



Bat Report 2021

The Cottage, Shripney Road
Bognor Regis, West Sussex

Contents

1.0 INTRODUCTION	3
BACKGROUND	3
SITE CONTEXT AND STATUS.....	3
PREVIOUS SURVEYS 2016-2018.....	4
LEGISLATION	5
2.0 METHODOLOGY	6
LIMITATIONS	7
3.0 RESULTS	8
4.0 DISCUSSION	10
RECOMMENDATIONS AND ENHANCEMENTS.....	12
5.0 CONCLUSION	14
6.0 REFERENCES.....	15

LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species maybe recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

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

1.0 Introduction

Background

- 1.1 The Ecology Partnership was commissioned by Intercare Developments to undertake update bat surveys at The Cottage, Shripney Road, Bognor Regis, West Sussex, PO22 9PA. This was following an updated Preliminary Ecological Appraisal undertaken in 2021, where further survey work for roosting bats were recommended. The results and conclusions of these surveys are documented within this report.
- 1.2 This report presents the results of The Ecology Partnership's emergence surveys conducted on site in July, August and September 2021, and how the results may affect the proposed development.

Site Context and Status

- 1.3 The site is located on land at The Cottage on Shripney Road in Bognor Regis, West Sussex (SU 93834 02327). The site covers approximately 0.65ha and includes a house and garden with a glasshouse and a boundary of trees and hedgerows. The site is directly adjacent to a public house and hotel. The site is surrounded by a mosaic of agricultural fields and medium-density housing. There is one statutory designation, a Local Nature Reserve (LNR) within 2km of the site.
- 1.4 The aerial photograph below (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.



Figure 1: Approximate location of the red-line boundary (Taken from Google Earth, June 2021)

Description of Proposed Development

- 1.5 The proposed development involves an application for the removal of all existing buildings and necessary trees on site, for the construction of a new large building to be split into flats with associated access, parking and landscaping. The final layout is yet to be determined.

Previous surveys 2016-2018

2016

- 1.6 Multiple surveys have been undertaken at the site since 2016. A preliminary ecological appraisal was first undertaken at the site in 2016, identifying two buildings (the cottage and one outbuilding, building 3) and five trees with bat potential (Figure 2). As such, two bat surveys were undertaken during September 2016, one dusk and one dawn.
- 1.7 No bats were identified as using trees 1-5 or building 3 during these surveys but one common pipistrelle (*Pipistrellus pipistrellus*) emerged from the cottage during the dusk survey on 19th September. This was from tiles on the southern elevation of the cottage, close to the eastern gable end which was lined internally by wooden sarking.

2017

- 1.8 Two additional bat surveys were undertaken between May and June in 2017, with no bats recorded roosting in building 3, the cottage or trees 1, 2, 4 or 5. Tree 3 was understood to be retained so no surveys were undertaken on it in 2017. An Anabat express was also placed within the main loft space of the Cottage between 4th- 18th May 2017, with no bat calls recorded within the void.

2021

- 1.9 An update preliminary ecological appraisal was undertaken at the site in 2021. This identified building 3 as 'low' potential for roosting bats, the cottage as a previously confirmed roost, and trees on site ranging from 'low' to 'moderate' potential.
- 1.10 'Low' potential trees that are required to be removed for the proposed development are to be sensitively soft felled. Tree 3 however, a cedar of Lebanon which is due to be removed, was considered to have 'medium' potential to support roosting bats and as such, is subject to further surveys.

Legislation

- 1.11 Bats are covered by the following relevant legislation: the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010).
- 1.12 Under the WCA 1981 it is an offence to:
- intentionally, recklessly or deliberately disturb a roosting or hibernating bat i.e. disturbing it whilst it is occupying a structure or place used for shelter or protection)
 - intentionally or recklessly obstruct access to a roost (i.e. a structure or place used for shelter or protection).
- 1.13 Under the CHSR 2010 it is an offence to:
- deliberately capture (or take), injure or kill a bat

- intentionally, recklessly or deliberately disturb a bat, in particular (i) any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; (ii) any disturbance which is likely to impair their ability in the case of hibernating or migratory species, to hibernate or migrate; or (iii) any disturbance which is likely to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place (roost) of a bat.

