Bat Survey Report

The Cottage, Church Road, Old Newton, Suffolk

Simonne Graells, The Cottage, Church St, Old Newton

November 2022 20206 R1 v2

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Executive Summary

- In May 2022, Huckle Ecology was commissioned by Simonne Graells to undertake a bat activity survey of The Cottage, Old Newton, Suffolk. The surveys were undertaken to inform a planning application for the re-roofing and repairs to structural roof timbers of the property, which is a Grade II listed building.
- The surveys included a Preliminary Roost Assessment undertaken in May 2022 that evaluated the building as providing High potential suitability to support bat roosting habitat; in accordance with recommended BCT survey guidelines (Collins, 2016), it was recommended that a minimum of three bat activity surveys be undertaken during the bat activity season (May – September).
- This report presents the results of bat surveys undertaken between May and August 2022, and which included three bat activity emergence surveys undertaken on 17th of June, 21st July and 26th August 2022.
- The bat activity surveys confirmed the presence of roosting bats with two roosting locations identified on the north elevation. All bats that echolocated on emergence from the roosting locations were identified as Common pipistrelle, which were only recorded emerging from roosts during the June and August emergence surveys. The roosting locations identified on north elevation were considered to represent two Common pipistrelle day roosts.
- A European Protected Species mitigation licence (EPSL) application will be submitted to Natural England to undertake any disturbance to, damage of or destruction of bat roosts in The Cottage, which has been identified as having roosting bats present. Due to the low numbers of bats present within the Cottage it is considered that the proposed development could proceed under a Bat Low Impact Class Licence (BLICL) from Natural England.
- During the bat activity surveys, bat activity was recorded by three experienced surveyors from three locations to the west, north east and south east of the building.
- Mitigation and compensation measures set out by best practice guidance (Bat Mitigation Guidelines, 2004) for bats are included within the proposals. The recommendations will ensure that the conservation status of the species present will not change and will also enhance the value of the site to bats as a result of the proposed development.
- Appropriate mitigation measures have been specified including recommendations for lighting specifications and for the use of Type 1F Bitumen Felt as a roof lining.

1 Introduction

1.1 Terms of Reference

1.1.1 In May 2022, Huckle Ecology was commissioned by Simonne Graells to undertake a Bat Survey of The Cottage, Church St, Old Newton, Suffolk. The Cottage is a residential, period property, occupied by the client, and the surveys were commissioned to inform a planning application to Mid Suffolk Council for the re-roofing of the main part of the property.

1.1.2 The Cottage comprises a 16th Century, Grade II listed property with a pitched pan-tile roof; the application is for listed building consent to undertake structural work to the roof, including the re-roofing of the tiles and repair to structural timbers etc. It is understood that as many of the existing tiles will be re-used as possible.

1.2 Site Description

1.2.1 The Cottage is located on Church Street, Old Newton, and is located to the southeast of St Mary's Church, Old Newton, with the graveyard located adjacent to the west of the garden of the property. The Cottage is set within mature gardens with a small front garden approx. 5-10m wide between the house and Church Road, comprising a lawn, perennial flower beds and mature ornamental shrubs, with a low hedge along the road frontage. To the rear is a large lawn that extends northwards, with mature shrubs and trees along the boundaries. To the north of the property is a detached outbuilding/garage that is distant from the cottage and not included within the proposed application.

1.2.2 The Site Location is presented in Figure 1 with the Property Site Plan presented in Figure 2 below.

1.3 Proposed Development

1.3.1 The proposed development is for the re-roofing of the Cottage, and repair and replacement of structural timbers, which has the potential to destroy or modify potential bat roosts if they were present.

1.4 Aim of this Report

1.4.1 This report presents the results of bat surveys undertaken at The Cottage between May and August 2022

1.4.2 The scope of the ecological and protected species surveys undertaken was determined from a habitat suitability assessment for bats (as reported below) and an evaluation of the potential to support other protected species, undertaken in May 2022. This survey confirmed that no semi-natural habitats would be affected by the proposed works, with access and materials being stored within existing driveways or lawned areas of garden adjacent to the Cottage. Although there is a pond approximately 80m northwest of the Cottage, this pond was located on the opposite side of St Mary's Church and given that there were no excavations required for the proposed works, no surveys great crested newts were considered necessary and were therefore scoped out of the assessment.

1.4.3 It was concluded that the only protected species likely to be an ecological constraint were roosting bats and breeding birds, using the building structure for breeding.

