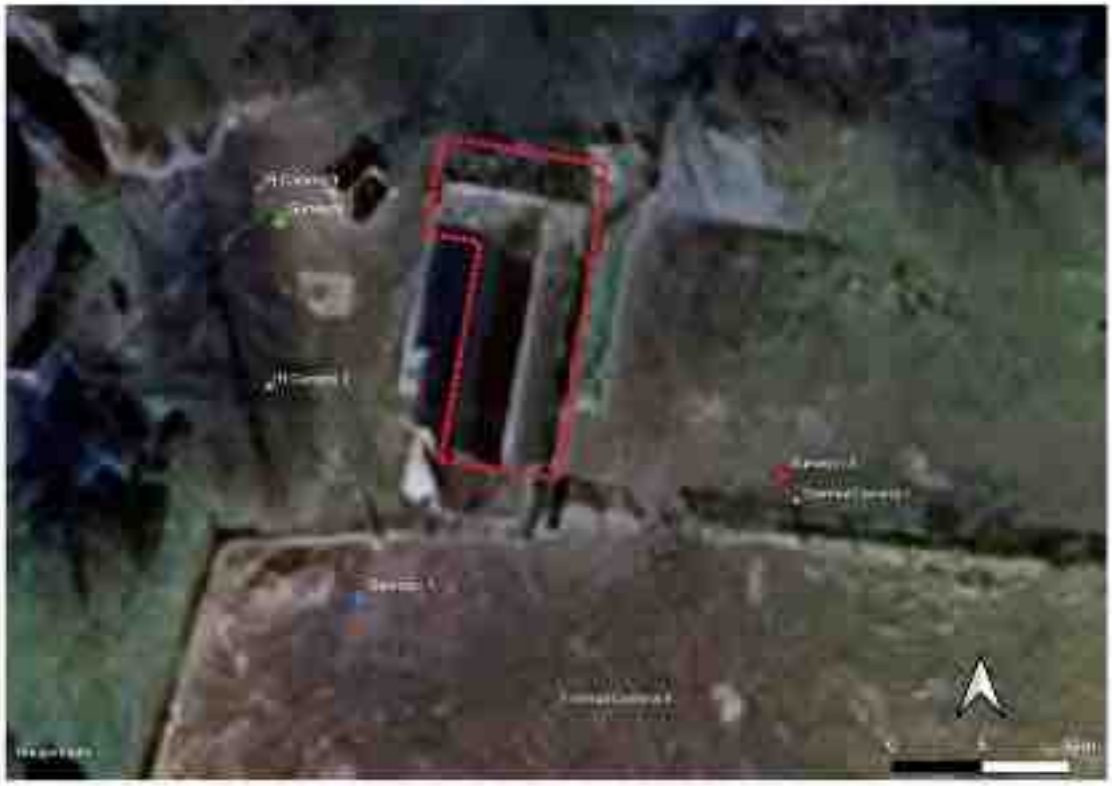
Equipment Used Emergence Surveys

3.3 Echometer Pro 2 bat detector with iPad processor unit and Bat Box Duet detectors were used to detect bat echolocation. A mixture of night vision equipment was used including: Sionyx Aurora IR camera, a Pulsar Axion and Telios thermal imaging cameras. Calls were analysed, when required, identifying species following Russ (2021).

3.4 The night vision observation equipment gave a view of the features of the building surveyed that was not possible with the naked eye, enabling effective observation to continue in the dark. The cameras were installed on tripods, which enabled the surveyor to work normally without having to hold the camera steady. The Axion and Telios enable a live feed to be viewed and recorded directly through a

suitable tablet, which in this incidence was an iPad Pro. The Sionyx Aurora IR camera provide a wide angled view which is also recorded and fixed throughout the survey.

3.5 ***Figure 2: Surveyor and Camera Positions***



Survey Type

3.6 Emergence survey is undertaken to observe bats emerging from roost. In addition to observation, night vision and thermal imaging equipment was used to ensure that features can be effectively viewed in the dark and that any footage can be reviewed following the survey.

4.0 RESULTS

4.1 This section provides an account of the results from the surveys carried out and from the records search. These findings will inform any further recommendations outlined within this report.