2.0 Methodology

Bat Emergence Surveys

- 2.1 Following the Bat Conservation Trust guidelines (Collins 2016), the ‘low’ potential bat roost building (B3) required a single survey, the previously confirmed bat roost building (B1) required three surveys and the ‘moderate’ potential bat roost tree required two surveys. Two of the surveys occurred within the optimal time period between May and August, with one conducted in September, which is considered sub-optimal.
- 2.2 The aim of the surveys are to confirm the buildings and tree usage by bats, the type of roost, access/egress points and the numbers of bats present within the structures. The results of the surveys will inform the application for a Natural England licence to legalise the loss / disturbance to bat roosts on site as part of proposals and to inform appropriate mitigation.
- 2.3 Dusk emergence surveys commence at least 15 minutes before sunset until 1.5 hours after sunset, and dawn survey commence 2 hours prior to sunrise and finish 15 minutes after sunrise, during which time, bats are identified and recorded. Bat surveys are required to be undertaken during suitable weather conditions, when conditions are relatively dry and mild with little/no wind. The approximate location of the surveyors is shown in Figure 2 below.
- 2.4 The surveyors were Ecologist Aimee Littlechild BSc (Hons) and assistant ecologist Digby Hayden BSc (Hons), with infra-red cameras additionally used on site. The surveyors were

ecologists with extensive experience in conducting bat surveys and were equipped with an Echometer Touch with an iPad and/or a Batlogger M.



Figure 2: Approximate location of the surveyors (blue stars) and infa-red cameras (blue arrows) across all three surveys (Taken from Google Earth on 21/09/21)

Limitations

- 2.5 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment.
- 2.6 During the first survey on 27th July 2021, the infa-red camera positioned on tree 3 failed part way through the survey. Two surveys were required for tree 3 and as such, the tree was additionally surveyed on the final survey date of 7th September 2021.

3.0 Results

- 3.1 The surveys identified a single common pipistrelle day roost within the cottage, comprising of a single individual. Roosts were confirmed as likely absent from building 3 and tree 3 on site, due to no emergence recorded across the surveys.

Dusk survey 27th July 2021

- 3.2 Sunset was at 20:56 and the weather was dry but overcast with 100% cloud cover, a light breeze and a temperature of 18°C dropping to 17°C by the end of the survey. During this survey two surveyors observed the cottage (B1), with an infra-red camera and anabat express set up to observe tree 3.
- 3.3 The first bat recorded was a soprano pipistrelle at 20:11 which came from the west and started foraging on site. Common pipistrelle was first recorded on site at 21:17 and there was near constant foraging in the gardens and along the boundary treelines from both species until the end of the survey at 22:26. From the surveyors observations a minimum of three individual bats were using the site.
- 3.4 A common pipistrelle emerged from the cottage at 21:19 and then foraged in the gardens. It emerged from a roof tile on the southern elevation, between the middle of the building and the eastern gable end. Part way through the survey, the camera on tree 3 failed. Footage was watched at a later date and no bats were seen to emerge for the duration of the video.
- 3.5 No other bats were observed to emerge or re-enter the cottage and no other bat species was recorded during the survey.

Dusk survey 17th August 2021

- 3.6 Sunset was at 20:18 and the weather was dry and clear with 10% cloud cover, a light breeze and a temperature of 18°C dropping to 17°C by the end of the survey. During this survey two surveyors observed the cottage (B1), with infra-red cameras and anabat express' set up to observe both the outbuilding (B3) and tree 3.