Figure 1 Location Plan Showing location of The Cottage, Old Newton

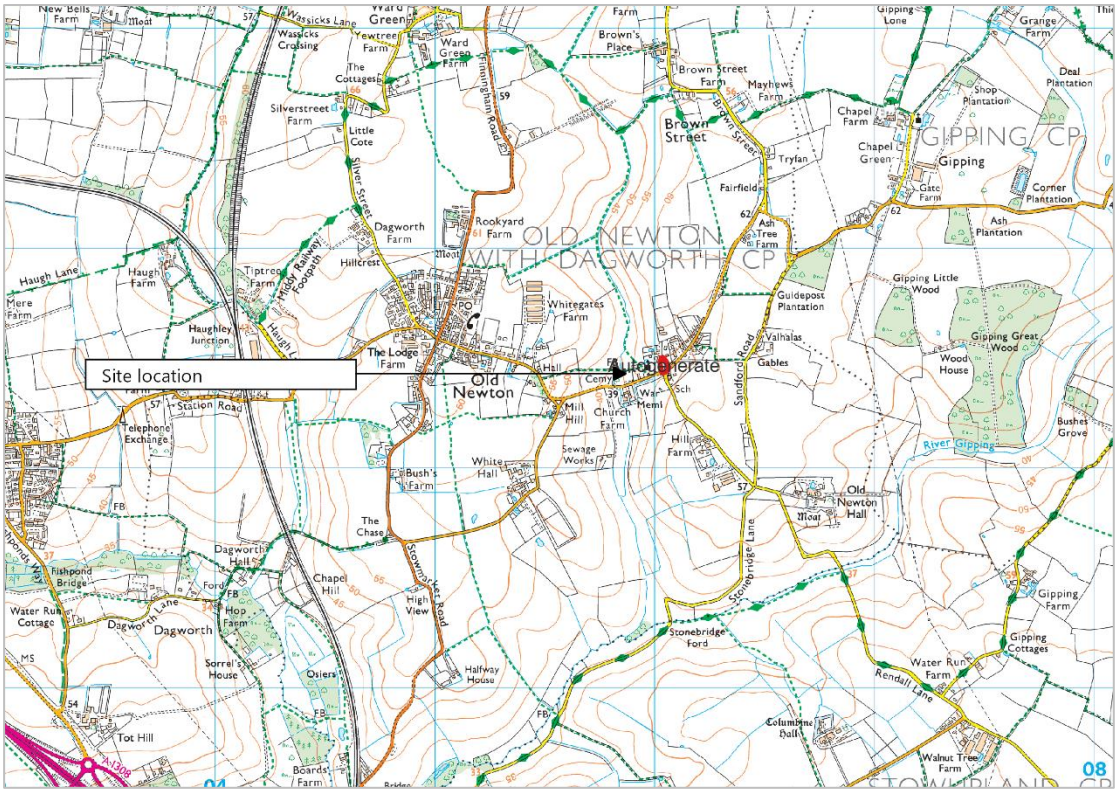


Figure 2 Existing Site Location Plan

2 Desk Study

2.1 Designated Sites

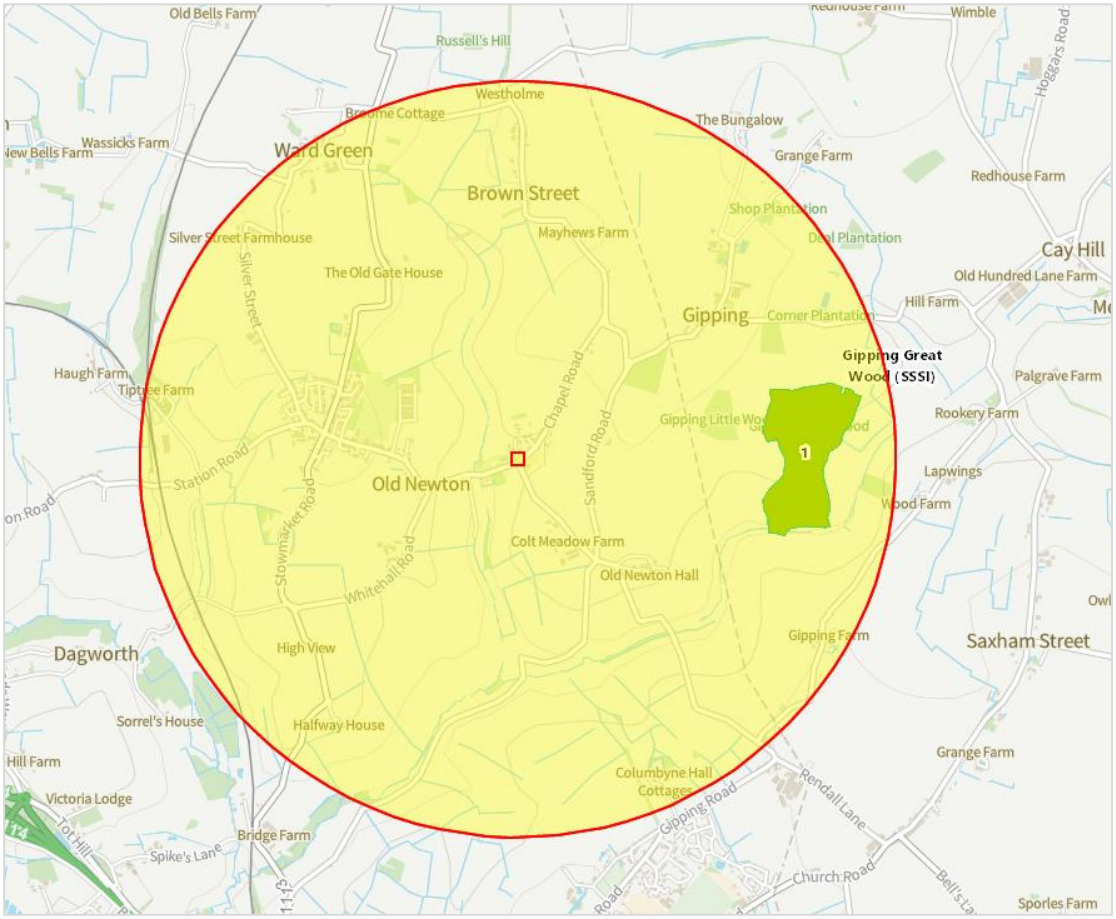
2.1.1 A search of online data resources determined that there was one statutory designated site located within 2km of the Site, Gipping Great Wood Site of Special Scientific Interest (SSSI) located approx. 1.3km east

of the Site at its closest point. The SSSI citation[1] for Gipping Great Wood is an ancient coppice-with-standards wood on a plateau site situated close to the headwaters of the River Gipping. The has a complex mosaic of stand types present with pedunculate oak, hornbeam, Hazel, and ash in the canopy. The ground flora is characteristic of an ancient woodland site on slightly calcareous boulder clay and includes two uncommon species, Thin-spiked Wood Sedge *Carex strigosa* and Oxlip *Primula elatior*.

2.1.2 A review of the Mid Suffolk District Council Index of County Wildlife Sites (CWS) confirmed that the site itself was not included within a CWS and that there were three CWS within 2km of the Site:

- Guidepost Plantation - TM 066629: located ca. 700m northeast of the Site at its closest point;
- Gipping Little Wood - TM 072627: located ca. 1km east of the Site at its closest point: and
- Ash Plantation - TM 074631: located ca. 1.4 km east north east of the Site.

Figure 3 Location of Statutory Designated Sites Within 2km search area



2.2 Bat Records

2.2.1 A search for records of bats within a 2-kilometre radius was submitted to Suffolk Biodiversity Information Service in October 2022; the search returned all bat records held within an 2km search radius of The Cottage, Old Newton.

2.2.2 The data search returned 18 records of bats from within the 2km search area.

2.2.3 The closest bat records returned were from bats recorded at Old Newton with Dagworth Churchyard,

[1] 1004186 (naturalengland.org.uk)

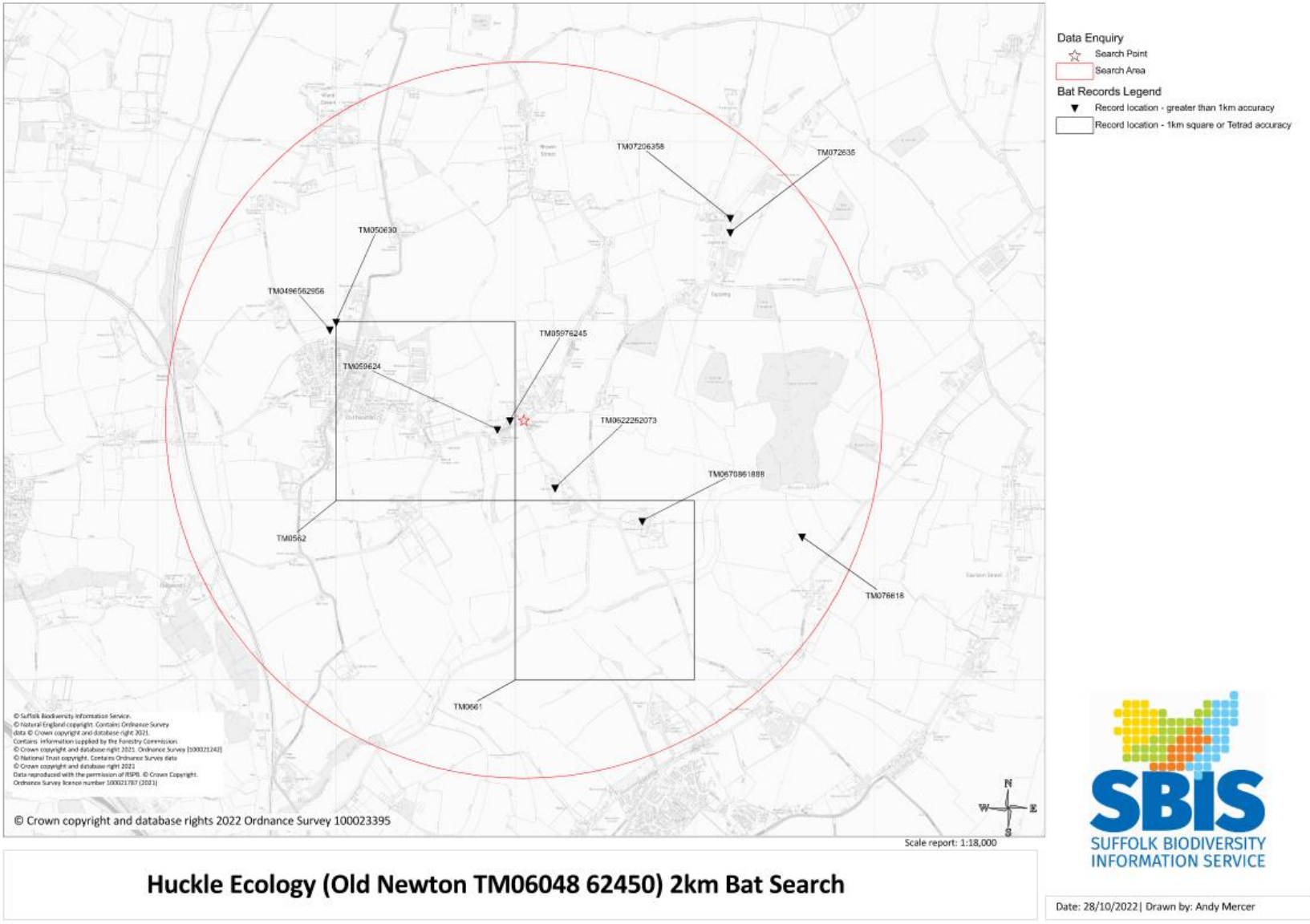
with records from 2015 of Pipistrelle droppings (not identified to species). In addition, records were returned from Hill Farm, Old Newton, of Common pipistrelle 'recorded exiting building during emergence survey' in 2020 and of soprano pipistrelle foraging during an emergence survey in 2020.