Survey Meta Data

4.2 ***Table 1: Timings and Weather Conditions***

Date	Sunset/ Sunrise	Survey Start and End	Temp	Rain	Wind Speed (Beaufort Scale) and direction
8th May 2025	20:35	20:05 to 22:05	13°C	None	SW 2
29th May 2025	21:05	20:40 to 22:40	14°C	None	SW 1

4.3 Two evening emergence surveys were undertaken at the L-shaped barn at Holders, Henfield. The first was carried out on 8th May 2025, with sunset at 20:35. The survey commenced at 20:05 and concluded at 22:05 in dry conditions with a temperature of 13°C and a south-westerly breeze (Beaufort scale 2). The second survey was conducted on 29th May 2025, with sunset at 21:05. The survey ran from 20:40 to 22:40, again in dry weather with a slightly warmer temperature of 14°C and a lighter south-westerly wind (Beaufort scale 1). Both surveys were undertaken in suitable weather conditions for detecting bat activity.

Bat Roost Potential Survey

4.4 The building comprised a single-storey, L-shaped former stable block located adjacent to a mature broadleaved woodland edge. It was constructed with horizontal timber weatherboarding on all elevations and supported a clay-tiled pitched roof with gabled ends. The roofing was composed of traditional clay tiles, several of which appeared weathered, uneven, or slightly displaced along the ridge and eaves. These minor imperfections created crevices and small gaps that could provide access for crevice-dwelling bat species. The timber cladding, although largely intact, exhibited minor shrinkage and surface separation, particularly around window frames, doors, and junctions with the roofline, further enhancing its suitability for bat access.

4.5 Externally, the building exhibited features commonly associated with bat roosting potential, including raised tiles, unsealed eaves, and vertical timber joints. A loft hatch gave access to an extensive roof void, which extended the full length of the ridge and remained largely undisturbed. The roof void was tall and narrow with exposed wooden rafters and no lining or insulation between the timbers. The roof covering was lined with traditional black bitumen-based sarking felt, a material known to be more

suitable for bats compared to modern breathable membranes which can pose an entanglement risk. The internal void was dry and stable, with low light levels and a relatively constant microclimate, all of which are favourable to bat roosting.

4.6 No direct evidence of bats (e.g. droppings, staining, feeding remains) was recorded during the internal inspection; however, the presence of suitable crevice features, roof void space, low disturbance, and appropriate microclimatic conditions led to the assessment of the building as having ***moderate potential*** to support roosting bats, in accordance with BCT (2023) survey guidelines.

4.7 An active swift (*Apus apus*) nest was observed within the loft space, affixed to the underside of the roof lining. The nest was constructed from mud and plant material, typical of the species, and there was clear evidence of recent or ongoing use. Swifts are a migratory Schedule 1 species under the Wildlife and Countryside Act 1981 (as amended), and their active nests are legally protected from disturbance.

Bat Survey Results

4.8 ***Table 2: 8th May 2025 – 21:17 Emergence Survey***

Time	Species	Passes	Activity and Location
20:59	C.pip	1	Emergence from Gable End of the Eastern Apex. From between the roof edge, halfway down the left side. See Plate 5 Section 7.
21:22	Noc	1	Commuting pass overhead.
21:34 – 21:48	C.pip	Multiple	Foraging along the treeline to the west, around the adjacent building.
22:01	Noc	1	Commuting pass overhead.

C.pip = Common Pipistrelle (*Pipistrellus pipistrellus*)
Noc = Noctule (*Nyctalus noctula*)

4.9 An emergence survey undertaken at the stable building recorded a confirmed emergence of a common pipistrelle at 20:59 from the gable end of the eastern apex, specifically from between the roof edge halfway down the left side. This is considered direct evidence of a day roost feature within the roof structure (see Plate 5, Section 7). Additional common pipistrelle activity was recorded between 21:34 and 21:48, with multiple foraging passes observed along the western treeline and around the adjacent building, indicating the surrounding habitat supported feeding activity. Two noctule passes were detected overhead at 21:22 and 22:01, consistent with high-level commuting behaviour.

4.10 ***Table 3: 29th May 2025 - Emergence Survey***

Time	Species	Passes	Activity and Location
21:17	C.pip	1	Emergence from Gable End of the Eastern Apex. Emergence from Gable End of the Eastern Apex. From between the roof edge, halfway down the left side. See Plate 5 Section 7.
21:22	Noc	1	Commuting pass overhead
21:38 – 21:56	C.pip	Multiple	Foraging along the treeline to the west, around the adjacent building.