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- 3.7 General bat activity was similar to the first survey. The first bat recorded was a common pipistrelle at 20:18 which came from the west and started foraging over the site. There was intermittent foraging in the gardens and along the northern and western boundary treelines until the end of the survey.
- 3.8 A soprano pipistrelle was first recorded at 20:49, foraging on site. A single noctule bat (*Nyctalus noctula*) commuted over site at 21:03 and three brown long eared bat (*Plecotus auritus*) passes were recorded towards the end of the survey at 21:33.
- 3.9 No bats were observed to emerge or re-enter either the cottage, building 3 or tree 3 and no other bat species was recorded during the survey.

Dusk survey 7th September 2021

- 3.10 Sunset was at 19:36 and the weather was dry and clear with 0% cloud cover, a light breeze and a temperature of 25°C dropping to 22°C by the end of the survey. During this survey two surveyors observed the cottage (B1), with an infra-red camera and anabat express set up to observe tree 3.
- 3.11 General bat activity was similar to the first two surveys. The first bat recorded was a common pipistrelle at 19:50, commuting from the south-east towards the northern treeline, with a single noctule bat recorded commuting over site at 19:51. Soprano pipistrelle was first recorded foraging on site from 19:57 and like the previous surveys, there was intermittent foraging in the gardens and along the boundary treelines from both common and soprano pipistrelles until the end of the survey. Observations from surveyors suggest there was a minimum of two bats from each species using the site to forage in and around.
- 3.12 At 20:21 a noctule bat was recorded foraging briefly above the trees on the western boundary. A myotis bat (*Myotis sp.*) was also heard but not seen by the southern surveyor at 20:08 and 20:59.
- 3.13 No bats were observed to emerge or re-enter either the cottage or tree 3 and no other bat species was recorded during the survey.

4.0 Discussion

4.1 A single common pipistrelle was seen emerging from the cottage (B1) during the first survey on 27th July 2021 and similarly on 26th September 2016. No bats were recorded roosting within the outbuilding (B3) or tree 3 on site. Overall, it was considered that the day roost in the cottage is not of major significance and likely used as an opportunistic roost by a low number of a single common species.

4.2 As a bat roost has been identified within the cottage, all works to the building will need to occur under a Natural England low-impact licence. With regards to the licence, the following methods are considered to be implemented:

- Establish a Schwegler 2F General Purpose Bat Box or similar box on any of the retained mature trees on site, prior to any works as mitigation;
- Conduct a Tool Box Talk (TBT) to all team members on site with regards to the presence of bats using the building, bats legal protection, measures that will be undertaken to ensure that bats are not harmed, good working practises, licensable activities and what to do if a bat is found;
- Once this TBT has been conducted then works to the building can commence under direct supervision of a registered consultant (RC) / accredited agent;
- The tiles of the building will be hand removed. All tiles will be removed by hand individually, with the tiles being turned prior to stacking. If a bat is found, then the RC will gently move the bat to a bat box on site;
- Once the tiles of the building have been removed, other features such as the bitumen felt lining will be removed, again under direct supervision from the RC;
- Any soffit boards will finally be removed using hand tools and checked gently before final removal. All works to be supervised by the RC;
- Once the RC has rechecked the whole of the building and is happy that all licensable activities to the building have occurred (i.e. the features which bats are using for roosting have been removed), then the remaining works to the buildings can occur without further supervision;
- It is considered that this process is likely to take between 2 to 3 days.

