



BAT ROOST ASSESSMENT

226 HAVANT ROAD, HAYLING ISLAND, HAMPSHIRE, PO11 0LN

FINAL REPORT

September 2020

Report conditions

<i>Report title</i>	Bat Roost Assessment – 226 Havant Road, Hayling Island		
<i>Client</i>	Mr A. Pugh		
<i>Report status</i>	Final		
<i>Survey date</i>	13 th August 2020 and 27 th August 2020		
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Executive Summary

- This bat roost assessment report has been prepared in order to support a planning application for the proposed first-floor extension to the rear and the replacement cladding of the dormer at the front of the existing building at 226 Havant Road, Hayling Island.
- A preliminary roost assessment survey was undertaken on the 13th August 2020.
- The preliminary roost assessment has confirmed the presence of low suitability roosting features on the building. No evidence of activity was recorded during the survey. Overall, the house is considered to support low suitability for roosting bats.
- In order to confirm the presence/absence of roosting bats, characterise any bat roosts, assess the extent that they may be affected by the proposed extension works and develop a proportionate and appropriate mitigation strategy, further survey work in accordance with Natural England standing advice and the Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition) was undertaken. The recommended survey effort for structures with low roost suitability is one presence/absence survey.
- One presence/absence survey comprising a dusk emergence survey was carried out on the 27th August 2020.
- The survey has confirmed that the hanging tiles on the front dormer support a soprano pipistrelle bat day roost. A total of five soprano pipistrelle bats were recorded emerging from a lifted hanging tile at the top of the dormer during the survey.
- The proposed dormer alterations will result in the destruction of the identified soprano pipistrelle bat day roost. As such, a European Protected Species Mitigation (EPSM) licence will be required to enable the development to proceed lawfully under a derogation from the Habitat Regulations 2017.
- A mitigation strategy has been designed that would ensure the maintenance of the favourable conservation status of bats. In summary, this comprises the provision of replacement roost opportunities which are proportionate to the scale of impact and the removal of roost features by hand, under the supervision of a licenced bat worker to ensure that individual bats are not killed or injured.
- A second emergence survey is scheduled for September 2020 to support the EPSM licence application.
- Provided the recommendations set out in section 5 are followed, the planning authority can be confident that the development would accord with relevant planning policy, legislation and caselaw.

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1. Introduction

1.1 Report purpose

This report presents the findings of the bat roost assessment undertaken of the house at 226 Havant Road, Hayling Island.

1.2 Description of proposal

The current proposal is for a first-floor extension to the rear of the house and the recladding of the dormer at the front of the house.

1.3 Report context

Hebden Design Studio have prepared a planning application on behalf of Mr A. Pugh (the Applicant) for a first-floor extension to the rear of the building and recladding to the dormer at the front of the building at 226 Havant Road. The planning authority, Havant Borough Council, have requested that the planning application is accompanied by an ecological survey and assessment. Phillips Ecology have been instructed by the Applicants to undertake this assessment.

1.4 Survey area

The survey area comprised the existing building at 226 Havant Road and its immediate surrounds.

1.5 Limitations

No limitations were encountered during the course of the survey.

1.6 Relevant documents

The relevant proposal plan used to inform this assessment is presented in Appendix 1.

2. Survey Methodology

2.1 Preliminary Bat Roost Assessment Methodology

2.1.1 Surveyor/s

The survey was carried out by Katy Goddard of Phillips Ecology.

2.1.2 Survey area

The survey area comprised the house at 226 Havant Road and its immediate surrounds which will be modified by the proposed extension. The survey area extended to all areas of the house that will be modified by the proposed works in such a way that bats or their roosts could be impacted (directly or indirectly). Therefore, the survey included the entirety of the building.

2.1.3 Survey date

The survey was carried out during the daytime on the 13th August 2020.

2.1.4 Survey description

The survey did not depart from the Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition) which states that "A preliminary roost inspection survey is a detailed inspection of the exterior and interior of a structure to look for features that bats could use for entry/exit and roosting and to search for signs of bats".