2.2.4 The bat records returned by the SBIS data search are provided at Appendix 3.

2.2.5 The bat species recorded included the following:

- Common pipistrelle
- Soprano pipistrelle
- Brown long-eared bat
- Noctule
- Serotine;
- Pipistrelle bats (not identified to species level); and
- Bats – general record

Figure 4 Bat records returned from data search undertaken by SBIS.



3 Preliminary Roost Assessment

3.1 Methodology

3.1.1 A Site Visit was undertaken on 27th May 2022 to provide a bat preliminary roost assessment (PRA) of The Cottage and to confirm the scope of further surveys that would be required to accompany the planning application, in line with best practice guidance on bat surveys (Collins, 2016).

3.1.2 The May 2022 building inspection survey was undertaken by Dr Jon Huckle, an experienced professional ecologist with over 25 years of postgraduate experience and over 20 years operating as an ecological consultant. He has undertaken numerous bat surveys, including building inspections, bat activity transects, emergence and return roost surveys and has managed ecological input to numerous ecology chapters of Environmental Statements. He has provided evidence as an expert witness on bat ecology at several planning inquiries.

3.1.3 The preliminary roost assessment comprised a detailed inspection of the exterior and interior of the buildings to look for features that bats could use for entry/exit and to search for signs of bats, in accordance with methodological guidance produced by the Bat Conservation Trust (Collins, 2016). The objective of the survey was to determine the actual or potential presence of bats and to identify potential emergence points to focus on during emergence surveys.

3.1.4 For each building or tree, the preliminary roost assessment assigns a category to each structure according to its potential for supporting bat roosts using the criteria detailed in the BCT survey guidelines (Collins, 2016) and summarised in Table 1 below.

Table 1 Guidelines for assessing the potential suitability of proposed development sites for bats, taken from Collins 2016.

Suitability	Description of roosting habitats	Description of commuting and foraging habitat
Negligible	Negligible habitat features onsite likely to be used by roosting bats.	Negligible habitat features on- site likely to be used by commuting or foraging bats.
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.) A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree 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 (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.

Suitability	Description of roosting habitats	Description of commuting and foraging habitat
High	A structure or tree 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.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Site is close to and connected to known roosts.

Bird Survey

3.1.5 During the building inspections, signs of any old or active bird nests were recorded.

Survey Limitations

3.1.6 The PRA was undertaken at the end of May 2022 in good weather conditions. This is an optimal time of year to detect recent signs of bat activity, and there were no limitations in the ability to check external features of the building; all external features were checked as far as was reasonably possible, but it is recognised that there were some areas where bats could roost that could not be checked thoroughly, or it was just not safe to access.

3.1.7 The building was accessible internally via a loft hatch adjacent to the west end of the loft, adjacent to the chimney/ While this hatch provided access to the loft, it was not considered safe to enter the loft, and thus the internal loft inspection was limited to the areas around the loft hatch and areas that could be viewed using a torch and close focusing binoculars. This limitation has been reflected in the conclusion of the PRA below.

3.2 Results of Preliminary Roost Assessment

3.2.1 As noted above, The Cottage is Grade II listed Cottage, dating from the early 16th Century. The Listing for The Cottage[2] states:

> *House, early C16. One storey and attics. A three-cell open hall house. Timber-framed and plastered. Pantiled roof, once thatched; two raking casement dormers. An external end chimney of red brick at either gable. C19/C20 small-pane casements. Boarded C20 entrance door with open gabled porch on posts. The 2-bay hall has one of a pair of 4-centred arched service- room doorways exposed. The service cell to right has lodged unchamfered floor joists. Heavy studwork, rather widely spaced. The open truss in the hall has a pair of posts with archbrace evidence; the uncambered tiebeam has been moved slightly for a chimney (later to be removed). Smoke encrustation at roof level: the roof was rebuilt in C17/C18 but reusing blackened rafters.*

External Inspection

3.2.2 The roof was inspected from ground level using close-focusing binoculars. The roof was confirmed to comprise clay pan tiles and ridge tiles. The tiles were generally intact with no missing tiles apparent on either the north or south elevation. However, it was noted that slightly displaced tiles were present on both elevations, which created potential access points for individual or small numbers of bats.

3.2.3 The ridge tiles were generally intact, but with missing mortar along the ridge creating potential roost

[2] THE COTTAGE, Old Newton with Dagworth - 1284890 | Historic England

features at several locations, particularly along the north elevation. A red-brick chimney was present at each end of the building, and there were two casement dormer windows on the south elevation and one similar dormer on the north elevation. The chimneys had an area of cement and lead cladding which could potentially support access points for bats.

3.2.4 On the north side of the Cottage, a single storey lean-to extension was present along approx. 755 of the elevation, with a perpendicular single-storey extension extending northwards into the garden. This single storey extension was of relatively recent construction (20th Century) and the roof was in excellent condition with intact mortaring along the ridge tiles and few potential roost features (PRFs).

3.2.5 The walls of the Cottage comprised plastered render that appeared in excellent condition with no apparent PRFS present around the windows or along the edge of the east and west gable walls. The walls extended up to the eaves on the north and south elevations where there was a timber fascia/soffit which appeared to be excellent condition.

3.2.6 The roof of The Cottage was the structural feature of the building with the greatest potential to support roosting bats, with PRFS associated with:

- Loose and raised tiles present in various locations on both the north and south elevation of the main roof;
- Cavities associated with cement and lead cladding on each chimney and mortar gaps on each chimney;
- Missing mortar on ridge tiles present along the roof apex

3.2.7 The presence of numerous PRFs associated with the loose/raised tiles, and raised cladding resulted in the conclusion that the roof was of **High** potential suitability as roosting habitat (Collins, 2016).

Internal Inspection

3.2.8 Access to the loft of the Cottage was via a small hatch adjacent to the Chimney stack at the west end of the house. Due to the unstable condition of the timbers and boards, it was not considered safe to enter the roof and thus access was restricted to viewing the roof from the west end of the loft. The loft space was reduced in height to approx. 1m from board to apex, due to the floor boards. The roof timbers were in poor condition with many blackened beams, indicative of the historic fire damage noted in the listed building description above.

3.2.9 The chimney at the west end was of red-brick construction and had been re-pointed in the past, but included several mortar holes, and there were visible light gaps at the apex indicative of access points that bats could potentially use.