C.pip = Common Pipistrelle (*Pipistrellus pipistrellus*)
Noc = Noctule (*Nyctalus noctula*)

4.11 A single common pipistrelle was observed emerging at 21:17 from the gable end of the eastern apex of the stable building, specifically from between the roof edge halfway down the left side (see Plate 5, Section 7). This confirmed the presence of an active day roost within the roof structure. Additional common pipistrelle activity was recorded between 21:38 and 21:56, with multiple foraging passes observed along the treeline to the west and around the adjacent building, indicating that the surrounding habitat supported feeding activity. A single noctule pass was recorded overhead at 21:22, consistent with high-level commuting behaviour. These findings confirm the presence of a small day roost within the building and demonstrate the use of the wider site by both common pipistrelle and noctule for foraging and commuting.

5.0 DISCUSSION AND RECOMMENDATION

5.1 A single common pipistrelle bat was observed emerging from the gable end of the roof on the eastern side of the building. Bat activity within the wider site was relatively low, with common pipistrelle foraging activity to the west, close to the main building and around the gardens. Very occasional noctule passes were recorded, likely to be commuting overhead.

Roost Categorisation

5.2 The maximum count of bats emerging from this building was one common pipistrelle. No maternity roosts were identified. This roost can be considered as of low conservation value, locally, regionally and nationally.

Impact Assessment

5.3 Any works to the building that would impact the location where bats have been found to be roosting would constitute either a disturbance or destruction of the roost present here.

5.4 Without mitigation, any impact is likely to be permanent and would result in both the disturbance and likely destruction of the soprano pipistrelle roost. These carried out without licence would constitute an offence under the Wildlife and Countryside Act (1981).

Mitigation Licencing

5.5 A mitigation licence is required as it is predicted that there will be disturbance of the roost as a result of the works a mitigation licence is required from Natural England. The licence would require the production of a method statement of works, which would include measures such as hand removal of the roof tiles and any cladding under the supervision of a licenced ecological consultant and the use of bitumen felt, rather than a semi-breathable membrane, under any tiles, so to avoid causing injury or death to bats through entanglement.

5.6 Two bat boxes would be installed prior to the works. These could be installed in the adjacent trees and could consist of types that would be specific to the bat species present. For common pipistrelle, these would take the form of a Schwegler 2F general purpose bat box installed within adjacent trees. Should any bats be found during the works, then they can be relocated to these.

5.7 Replacement roost locations would then be installed into the newly developed areas. These would utilise bat access tiles/ bricks, the type and design would be suitable to the design of any newly constructed location.

5.8 To account for the foraging activity of bat species within the local area, any lighting installed at the property will conform to the specifications which are outlined within BCT Guidance Note (2023b). This will reduce any light pollution would have on nocturnal activity of fauna, namely bat species, some of which are extremely sensitive to light pollution. Light spill into adjacent habitats will be reduced and avoided by the following:

- *All luminaries will lack UV elements; metal halide and fluorescent sources will be avoided,*
- *A warm white light spectrum on external lighting will be adopted (<2700kelvin) to reduce the blue light component,*
- *LED luminaries will be used where a sharp cut off is required to avoid light spill into adjacent habitat,*
- *External luminaries will feature wavelengths higher that 550nm to avoid the component of light most disturbing to bats,*
- *Column heights of external lighting will be limited,*
- *Luminaries will be mounted on the horizontal plane, with no upwards tilt,*
- *Security lighting will be set on motion sensors and on short timers (<1min).*

Swift Nests

5.9 Swifts are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird, or to damage, destroy or obstruct access to their nests while in use or being built. As swifts are colonial nesters that return to the same sites each year, the protection of active nest sites is particularly important. Although swifts are not currently listed as a Schedule 1 species, they are a priority species under the UK Biodiversity Action Plan and are included on the Red List of Birds of Conservation Concern due to significant national population declines. Therefore, any proposed works that may affect existing swift nesting sites must be timed outside the breeding season (typically May to August) and should include appropriate mitigation or compensation, such as the retention of nest access or installation of swift nest boxes to maintain ecological continuity.

5.10 To compensate for the loss of one existing swift nest, it is recommended that one integrated or external swift boxes be installed on or near the original structure (at a 1:2 ratio), ideally as close to the previous nesting location as possible. Swift boxes should be installed as high as possible from ground level in a shaded or sheltered location, away from direct sunlight and prevailing wind. The boxes must have a clear flight path with no obstructions such as wires, pipes, or vegetation in front of the entrance

Summary

5.11 The building contained a single roost for a commonly occurring bat species that were likely to be a day/ transitional roost, It also contained an active swift nest. In the absence of any licencing and mitigation,

disturbance, damage and destruction of this roost and swift nest would constitute a crime under the Wildlife and Countryside Act 1981. The recommendations outlined within this report, enable the works to proceed under licence, which in this case, the recommended licence would be the Low Impact Class Licence for the bat roost. Avoidance measures and replacement have been recommended for the swift nest.