The external features of the structure which will be modified by the proposed works in such a way that bats or their roosts could be impacted (directly or indirectly) if present, were systematically inspected in detail to compile information on potential and actual bat access points and roosting places such as lifted or broken roof materials, loose brickwork and open eaves. This included a thorough search for evidence of bat activity such as bat droppings, urine splashes and fur staining.

The interior of the building was inspected in order to identify potential or actual access points and roosting places and to record any evidence of bat activity or bats themselves.

2.1.5 Survey equipment

Survey equipment comprised:

- High-powered torch
- Camera
- Ladders
- Endoscope

2.1.6 Weather conditions

Weather during the survey can be described as: dry, 70% cloud cover, breezy and 20°C. The weather conditions did not hinder the ecologist's ability to carry out the survey effectively.

2.1.7 Assessment methodology

The suitability of the building for supporting bat roosts will be assessed against the guidelines within Table 1 which have been adapted from the BCT Good Practice Guidelines.

Table 1 Suitability assessment guidelines

Suitability	Description of Roosting Habitats
<i>Negligible</i>	Structure has no reasonable likelihood of supporting roosting bats i.e. no suitable roosting features present.
<i>Low</i>	A structure which could be used opportunistically by individual bats i.e. one or more potential roost sites which do not provide sufficient space, shelter, protection, appropriate conditions (e.g. temperature, light, humidity) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
<i>Moderate</i>	A structure which could be used by bats but is not likely to support a roost of high conservation status (e.g. maternity roost). This structure would support features which exhibit suitable size, shelter, protection, conditions and surrounding habitat for roosting bats.
<i>High</i>	A structure which is obviously suitable for supporting larger numbers of bats, on a regular basis and for longer periods of time.

2.2 Emergence Survey Methodology

2.2.1 Surveyor/s

The survey was carried out by Katy Goddard and Francesca Hart.

2.2.2 Survey area

The survey area comprised all elevations of the main house. This enabled survey coverage of all suitable access/egress and roosting features which were recorded during the preliminary bat roost assessment and within the impact zone of the proposed works.

2.2.3 Survey date

The date and timings of the emergence survey are presented in Table 2. The emergence survey commenced 15 minutes prior to sunset and continued for at least 1.5 hours.

Table 2 survey date and timings

Survey type	Date	Start	Finish	Sunset/sunrise
<i>Emergence</i>	27/08/2020	20:45	21:40	19:59

2.2.4 Survey description

The emergence survey was undertaken in accordance Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). Four surveyors were positioned in order to provide sufficient coverage of all potential access/egress points when stationary. All emergences, re-entries and general activity were recorded during the course of each survey. Recordings were later analysed using Sonobat bat call analysis software to confirm species identification.

2.2.5 Survey equipment

Survey equipment comprised:

- Pettersson D240X bat detector
- Elekon Batlogger M detector

2.2.6 Weather conditions

Weather conditions during the survey are provided in Table 3:

Table 3 emergence weather conditions

Survey	Date	Precipitation		Temperature		Wind		Cloud Cover	
		Start	Finish	Start	Finish	Start	Finish	Start	Finish
Emergence	27/08/2020	Nil	Nil	17.0°C	15.5°C	Bf 2	Bf 2	100%	30%

3. Survey results

3.1 Preliminary Bat Roost Assessment

3.1.1 *Building descriptions relevant to bats and their roosts*

The application site supports a single structure: the house. The house comprises a two-storey brick-built structure which rises to an open gable end design roof that is clad with interlocking concrete roof and ridge tiles. The house is oriented west-east. A single-storey extension extends from the eastern elevation (Figure 1). The extension is flat roofed and clad with roofing felt. The walls of the extension are rendered and painted while the remainder of the walls on the eastern, southern and northern elevations remain as exposed brick. The walls of the western elevation comprise stone and painted brick (Figure 2). The roof extends beyond the wall plate. The eaves of the original house are enclosed with wooden underboards while the eaves of the extension are enclosed with plastic underboards (Figures 3 and 4). A ventilation pipe extends from the northern end of the eastern roof face and is lined with lead flashing. A box dormer window extends from the southern end of the western roof face. It has a flat roof clad with roofing felt and the elevations are clad with clay hanging tiles, the majority of which are very tight (Figure 6). Fascia boards and lead flashing line the top of the dormer window on all elevations. A stone chimney extends from the northern end of the western roof face and is lined with lead flashing. A recess at the southern end of the western elevation creates a porch where the entrance door and an up and over garage door are situated. The porch is lined with underboards. Several windows are within the survey area, a mixture of wooden and plastic frames. These have been installed with no gaps between them and the surrounding brick wall. One wooden window on the southern elevation has been boarded.