3.2.10 The roof was lined with old bitumen felt that appeared to have been patched in places.

3.2.11 It was concluded that bats could potentially access the loft space via loose roof and ridge tiles and at the chimneys at each end, and that although there was a moderate level of cobwebbing there was potential for bats to fly within the loft.

3.2.12 No signs of bats, such as bat droppings or urine staining were observed, although the limited access meant that only the west end of the loft could be inspected.

3.2.13 Consequently, it was concluded likely that the chimney and roof apex provided PRFs for bats and that bats could potentially access the interior of the loft via the gaps in the roof tiles and through gaps under the lead and cement flashing on the chimneys.

Evidence of Bird Nesting

3.2.14 No birds nest were noted during the internal inspection of the roof, but it was considered likely that small passerine birds, including house sparrow, starling and wren would be able to access the roof space and thus could potentially nest under the eaves or along the ridge space.

3.3 Conclusion of Preliminary Roost Assessment

3.3.1 Based on the findings of the external and internal inspection, the presence of PRFs was confirmed, primarily associated with the clay roof and ridge tiles, and internally with the roof timbers and brick work on the internal chimney stacks.

3.3.2 Consequently, it was concluded that the Cottage was consistent with a structure with **High** potential suitability for bat roosting habitat and had "…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".

3.3.3 Therefore it was recommended that three bat activity habitats should be undertaken to provide confidence in a negative result, or, if bats were recorded to provide sufficient information to characterise the nature of a bat roost (in terms of the species present, the numbers of bats, and the type of roost present).

Photo 1 North elevation facing garden to rear of Cottage

Photo 2 North west elevation (rear) showing single storey extension

Photo 3 North east elevation (rear) showing modern extension and dormer window

Photo 4 South elevation (front) showing south west corner and chimney

Photo 5 South elevation (front) showing south east corner and chimney

Photo 6 Interior of loft – west chimney stack showing brick work and light gaps at edge of roof

Photo 7 Interior of loft – west end showing fire damaged roof timbers

Photo 8 Interior of loft – west end showing felt lining and damaged roof timbers

4 Bat Activity Surveys

4.1 Bat Activity Survey Methodology

4.1.1 Between May and June 2022, three bat activity surveys were undertaken, consistent with the level of survey effort recommended to provide confidence in a negative result for a building or structure evaluated as providing **High** potential suitability for roosting habitat (Collins, 2016).

4.1.2 Observations were made from outside, from three vantage point locations:

- VP1 – South of the building viewing the whole of the south elevation;
- VP2 – North East of the building, viewing the north east side of the north elevation and the east side of the single storey extension;
- VP3 – North West of the building, viewing the north west side of the north elevation and the west side of the single storey extension.

4.1.3 These positions were selected to provide as much coverage of the roof and building features most likely to support bat roosts or where bats may access the building.

4.1.4 The dusk surveys commenced fifteen minutes before sunset until ninety minutes after sunset, by which time any bats present were expected to have emerged (Collins, 2016).

4.1.5 All emergence surveys were undertaken by Jon Huckle, assisted by a team of experienced surveyors comprising Terry Stopher and John Worthington-Hill.

4.1.6 Bat activity was surveyed using full spectrum handheld bat detectors: an Elekon Batlogger M2, an Anabat Scout detector and an EMTouch Pro attached to a tablet or smartphone. Time-expanded (x10) recordings were later analysed using computer software (e.g. BatExplorer or Kaleidoscope).

4.1.7 Night Vision Aids (NVAs) were used alongside each surveyor comprising two Sony video camcorders and one Nightfox Red IR recorder with infrared illuminators lights to provide additional infrared lighting, covering areas where bats were considered most likely to emerge.

4.1.8 The bat surveys were conducted during the bat activity season (May to September) using the correct methodology as per The Bat Conservation Trust Bat Survey - Good Practice Guidelines (Collins, 2016).

Survey Limitations

4.1.9 The bat emergence surveys were undertaken in optimal weather conditions for bat activity surveys, in dry weather and at appropriate temperatures. The vantage points were selected to provide coverage of the building elevations that could be easily viewed and accessed.

4.2 Bat Activity Survey Results

Activity Survey 1 – Dusk Emergence Survey – 17th of June 2022

4.2.1 Weather conditions were optimal for bat activity surveys, although hot following day time temperatures of above 30°C:

- Air temperature – 24°C (start) – 21°C (end)

- Wind – Beaufort scale 1-2 (light air / breeze)
- Precipitation – none
- Cloud – none – clear sky (0/8 oktas)

4.2.2 The survey commenced at 21.10 with sunset scheduled for 21.20.

4.2.3 Observations were made from outside, from positions to the south, northeast, and northwest of the building providing good visual coverage of the entire roof and elevations of the building.

Summary of Survey on 17.06.2022

4.2.4 Following a review of the bat calls recorded during the survey and the infrared video coverage from each vantage point, it was confirmed that one Common pipistrelle *Pipistrellus pipistrellus* was observed to emerge at 21.45 from a roof tile adjacent to the east chimney, approx. 2 tiles down from the ridge.

4.2.5 Bats were recorded continuously foraging in the back garden for much of the survey, and less frequently in the front garden, where it was noted that there was frequent illumination from cars approaching from the south, as well as illumination from houses to the southeast of the site.

4.2.6 Almost all activity was identified as Common pipistrelle with single calls recorded from soprano pipistrelle and serotine bats.

4.2.7 In summary, three species were recorded with one Common pipistrelle observed emerging from a roof tile on the north elevation of the Cottage.

Activity Survey 2 – Dusk Emergence Survey – 21st of July 2022

4.2.8 Weather conditions were optimal for bat activity surveys:

- Air temperature – 20°C (start) - 18°C (end)
- Wind – Beaufort scale 0 (still), gusting to 3 gentle breeze
- Precipitation – none
- Mostly overcast with scattered clear sky (7/8 oktas)

4.2.9 The survey commenced at 20.55 with sunset scheduled for 21:05.

4.2.10 Observations were made from outside, from positions to the south, northeast, and northwest of the building providing good visual coverage of the entire roof and elevations of the building.

Summary of Survey on 21.07.2022

4.2.11 In summary, no bats were recorded at any of the vantage points and no bats emerged from the building during the survey.

4.2.12 The first bat was recorded at 21.16, observed arriving from the east and passing around the back of the cottage and being recorded at both VP2 and VP3. The bat was recorded approx. 10 mins after sunset and is likely to have recently emerged from a roost, possibly from a residential property to the east of south east of the Site.

4.2.13 Bats were recorded foraging almost continuously in the back garden and far less frequently in the front. Activity in the back garden appeared to comprise 1 to 3 individual bats foraging, with bats tending to be located along the north west area of the garden adjacent to the churchyard.

4.2.14 Bat activity was almost exclusively of Common pipistrelle bats with just 2x faint passes of soprano pipistrelle recorded.

4.2.15 In summary, two species were recorded with no bats observed emerging from potential roost sites.

Activity Survey 3 – Dusk Emergence Survey – 26th of August 2022

4.2.16 Weather conditions were optimal for bat activity surveys:

- Air temperature – 20°C (start) - 18°C (end)
- Wind – Beaufort scale 0 (still)
- Precipitation – none
- Overcast (8/8 oktas)

4.2.17 The survey commenced at 19.50 with sunset scheduled for 19.58.

4.2.18 Observations were made from outside, from positions to the south, northeast, and northwest of the building providing good visual coverage of the entire roof and elevations of the building.

Summary of Survey on 21.07.2022

4.2.19 In summary, two Common pipistrelle bats were observed emerging from ridge tiles in the same approximate area of the roof, approx. mid-way along the roof. It is possible that the bats emerged from the same tile or from an area with several loose tiles in close proximity. The two bats were recorded emerging at 20.12 and 20.21, and the first bat was observed immediately foraging close to the building.