6.0 REFERENCES

BCT (2022) Interim Guidance: Use of night vision aids for bat emergence surveys and further comment on dawn surveys

BCT (2023a) Bat Survey Guidelines for Professional Ecologist 4th Edition – Good Practice Guidelines

BCT (2023b) Bats and Artificial Lighting in the UK – Bats and the Built Environment Series.

English Nature (2004) Bat Mitigation Guidelines IN13.6

HMSO (1981) The Wildlife and Countryside Act 1981 (as amended) HMSO, London.

HMSO (2017). The Conservation (Natural Habitats, &c). (As amended) Regulations 2017

Mitchell-Jones, T & McLeish, A.P (2004) Bat Workers Manual, Joint Nature Conservation Committee

Russ, J (2021) Bat Calls of Britain and Europe – A Guide to Species Identification. Pelagic Publishing

7.0 CAMERA VIEWS AND PHOTOS OF BUILDING

Plate 1: IR 1 - Start View	*Plate 2: IR 1- End View*

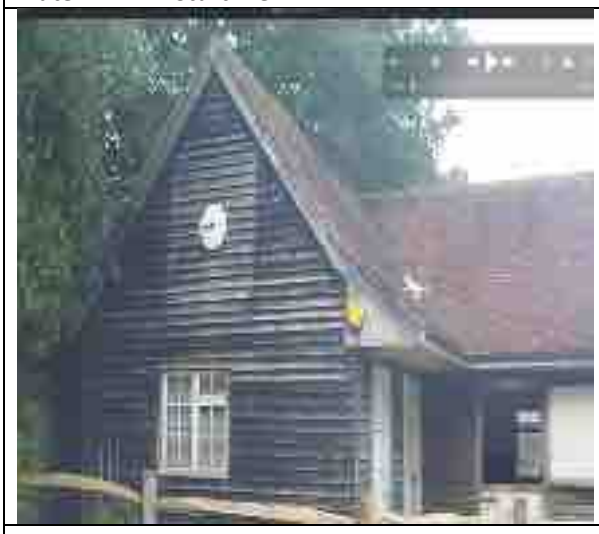



Plate 3: IR 2- Start View	*Plate 4: IR 2 - End View*

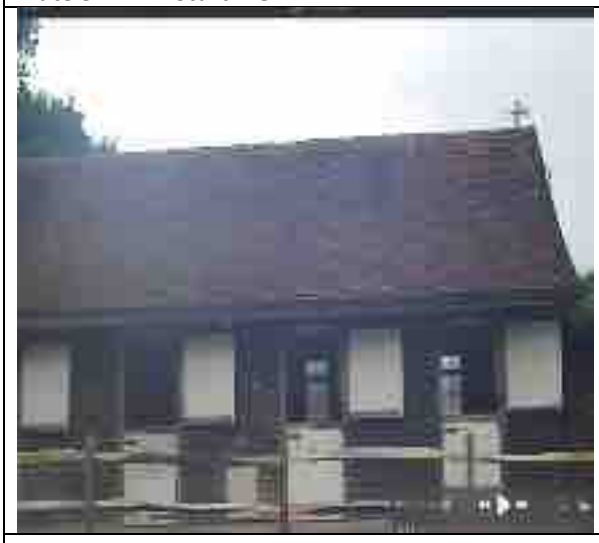
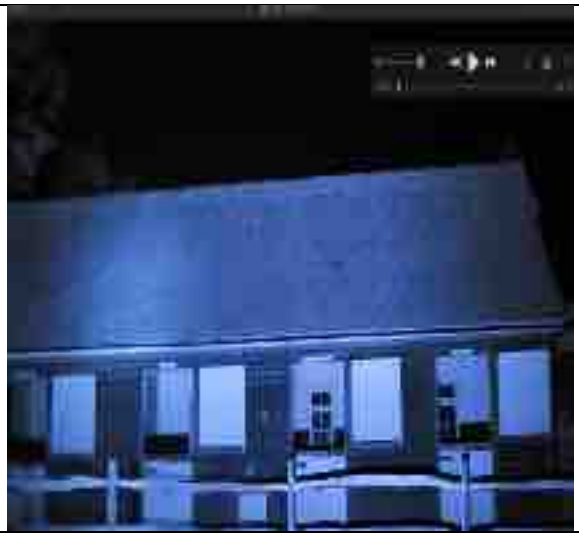