Internally, the roof supports a single roof void. The void is lined with heavy duty bitumen felt and the floor is insulated with spun rockwall insulation and remains unboarded (Figure 7). The void is heavily filled with cobwebbing.



Figure 1 – eastern elevation of the house



Figure 2 – western elevation of the house



Figure 3 – wooden underboards on the northern elevation of the original house



Figure 5 – plastic underboards on the eastern elevation of the extension



Figure 5 – tight fitting hanging tiles on the southern elevation of the dormer window

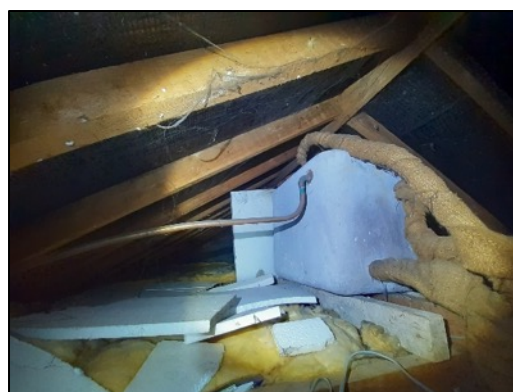


Figure 6 – internal view of the roof void, looking south

An account of suitable access/egress features and recorded evidence of bat activity is given in table 2.

Table 2 - Recorded features and activity

	Suitability	Evidence
Exterior	The following suitable access/egress and roosting features were recorded externally during the survey: - Lifted roof tiles at the edges of the eastern roof face due to bowing (Figure 7). - Lifted roof tiles above the ventilation pipe in the eastern elevation. - Damage to the underboard and brick work at the south eastern corner of the eaves (Figure 8).	The following evidence of roosting activity was recorded externally during the survey: - The damage to the south eastern corner of the eaves was found to be filled with heavy cobwebbing and debris. - No droppings were recorded externally during the survey.

Suitability	Evidence
Interior	- Gap between the boards on the boarded window on the southern elevation. - Gaps under some corner hanging tiles on the dormer window. The following suitable access/egress and roosting features were recorded externally during the survey: - One tear in the bitumen lining. No evidence of roosting activity was recorded internally during the survey.



Figure 7 – Lifted roof tile at the southern end of the eastern roof face



Figure 8 – damage to the south eastern corner of the eaves

3.1.2 Site grounds description relevant to bats

The immediate surrounds of the property comprise paved walkways, ornamental planting, mature trees and managed lawn. Beyond this, to the north, east and south, the landscape comprises blocks of residential properties, arable farmland, permanent pasture and hedgerow. To the west is a block of broadleaved woodland followed by the shoreline of Langstone Harbour and its associated coastal habitat. In this context, the habitats within the footprint of the proposal are considered unexceptional and of low suitability for foraging and commuting bats, however, given their location within a landscape which is suitable for commuting and foraging bats, it is possible that bats will commute and forage through the site.

3.2 Emergence / Re-entry Surveys

3.2.1 Visit 1 – 27th August 2020 – Dusk Emergence Survey

A total of five bats was recorded emerging from the main house during the emergence survey carried out on the 27th August 2020. These comprised five soprano pipistrelle *Pipistrellus pygmaeus* bats which emerged from a lifted corner hanging tile at the top of the dormer window between 20:15 and 20:24 (Figure 9). Following this, individual common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle bats foraged through the site intermittently on a loop between the site and adjacent gardens for the remainder of the survey.