4.2.20 No other bats were recorded emerging from the building during the survey or observed re-entering roosts or engaging in swarming activity.

4.2.21 Bat activity was consistent with that recorded on previous surveys, with several individual bats foraging in the back garden and with frequent foraging around the western edge of the garden and over the churchyard to the west of the site.

4.3 Conclusion of Bat Activity Surveys

4.3.1 In summary, bats were observed emerging from loose roof tiles on two of the three surveys, with all bats emerging from the north elevation. A single Common pipistrelle emerged from a tile adjacent to the east chimney during the June emergence survey, approx. 1 tile down from the ridge. Two Common pipistrelle bats were observed emerging from ridge tiles in the same approximate location mid-way along the roof on the August survey.

4.3.2 The bat emergence locations are shown on Figure 5 below.

Figure 5 Emergence locations from combined surveys – north elevation. Blue – June 2022 survey; Purple – August 2022 survey. (cpip – Common pipistrelle)

Foraging and Commuting Habitat

4.3.3 Foraging and commuting habitats for bats in the local area are numerous with mature tree and shrub canopy to the north, east and west of the Cottage, and the churchyard to the west providing direct connectivity with a likely roost site. Bats were observed arriving from the west, and it was considered likely that the church supports a roost, most likely of Common pipistrelle bats given the predominance of this species in the assemblage recorded during the surveys.

4.3.4 Bats were frequently observed foraging around the Cottage and in the garden to the north and less frequently to the south of the cottage. Bats emerging from the building were noted often to fly in a west or north west direction towards the mature tree canopy and churchyard.

5 Discussion and Recommendations

5.1 Evaluation

Bats

5.1.1 The records search information returned relatively few records of bat roosts with a brown long-eared bat roost recorded int eh church roof of Gipping Church, and roosts of Pipistrelle and brown long-eared bat recorded from Old Newton Hall Barn from 2006. The records included the presence of Pipistrelle species droppings from St Mary's church adjacent to the Site, dating from 2015, although the droppings were not identified to species level.

5.1.2 During the initial building inspection in May 2022, potential roost features were identified within the Cottage, associated with the clay roof and ridge tiles and the brick chimneys at either end of the building. The internal inspection confirmed that potential roosting habitat was present within the loft.

5.1.3 No droppings or other signs of bats were noted during the inspection and no bats were seen roosting inside the loft during the PRA inspection.

5.1.4 Activity surveys on the 17th of June, 21st July and 26th August confirmed the presence of roosting bats with two roosting locations identified on the north elevation. All bats that echolocated on emergence from the roosting locations were identified as Common pipistrelle. Bats were only recorded emerging from roosts during the June and August emergence surveys.

5.1.5 The roosting locations identified on north elevation were considered to represent two Common pipistrelle day roosts. A day roost is defined as "A place where individual bats, or small groups of males, rest or shelter in the day, but are rarely found by night in the summer" (Collins, 2016).

5.1.6 Other bat species recorded during the surveys but not roosting in the building included Soprano pipistrelle, Noctule bat, Serotine, Natterer's bat and Brown long-eared bat, all recorded very infrequently with no more than one record per survey.

5.1.7 A European Protected Species mitigation licence (EPSL) application will be submitted to Natural England to undertake any disturbance to, damage of or destruction of bat roosts in The Cottage, which has been identified as having roosting bats present.

5.1.8 Due to the low numbers of bats present within the Cottage it is considered that the proposed development could proceed under a Bat Low Impact Class Licence (BLICL) from Natural England. This licence permits the disturbance and capture of bats and/or damage/destruction of roost/s of no more than three low conservation significance roosts (i.e. feeding roosts, day, night and transitional / occasional roosts), affecting no more than three of the more common species of bats present in small numbers. As both common pipistrelle and brown long-eared bats are included in the list of common species of bats to which this Class Licence applies, it can be used in this case.

5.2 Potential Impacts

5.2.1 To be considered the same roost, the locations need to have the same functional and qualitative characteristics, be used by the same species for the same purpose (e.g., day roosting) and be within the same building / structure. If the physical characteristics are different (e.g., one roost is in external crevices in the wall and the other is in the roof void against internal timbers) then they should be considered different roosts – because they offer bats different roosting opportunities. If the physical characteristics are similar and provide the same functional characteristics, used by the same species for the same purpose (e.g., transitional roost) but with different individual roosting locations within the overall building / structure, that could be considered one transitional roost. If two species are using an area that provides the same characteristics, for the same function, it is still two roosts – as they are two species.

5.2.2 Without any mitigation, the renovation of the roof of The Cottage will result in the loss of legally protected bat roosts. It is likely to disturb common pipistrelles if they are present when work is carried out. Disturbance, damage, and destruction of roosts is most likely during the removal of roof tiles, and whilst repairing structural timbers.

5.2.3 Without any mitigation, removal of roof and ridge tiles on the northern elevation will lead to the loss of:

- a day roost of 2 common pipistrelles under ridge tiles in the north elevation
- a day roost of 1 soprano pipistrelles under roof tiles adjacent to the eastern chimney in the north elevation

5.2.4 The CIEEM EcIA guidelines (2018) note that 'various approaches can be adopted for defining local

importance, including assessment within a district, borough or parish context or within other locally defined areas.'

5.2.5 Day roosts of common pipistrelle that will be impacted during the development will result in a negative impact at a local level.

5.3 Mitigation and Compensation Measures

5.3.1 For the Cottage, which has been identified as having roosting bats present, works to undertake disturbance or modification to, or damage or destruction of bat roosts will be carried out under a European Protected Species Licence (EPSL) from Natural England. As noted above, due to the low numbers of bats recorded roosting, and that one species of the more common species was recorded roosting (Common pipistrelle), the most appropriate approach to undertaking the works would be by registering the site using the BLICL scheme.

5.3.2 The details of the mitigation measures required to avoid or reduce the risk of disturbing individual bats would be determined by the appointed bat consultant under the term the BLICL registration scheme or under a Natural England EPS licence should that be deemed necessary.

5.3.3 The emergence of a peak count of two common pipistrelle bats confirms that it supports a low conservation significance roost of this species. Mitigation for the loss of these roosts is recommended to provide a 'like for like' replacement of the above roost opportunities, to include the following measures:

- If possible, retention of a loft space within the Cottage, with access provided through appropriate access points and tiles;
- Provision of 3x 'raised ridge' bat access tiles along the ridge, creating potential roosting locations for bats to replace lost cavities;
- Provision of 3x raised pan tiles, creating access points to provide replacement roost spaces under tiles – cavities can be created when installing new tiles by using wedges or battens to raise individual tiles, or via the use of specific tiles designed to create bat access points (see below)
- Provision of 2x no. bat box suitable for use by pipistrelle bats to be erected in trees adjacent to the Cottage;
- No increase in upward pointing artificial lighting around The Cottage, subject to no overriding constraints requiring lighting.

Use of Safe Roofing Membranes

5.3.4 It is recommended that the re-roofing works be undertaken using traditional type 1F bitumen felting to minimise the risk of bat mortality arising from bat becoming entangled within the fibres of Non-Bitumen Coated Roofing Membrane (NBCRM).

5.3.5 However, Natural England has recently revised its advice regarding the use of roofing membranes stating on the www.gov.uk website at the time writing (November 2022) that when applying for a bat mitigation licence[3]:

[3] Bats: apply for a mitigation licence (A13) - GOV.UK (www.gov.uk)

"You must include a certificate that proves the roofing membrane has passed a 'snagging propensity test' if you're using a non-bitumen coated roofing membrane.