	

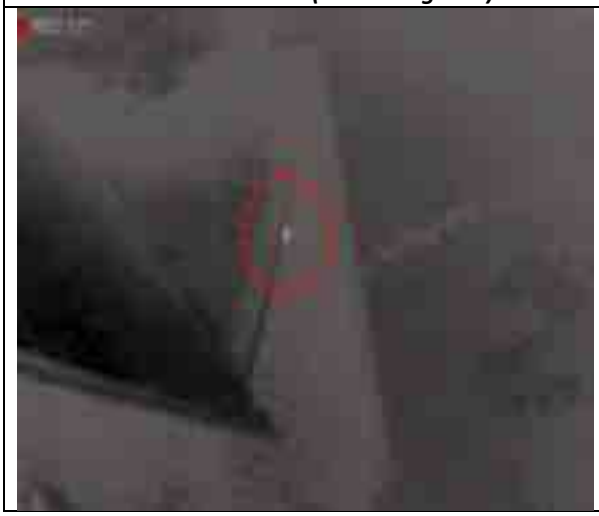
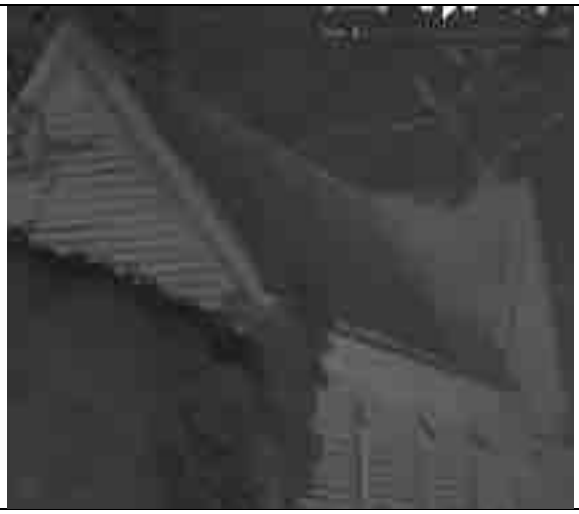
Plate 5: Thermal 1 – View (Bat Emergence)	*Plate 6: Thermal 2 - View*
	