Figure 9 – location of soprano pipistrelle bat emergences

3.3 **Other protected species**

During the course of the survey, no evidence of bird nesting activity was recorded.

4. Discussion and Assessment of Impacts

4.1 Assessment of bat roosts

On the basis that the house supports low suitability for roosting bats, there was considered to be a reasonable likelihood that bats will be present and affected by the proposed extension works which will impact the features detailed in Table 4.

The Phase 2 survey has confirmed that the main house supports a soprano pipistrelle bat day roost behind hanging tiles on the front facing dormer window.

The bat mitigation guidelines identify that summer (non-maternity) roosts used by individuals / small numbers of more widespread species such as the species recorded at 226 Havant Road are of low conservation status.

The site supports a small number of foraging and commuting common pipistrelle and soprano pipistrelle bats.

4.2 Assessment of impacts

The development includes alterations to the dormer at 226 Havant Road. As such, the identified soprano pipistrelle bat roost will be lost to the development.

The proposal will result in the destruction of the identified roost and the removal of the hanging tiles would potentially cause the killing, injury or disturbance to any bats present within roost features when works are undertaken.

The proposed alterations to the rear of the property and re-roofing will not impact roosting bats.

The assessment of the roost characteristics, the nature of the development and the conservation status of the roosts that will be impacted by the proposed development has informed a strategy to avoid, mitigate and compensate for the identified impacts.

The application site is considered to support suitability for foraging bats and commuting bats leaving or returning to roost. Increasing lighting could impact this behaviour which would indirectly impact roosts.

4.3 Relevant legislation and policy

Circular 06/2005 identifies that applicants should not be required to provide information on protected species unless there is a reasonable likelihood that they will be present and affected by the proposed development. The site is considered to support habitats with suitability and potential for protected species and these may be affected by the proposed development. Therefore, the proposal triggers 'reasonable likelihood' under the Circular.

The Wildlife and Countryside Act 1981 (as amended) and the Habitats Directive, which is transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (commonly referred to as the Habitats Regulations) may apply should protected species be confirmed on site.

In the case that a European protected species is found to be present and impacted by the proposal, the local planning authority will be required to engage with the Habitat Regulations. Permission will be granted unless:

- a) the development is likely to result in a breach of the EU Directive, and
- b) is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law (under licence).

When considering whether Natural England would not be unlikely to grant a licence for the identified impact, the local planning authority must consider the three tests which are set out in the Habitat Regulations:

- 1. the consented operation must be for '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'; (Regulation 53(2)(e))
- 2. there must be 'no satisfactory alternative' (Regulation 53(9)(a)); and
- 3. the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).

Case-law (Morge vs. Hampshire County Council) has clarified that planning authorities are able to grant permission for developments that would cause a breach of the Regulations is likely (i.e. in the case of this proposal, destruction of a bat roost), provided that sufficient information is provided to give the planning authority assurance that the relevant EPSM licence is not unlikely to be granted - i.e. planning authorities also have a duty to assess planning applications against these tests.

4.4 **Licensing**

As this work will result in the destruction of the identified bat roost, an EPSM licence will need to be obtained from Natural England before the dormer alterations start. A licence can be applied for once planning permission has been obtained. Provided the development can pass the three 'derogation' tests discussed above Natural England will grant the relevant licence to allow the developer to legally carry out the work that would otherwise be illegal – i.e. to destroy a bat roost and disturb / take bats.

5. Recommendations

5.1 Requirement for further surveys

Where there is a reasonable likelihood that a protected species will be present and impacted by the proposed development, planning authorities require further surveys to properly assess development proposals against relevant planning policy. An assessment into the requirement for further surveys is presented below, however in summary, one additional survey is considered necessary to support a licence application.

5.1.1 Bats

In order to provide robust confirmation of the status of bat roosts and the extent that they may be affected by the proposed development as required by Circular 06/2005, further survey work in accordance with Natural England standing advice and the BCT Good Practice Guidelines was required. This same survey work will be used to inform the third test of the Habitat Regulations.