A snagging propensity test checks that the membrane can stand the repeated snagging actions of roosting bats. To pass, a membrane must show no change in the average number of loops per cm2 as rotations are increased from 0 to 1000.

You do not need a certificate for bitumen 1F felt that has a non-woven, short fibre construction."

5.3.6 Guidance provided by the Bat Conservation Trust on the issue of Non-Bitumen Coated Roofing Membranes (NBCRMs) (Non-Bitumen Coated Roofing Membranes (formerly BRMs) - Buildings, planning and development - Bat Conservation Trust (bats.org.uk)) states that as of September 2022:

"…Currently the steering group is only aware of one product that has passed the snagging propensity test completed by an independent laboratory. This is TLX 'Bat Safe'. For technical questions covering any of the below areas in relation to TLX 'Bat Safe' please contact TLX Insulation on 01204 674 730 or email sales@tlxinsulation.co.uk

TLX can provide free technical support from their head office in Bolton on:

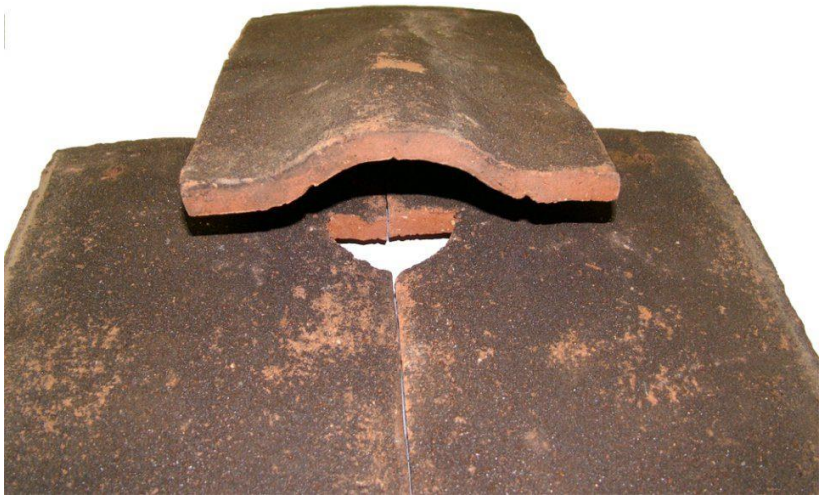
- *How TLX Batsafe should be installed*
- *Building regulations advise and how they apply*
- *Condensation risk calculations*
- *Access to CAD drawings*
- *Energy payback calculations*

Advice can also be sought from building control or the relevant manufacturer of any membrane that has passed the snagging propensity test."

Use of Bat Access Roof Tiles

5.3.7 Where roof tiles are being replaced bat access tiles can be used to create roosting spaces for one or two bats, these tiles are made to order to match the materials of the new roof tiles (Photo 8) https://www.nhbs.com/bat-access-tile-set?bkfno=187127 .

Photo 9 – example of bat access roof tile



5.3.8 Timings of works are recommended to avoid the bat maternity season (May – August) in locations where these types of roosts have been found. However, for day roosts timings of works are not so restrictive unless they are in proximity to maternity roosts. It is good practice to avoid undertaking works during the hibernation season (roughly December to February inclusive), as at this time of year bats are

generally hibernating or in torpor, and there is a high risk of mortality if they are disturbed. Therefore, works will be timed in order to take advantage of milder weather conditions after several nights where temperatures are no lower than 8 degrees Celsius. The ideal times of year to undertake building works is either Spring or Autumn, where bats will be moving between hibernation and mating areas or vice versa.

5.3.9 No works to amend the lighting are proposed but it is recommended that all temporary and permanent lighting will be in-line with lighting guidelines (Bats and Lighting in the UK, Bat Conservation Trust 2018). This lighting should be of low level, be on downward deflectors and ideally be on PIR sensors. Using LED directional lighting can also be a way of minimizing the light spill affecting the adjacent habitat. No up-lighting should be used. This will ensure that any roosting, commuting and foraging resources that the bats are likely to be using is maintained. This includes any lighting near buildings and trees where mitigation and compensations features have been installed.

Birds

5.3.10 As breeding birds are statutorily protected, to avoid impacts on breeding birds and committing an offence, removal of any structures should be undertaken outside of the breeding bird season (March – July inclusive). Should this not be possible then all areas identified for clearance must be checked for nests by an ecologist prior to clearance. If any nests are identified, then this area should be clearly delineated, and no works allowed until after chicks have fledged and the nest has been abandoned.

6 References

Bat Conservation Trust. (May 2022). *Interim Guidance Notes: Use of Night Vision Aids for bat emergence surveys and further comment on dawn surveys.* BCT.

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

MHCLG. (2019). *National Planning Policy Framework.* London, UK.: Minitry of Housing, Communities and Local Government.

Appendices

Appendix 1 – Summary of Legislation - Bats

This section provides a brief guide to legislation and planning policy, and it is recommended that the full text of policy and legislation is consulted for the correct legal wording.

All bat species benefit from statutory protection provided by the 'Habitats Regulations' and the Wildlife and Countryside Act, which have been enshrined within national and local planning policy throughout England and Wales.

All bat species are included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under Regulation 43 it is an offence to:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb bats including:
- impairing their ability to survive, breed or rear young;
- impairing their ability to hibernate or migrate;
- Significantly affect the local distribution or abundance of that species
- Damage or destroy a breeding site or resting place of a bat;
- Possess, control, transport, sell or exchange any live or dead bat, or any part or thing derived from a bat.

Bats are listed on Schedule 5 of the Wildlife & Countryside Act 1981, as amended, and as such are protected under Section 9 of the Act, which applies to all stages in their life cycle and makes it an offence to:

- intentionally kill, injure or take bats. [Section 9(1)]
- to possess or control a bat, live or dead or any part or thing derived from them. [Section 9(2)]
- to intentionally or recklessly damage, destroy, or obstruct access to any structure or place which bats use for shelter or protection. It is also an offence to intentionally disturb them while occupying a structure or place which it uses for that purpose. [Section 9(4)]
- to sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead bat or any part or thing derived from them. [It is also an offence to publish or cause to be published any advertisement likely to be understood as conveying that bats, or parts or derived things of them are bought, sold or are intended to be]. [Section 9(5)]

Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.

This legislation provides defences so that necessary operations may be carried out in places used by bats, provided the appropriate Statutory Nature Conservation Organisation (in England this is Natural England) is notified and allowed a reasonable time to advise on whether the proposed operation should be carried out and, if so, the approach to be used. The UK is a signatory to the Agreement on the Conservation of Bats in Europe, set up under the Bonn Convention. The Fundamental Obligations

of Article III of this Agreement require the protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats.

Paragraph 98 of Circular 06/2005 states that 'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

Section 9 of the National Planning Policy Framework 2019 (NPPF) (MHCLG, 2019) states that 'the planning system should contribute to and enhance the natural and local environment by …. minimising impacts on biodiversity and providing net gains in biodiversity where possible.'

Exemptions can be granted from the protection afforded to bats under the Habitat Regulations, by means of an EPS (European Protected Species) Habitats Regulations licence obtained from Natural England.

An 'EPS Habitats Regulations Licence' could be required for:

- Demolition of a building known to be used by bats prior to development of a site
- Conversion of barns or other buildings to be used by bats
- Removal of trees known be used by bats as well as tree pruning
- Significant alterations to roof voids known to be used by bats
- Road building or widening
- Bridge strengthening

There are three tests, which must be satisfied before a licence can be issued to permit otherwise prohibited acts;

- Regulation 55(2)(e), for the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment; or
- Regulation 55(9)(a) and there is no satisfactory alternative; and
- Regulation 55(9)(b) that the action authorised will not be detrimental to the maintenance of the species concerned at favourable conservation status in their natural range.