Licence Application

- 4.3 The timing of the works with regards to the licence requirements is as follows:
- A licence application will be made following planning permission being granted;
 - Furthermore, any conditions which are pertinent to ecology will be discharged before the low impact bat licence will be applied for. An update survey must occur (walk over or internal survey) in the last 3 months prior to works;
 - One bat box is to be established on the mature trees on site;
 - Once the licence is issued (the licence should take 10 working days for issue), all licensable works can commence. All licensable works (removal of tiles etc) should take in the region of 2 or 3 days.
 - Works under a low impact licence have no seasonal restrictions.
- 3.14 As no bats were recorded emerging from the outbuilding (B3) during the surveys conducted in 2017 or 2021, no licence will be required for demolition. However, it is recommended that a sensitive demolition is undertaken as a precautionary approach, due to the building displaying suitable roosting features. It is recommended that the tiles of the building are removed by hand along with any other suitable features such as lead flashing and soffit boards, prior to full demolition. If a bat is recorded during this soft strip then, then works will need to stop immediately and a suitably qualified ecologist contacted for further advice.
- 3.15 As no bats were recorded emerging from tree 3 during the 2021 surveys, no licence will be required for felling. The additional trees identified as having 'low' bat roosting potential during the 2021 preliminary ecological appraisal must be soft felled in sections. If a roosting bat is found during this process, works should stop immediately and a suitably qualified ecologist contacted for further advice. As a precaution, it is recommended that tree 3 is also soft felled in sections.
- 3.16 It is expected that the bat box installed prior to works, as mitigation for the loss of the bat roost on the cottage as discussed above, will be retained for a minimum of five years.

Recommendations and Enhancements

- 4.4 Bats were recorded foraging within and around the site. Therefore, a sensitive lighting scheme is recommended for the whole of the site since any new lighting would contribute to a significant change in light levels compared with present conditions. Recommendations include:
- Installing lighting only if there is a significant need;
 - Using LED luminaries due to their lower intensity, sharp cut-off and good colour rendition – any lights with UV elements or metal halide lights should not be used;
 - Lights with peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone 2012);
 - Lights with an upward light ratio of 0% and good optical control;
 - Careful consideration of column height to avoid light spill;
 - Any external security lights should use motion-sensors and short (1-minute) timers;
 - Avoid putting lighting near treelines or hedgerows and angling light away from these linear features which are used by commuting and foraging bats;
 - Planting a barrier or using man-made features required within the scheme to form a barrier.
- 4.5 It is always recommended that where possible enhancements for wildlife are included within the new developments where possible.
- 4.6 In addition to the bat box installed as mitigation for the loss of a bat roost as discussed in the section above, further roost provisions can be made as enhancements. A bat tube can be installed within a south facing external wall of the new building(s) on site (Figure 3). This would provide a similar roosting feature within the new development, to replicate the small roost present on the cottage.

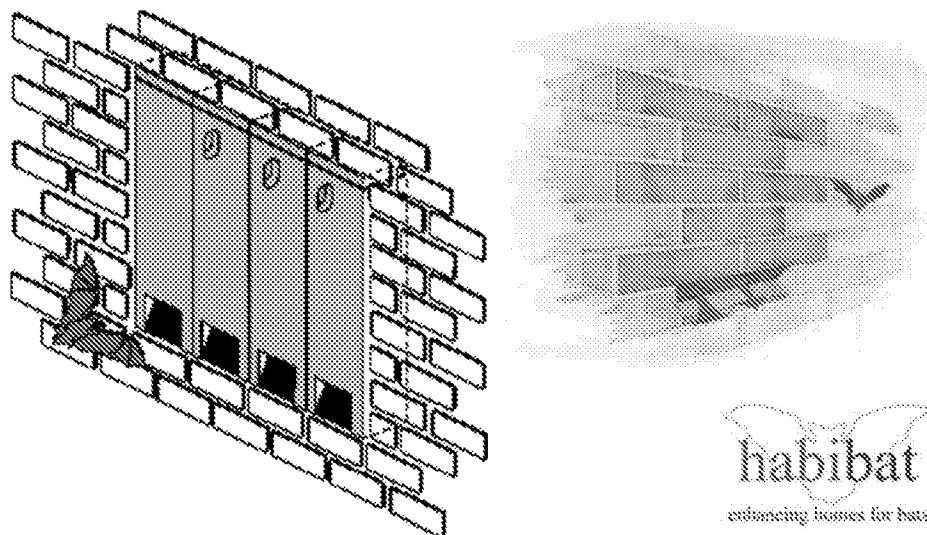


Figure 3: Example of bat tubes that can be installed within the walls of new building(s)

4.7 Further bat boxes can be hung on retained mature trees around the site to create new roosting opportunities post-development. Recommended boxes include:

- Vivara Pro WoodStone Bat Box – A general purpose bat box that supports a range of species (Figure 4). These can be hung on trees in a variety of heights and aspects in order to provide a variety of micro-climates.
- Large Multi Chamber WoodStone Bat Box – This is a multipurpose box designed for larger colonies and a range of bat species including pipistrelles, noctules and brown long-eared bats. These should be hung on mature trees around the site (Figure 4).