Plate 7: Roof Void on North- South Axis

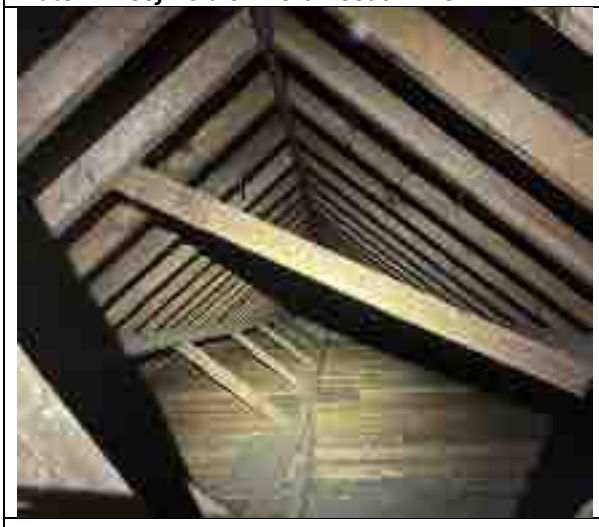


Plate 8: Eastern Gable End

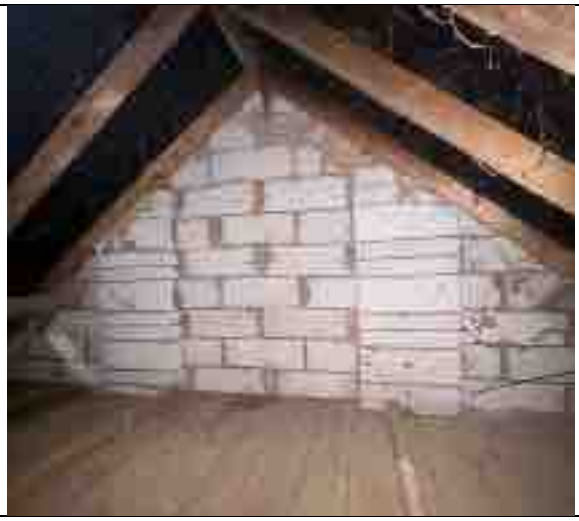


Plate 9: Swift Nest

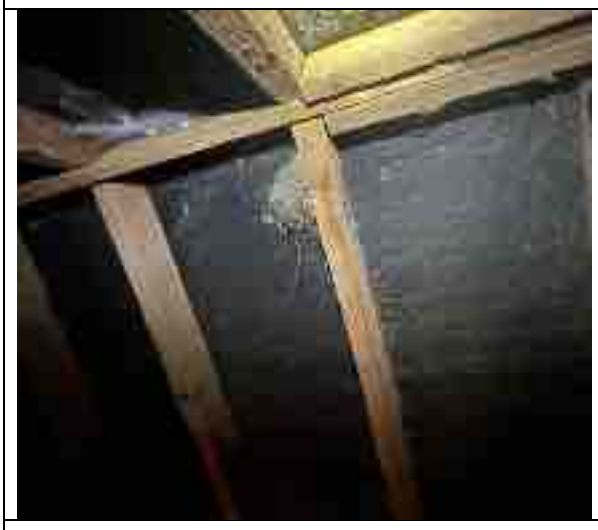


Plate 10: Open Loft Hatch at Void on East-West Axis

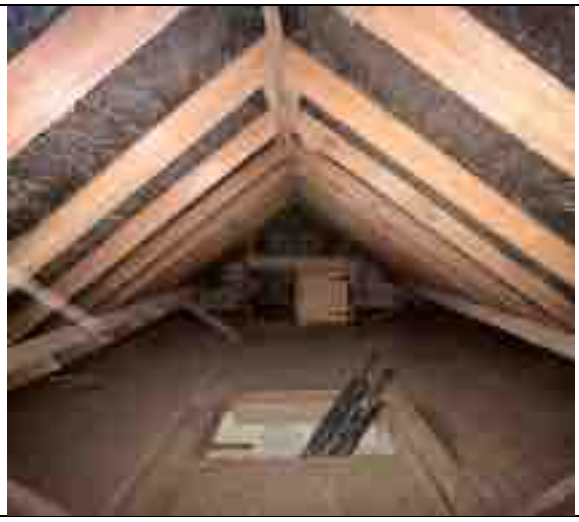


Plate 11: Western View

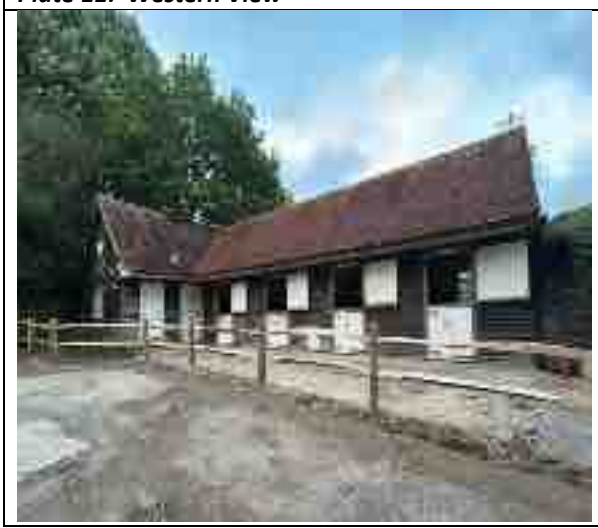
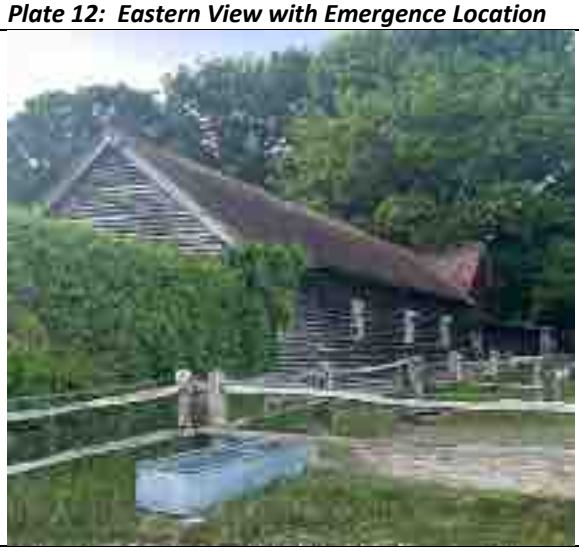


Plate 12: Eastern View with Emergence Location



8.0 SUMMARY MAP OF BAT ACTIVITY