A European Protected Species Licence is required before the commencement of any development that might impact on bats and their roosts.

Appendix 2 - Results of Bat Activity Surveys

Bat Emergence Survey 1 – 17.06.2022

Table 2 Results of Activity Survey 1 - Emergence Survey on 17.06.2022 (Sunset at 21.20hrs)

Time	Species	Observation
Vantage Point 1 (JH) – S of Cottage viewing south elevation– no emergence 33 bat passess of Common pipistrelle, 1x pass of soprano pipistrelle..		
21.10		Survey start
21.50	Common pipistrelle	1x pass; first bat recorded – flew from northwest direction around west chimney and over roof to north
22.01`	Common pipistrelle	3x passes, singel bat flying around house and then off to south
22.02	Common pipistrelle	2x passes, flew from west direction
22.06	Common pipistrelle	1x pass, brief pass, heard but not seen
22.09	Common pipistrelle	1x pass, singel bat flew from south and off to west
22.10-22.15	Common pipistrelle	5x passes, individual bats flying around house
22.15-22.20	Common pipistrelle	4x passes, 1 bat flew over house from north and then off towards trees to SE of house. South elevation regularly illuminated by car headlights
22.20-22.25	Common pipistrelle	1x pass, brief call, heard but not seen
22.25-22.30	Common pipistrelle	6x passes, individual bat flying around house
22.30-22.35	-	No bats recorded
22.35-22.40	Common pipistrelle	3x passes, foraging and commuting bats
22.40-22.45	Common pipistrelle	3x passes, brief calls of individual bats
22.45-22.50	Common pipistrelle	3x passes
	Soprano pipistrelle	1x pass
22.50		Survey end
	-	
Vantage Point 2 (TS)- NE of Building viewing east end of north elevation and singel storey extension - 1x Common pipistrelle emergence 106x passes of Common pipistrelle, and 1x pass of serotine bat.		
21.10		Survey start
21.45	Common pipistrelle	1x Emergence from roof tile adjacent to chimney at East end of main roof. Confirmed from video
		3x passes
21.46	Common pipistrelle	1 pass of bat that emerged abvoe
21.48	Common pipistrelle	1x bat forgaing around cottage
21.49	Common pipistrelle	2x passes of individual bat
21.50	Common pipistrelle	5x passes, foraging in back gardens
21.51	Common pipistrelle	4x passes foraging in back garden – 2x bats seen
21.52	Common pipistrelle	3x passes, foraging in back garden
21.53-54q	Common pipistrelle	7x passes – 2x bats foraging
21.55-22.00	Common pipistrelle	20x passes continuous foraging
22.00-22.10	Common pipistrelle	28x passes contnuous foraging – 1-2 bats
22.10-22.20	Common pipistrelle	10x passes, foraging in back garden,
22.20-22.30	Common pipistrelle	8x passes, foraging in back garden and around house
22.30-22.40	Common pipistrelle	7x passes, regular foraging activity
	Serotine	1x pass,brief pass of bat passing through garden
22.40-22.50	Common pipistrelle	5x passes, occasional foraging
	-	Survey ended at 22.50

Time	Species	Observation
Vantage Point 3 (JHW)- NW of Building viewing west end of north elevation - no emergence		
82x passes of Common pipistrelle, 1x pass of Serotine bat.		
21.10		Survey start
21.45	Common pipistrelle	1st bat recorded, 3x passes
21.50	Common pipistrelle	4x passes foraging in garden close to house
21.51	Common pipistrelle	5x passes, 2xf bats
21.52-55	Common pipistrelle	14x passes, continuous foraging in back garden
21.55-22.00	Common pipistrelle	17x passes, continuous foraging in back garden – up to 4x bats present along west edge of garden
22.00-22.10	Common pipistrelle	16x passes, continuous foraging in back garden until 22.10
22.10-22.20	Brown long-eared bat	10x passes, foraging in back garden,
22.20-22.30	Common pipistrelle	7x passes, foraging in back garden and around house
22.30-22.40	Common pipistrelle	4x passes, regular foraging activity
	Serotine	1x pass,brief pass of bat passing through garden
22.40-22.50	Common pipistrelle	2x passes, occasional foraging
	-	Survey ended at 22.50

Bat Emergence Survey 2 – 21.07.2022

Table 3 Results of Activity Survey 1 - Emergence Survey on 21.07.2022 (Sunset at 21.05 hrs)

Time	Species	Observation
Vantage Point 1 (TS) – S of Cottage viewing south elevation– no emergence observed		
20.55		Survey start
21.33	Common pipistrelle	1x pass; first bat recorded – flew from west from direction of church.
21.37	Common pipistrelle	Passed in front of house
21.41	Common pipistrelle	several passes, foraging around house and through front garden
21.49	Common pipistrelle	2x Common pipistrelle bats passed in front of house, Foraging activity
21.50-53	Common pipistrelle	Regular foraging to west of house, adjacent to church graveyard
21.59	Common pipistrelle	Forgaing bat, to west of house, near church yard
22.02	Common pipistrelle	Forgaing bat, to west of house, near church yard
22.14	Common pipistrelle	1x pass, foraging in front of house
22.23	Common pipistrelle	1x pass, foraging in front of house
22.30		Survey end at 22.30
	-	
Vantage Point 2 (JH)- NE of Building viewing east end of north elevation and single storey extension - no emergence observed		
202x passes of Common pipistrelle, and 2x passes of soprano pipistrelle.		
20.55		Survey start
21.16	Common pipistrelle	1st bat recorded – flew from east of cottage and around side of building in front of VP. Did not emerge.
21.26	Common pipistrelle	8x passes. Foraging back garden
21.27	Common pipistrelle	9x passes. Foraging back garden
21.28	Common pipistrelle	7x passes – Foraging bat, all calls short and clipped, active behind VP to north and west of cottage
21.29	Common pipistrelle	12x passes – brief calls, from behind VP
21.30-35	Common pipistrelle	Continuous foraging of 1-3 bats in garden to west and north
21.35-40	Common pipistrelle	Continuous foraging of 1-3 bats in garden to west and north
21.40-21.50	Common pipistrelle	Regular foraging of bats appeareing to be looping around, possibly to and from and around church

Time	Species	Observation
21.50-22.00	Common pipistrelle	13x passes, foraging in back gardens
	Soprano pipistrelle	2x faint passes at 21.56
22.00-22.10	Common pipistrelle	3x passes occasional foraging
22.10-22.20	Common pipistrelle	9x passes, foraging in back garden,
22.20-22.30	Common pipistrelle	Regular foraging of bats in back garden and around house
22.30-22.40	Common pipistrelle	3x passes, occasional foraging activity
	-	Survey ended at 22.40
Vantage Point 3 (JHW)- NW of Building viewing west end of north elevation - no emergence 117 passes of Common pipistrelle		
20.55		Survey start
21.16	Common pipistrelle	1st bat recorded, 1x pass of bat flying across from east, past VP2
21.26	Common pipistrelle	4x passes foraging in garden close to house. Bat arrived from west and commenced foraging in garden
21.27	Common pipistrelle	4x passes foraging in garden close to house
21.28	Common pipistrelle	5x passes foraging in garden close to house
21.29	Common pipistrelle	3x passes foraging in garden close to house
21.30	Common pipistrelle	3x passes foraging in garden close to house
21.30-21.42	Common pipistrelle	55x passes, continuous foraging in back garden
21.48-21.54	Common pipistrelle	13x passes, continuous foraging in back garden after 6 min lull
21.59-22.10	Common pipistrelle	6x passes. Occasional passes
22.10-22.20	Common pipistrelle	7x passes, occasional foraging
22.20-22.30	Common pipistrelle	19 Regukar foraging of bats in back garden
	-	Survey ended at 22.30