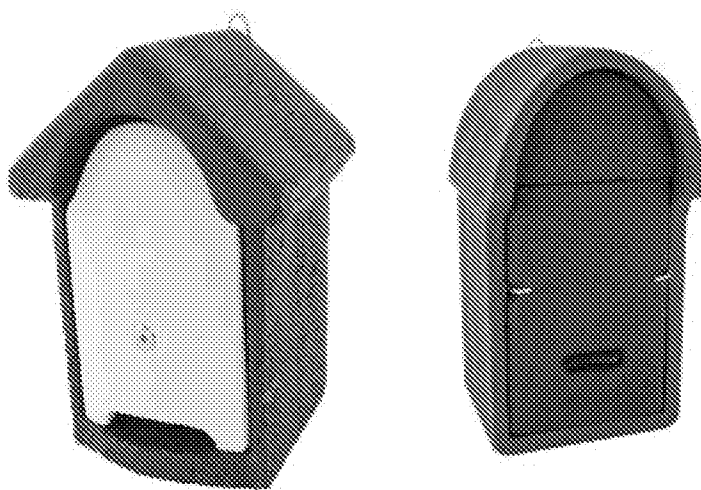


Figure 4: Vivara Pro WoodStone Bat Box (left) and Large Multi Chamber WoodStone Bat Box (right)

4.8 The siting of bat boxes is important, bat boxes are best located, and have the best rate of occupancy, when they are situated within or adjacent to bat-friendly features, such as hedgerows or woodland, providing connectivity to the wider landscape. The bat boxes should be situated where they are sheltered from strong winds and should be exposed to the sun for most of the day, therefore southern aspects are favourable. Multiple boxes may be hung on one large tree, facing different aspects. Bat boxes should be hung as high as possible, preferably around 5m high.

4.9 Sweet nectar and protein-rich pollen, especially night-scented flowers, are bait to encourage insects, a food source for bats. These species should be incorporated into the development where possible:

- Evenings primrose (*Oenothera biennis*)
- Field poppies (*Papaver rhoeas*)
- Knapweed (*Centaurea sp.*)
- Night-scented stock (*Matthiola longipetala*)
- Red campion (*Silene dioica*)
- Honeysuckle (*Lonicera periclymenum*)
- Sweet williams (*Dianthus barbatus*)
- Angelica species (*Angelica sp.*)
- Wisteria (*Wisteria floribunda*)
- Lavenders (*Lavandula sp.*)

5.0 Conclusion

5.1 A total of three bat surveys was undertaken on the cottage, two surveys on tree 3, and a single survey on building 3. The cottage was confirmed to support a single bat day roost: a single common pipistrelle underneath tiles on the southern elevation, near the eastern gable end. This roost is considered to be of low conservation significance as it only occasionally supported low numbers of a common species.

5.2 As demolition works on site will impact this building, works must commence sensitively under a Natural England low-impact licence, as to best ensure that no bats are harmed during the works.

- 5.3 Recommendations and enhancements have been made, including a sensitive lighting scheme, to ensure that bats can continue to roost, forage and commute within the site post development.

6.0 References

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The Ecology Partnership (2018 update), *Bat Activity Surveys- The Cottage, Shripney Road*. The Ecology Partnership, Leatherhead.

The Ecology Partnership (2021), *Preliminary Ecological Appraisal- The Cottage, Shripney Road*. The Ecology Partnership, Leatherhead.

Internet resources:

Google Maps: www.google.co.uk/maps

Magic Interactive Map: www.magic.gov.uk

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