Bat Emergence Survey 3 – 26.08.2022

Table 4 Results of Activity Survey 1 - Emergence Survey on 26.08.2022 (Sunset at 19.58 hrs)

Time	Species	Observation
Vantage Point 1 (JWH) – S of Cottage viewing south elevation– no emergence observed		
19.55		Survey start
20.13	Common pipistrelle	1x pass; first bat recorded – faint pass
20.19	Common pipistrelle	1 pass commuting, from west direction, from churchyard
20.23	Common pipistrelle	1x pass, commuting from west from direction of churchyard
20.50	Common pipistrelle	1x bat flew along roof, just to south of ridge line, originating from direction of church.
20.50-21.00	Common pipistrelle	Regular foraging activity, inlcuidng foraging along road and aeound trees to east and west of VP.
21.00-21.10	Common pipistrelle	Regular foraging activity, inlcuidng foraging along road and aeound trees to east and west of VP
21.10-21.20	Common pipistrelle	Regular foraging activity, inlcuidng foraging along road and aeound trees to east and west of VP
21.20-21.30	Common pipistrelle	Regular foraging activity, inlcuidng foraging along road and aeound trees to east and west of VP
21.30		Survey end
	-	
Vantage Point 2 (JH)- NE of Building viewing east end of north elevation and single storey extension 2x Common pipistrelle bats emerged from ridge tile near ridge approx half way along roof. 2x bats emerged from same location at separate times at 20.12 and 20.21.		

Time	Species	Observation
65x passes of Common pipistrelle, 2x passes of soprano pipistrelle, 1x pass of brown long-eared bat and 1x pass of Natterer's bat.		
19.50		Survey start
20.10	Common pipistrelle	1st bat recorded – quiet call – not seen but prob from behind VP. Not seen on video footage. Did not emerge.
20.11	Common pipistrelle	2x passes. Foraging on west side of garden, prob from direction of church. Did not emerge
20.12	**Common pipistrelle**	**1x bat Emerged from roof tile near ridge.** **5x passes of foraging bat in garden**
20.13	Common pipistrelle	7x passes – Foraging bat, all calls short and clipped, active behind VP to north and west of cottage
20.14	Common pipistrelle	7x passes – Foraging bat
20.15	Common pipistrelle	5x passes. Continuous foraging in garden to west and north
20.16-20.20	Common pipistrelle	16x passes. Regular foraging in garden
20.21	**Common pipistrelle**	**Emerged from roof tile in approx same location as earlier bat. Bat flew off to North west, towads churchyard.**
20.22	Common pipistrelle	1x pass
20.34-20.35	Common pipistrelle	10x passes – flurry of foraging activity after lull
20.39	Common pipistrelle	2x passes occasional foraging
20.40-20.50	Common pipistrelle	4x passes. Occasional foraging I garden
20.50-21.00	Common pipistrelle	1x pass – low activity
21.00-21.10	Common pipistrelle	2x passes – low activity
21.10-21.20	Natterers bat	Faint pass recorded at 21.12
	Brown long-eared bat	Faint pass recorded at 21.14
21.20-21.30	Soprano pipistrelle	Single call at 21.26
21.30-21.35	Common pipistrelle	Single pass at 21.34
	-	Survey ended at 21.35
Vantage Point 3 (TS)- NW of Building viewing west end of north elevation - no emergence		
102 passes of Common pipistrelle; 1 pass of noctule		
19.50		Survey start
20.10	Common pipistrelle	1st bat recorded, 1x brief pass, heard but not seen
20.11	Common pipistrelle	2x passes. Did not emerge
20.12	**Common pipistrelle**	**1x bat seen to emerge from from tile near ridge and continued to forage around trees to west of cottage.**
20.13	Common pipistrelle	7x passes foraging in garden close to house.
20.14	Common pipistrelle	4x passes foraging in garden close to house
20.15	Common pipistrelle	3x passes foraging in garden close to house
20.15-20.20	Common pipistrelle	20x passes foraging in garden close to house
20.20-20.30	Common pipistrelle	7x passes foraging in garden close to house
20.30-20.40	Common pipistrelle	17x passes, continuous foraging in back garden and seen over churchyard to west of garden
20.40-20.50	Common pipistrelle	20x passes, continuous foraging in back garden
20.50-21.00	Common pipistrelle	16x passes. Regular foraging over garden and churchyard
21.00-21.10	Common pipistrelle	2x passes, occasional foraging
21.10-21.20	-	No activity recorded
21.20-21.30	Common pipistrelle	2x passes
	Noctule	!x pass recorded at 21.28
	-	Survey ended at 21.30

Appendix 3 Bat Records Provided by Data Search from Suffolk Biodiversity Information Service

Common Name	Latin Name	Location	Site_detail	Grid_Ref	Year	Obs_Comment
Pipistrelle	Pipistrellus pipistrellus	Old Newton with Dagworth	Hill Farm, Old Newton	TM0622262073	2020	Recorded exiting building during emergence survey
Soprano Pipistrelle	Pipistrellus pygmaeus	Old Newton with Dagworth	Hill Farm, Old Newton	TM0622262073	2020	Recorded foraging during emergence survey
Noctule Bat	Nyctalus noctula	Old Newton with Dagworth	Finningham Road, Old Newton, Suffolk	TM0496562956	2018	Transect survey
Pipistrelle	Pipistrellus pipistrellus	Old Newton with Dagworth	Finningham Road, Old Newton, Suffolk	TM0496562956	2018	Static detector
Serotine	Eptesicus serotinus	Old Newton with Dagworth	Finningham Road, Old Newton, Suffolk	TM0496562956	2018	Static detector
Brown Long-eared Bat	Plecotus auritus	Gipping Churchyard	Gipping church	TM07206358	2016	Roost in church roof
Brown Long-eared Bat	Plecotus auritus	Gipping Churchyard		TM072635	2016	Close visual identification
Pipistrelle	Pipistrellus pipistrellus	Gipping Churchyard		TM072635	2016	By droppings
Pipistrelle Bat species	Pipistrellus	Gipping Churchyard	Gipping church	TM07206358	2016	Droppings
Pipistrelle	Pipistrellus pipistrellus	Old Newton Churchyard		TM059624	2015	By droppings
Pipistrelle Bat species	Pipistrellus	Old Newton Churchyard	Old Newton with Dagworth Church	TM05976245	2015	By droppings
Bat	Chiroptera	Old Newton with Dagworth	Rookyard Farm	TM050630	2014	
Brown Long-eared Bat	Plecotus auritus	Old Newton with Dagworth	old newton hall, stow market, Suffolk, IP14 4PL	TM0670861888	2014	flying in barn and roosting in rafter
Pipistrelle	Pipistrellus pipistrellus	Old Newton with Dagworth	Old Newton	TM0562	2014	Injured & released
Pipistrelle	Pipistrellus pipistrellus	Old Newton with Dagworth	old newton hall, stow market, Suffolk, IP14 4PL	TM0670861888	2014	flying in and out of barn and foraging
Pipistrelle Bat species	Pipistrellus	Stowupland		TM0661	2014	Injured & released
Brown Long-eared Bat	Plecotus auritus	Old Newton with Dagworth	Old Newton Hall Barn, Old Newton	TM076618	2006	Roost
Pipistrelle	Pipistrellus pipistrellus	Old Newton with Dagworth	Old Newton Hall Barn, Old Newton	TM076618	2006	Roost