In accordance with these guidelines, further survey effort took the form of a dusk emergence presence/absence survey undertaken during the bat active season. One further survey in respect of roosting bats is considered necessary to support a licence application.

The affected areas of habitat surrounding the property are not of significant value as a foraging or commuting resource. Therefore, further survey is considered unnecessary for understanding impacts on foraging and commuting bats beyond the presence/absence surveys subject to precautionary avoidance measures including a sensitive lighting scheme.

No further survey work is required in respect of the rear of the property.

5.2 Mitigation strategy

5.2.1 Bats

Dormer alterations mitigation strategy

- The destructive search will be carried out during the active season i.e. April to late-October. A toolbox talk will be given to contractors prior to the dormer roof and hanging tile stripping works commencing. The toolbox talk will provide an introduction to the legal protection afforded to bats, the status of bats at the site including likely species and roosting locations, evidence to look out for and the protocol which will be followed if a roosting bat is identified. Appropriate signage will be provided and displayed on site to inform contractors of the required protocol when working where a bat roost has been recorded.
- The destructive search works will be led by a licensed bat worker, accompanied by construction contractors. There will be no disturbance of identified and potential roost features without the supervision of a bat worker. This is because during the proposed tile stripping period bats, if present, may be very difficult to locate and easily be overlooked by contractors.

- Immediately prior to the tile stripping works commencing, inspections of known bat roosting areas and potentially suitable areas will be carried out by a licensed bat worker, using an endoscope where required, to check for the presence of roosting bats.
- All suitable bat roosting features supported by the building will be removed by/under the supervision of the licensed bat worker using hand tools. The works will be carried out from a suitably erected scaffold or mobile elevated work platform.
- Any bats which are found during the destructive search works will be captured by the licenced bat worker with the use of thin gloves or a hand net. The bat will immediately be transferred to a holding bag before being placed within the previously erected bat box within the site grounds. Any injured bats will immediately be taken into care.
- Once the licensed bat worker is satisfied that all features that may provide bat roosting opportunities have been safely removed, the contractors can complete the dormer alterations.
- If a bat is found during unsupervised works, all works will cease and the supervising bat worker will be contacted immediately.

Provision of new roosting sites

New roosting opportunities will be provided in the form of two Schwegler 2F bat boxes or similar which will be installed in a tree within the site grounds. The bat boxes will be installed prior to commencement to ensure that an alternative roost site is in place when works commence.

In order to limit any effects on foraging and commuting bats and ensure that the proposed mitigation features are functional, any additional external lighting which is proposed should be kept to a minimum; in quantity, aspect and lux level. External lighting should be selected that emits minimal ultraviolet light and avoids white and blue wavelengths of the light spectrum. All lights should be kept at a low level and directed away from the site boundaries. Lighting on sensors should not be so sensitive that foraging bats trigger them.

5.3 Enhancements

The delivery of biodiversity enhancement on development sites is promoted by the National Planning Policy Framework (NPPF) and Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006.

Where opportunities exist it is best practice to provide enhancement features which encourage greater biodiversity within development sites in accordance with the NPPF and Local Planning Authority's responsibilities under the NERC Act.

Opportunities for enhancement which are proportionate to the scale of the development include the provision of additional bird nesting opportunities. These could be external boxes located on the walls of the existing property or boundary fence. A total of two bird boxes comprising a hole fronted boxes would be appropriate.

6. Conclusion

The preliminary roost assessment confirmed that the main house supports suitability for roosting bats. Therefore, further survey effort was recommended to confirm the presence/absence of further roosts, characterise any bat roost/s, assess the extent bats may be affected by the works and devise an appropriate mitigation strategy to support the proposed redevelopment and address any breaches in the legislation. In accordance with Natural England standing advice and BCT Good Practice Guidelines, one presence/absence survey for the main house was undertaken during August 2020. This survey work has confirmed that the main house supports one soprano pipistrelle bat day roost.

The proposed dormer alterations will result in the loss of the identified soprano pipistrelle bat day roost. A mitigation strategy has been designed that would provide alternative roosting opportunities within the development which are proportional to the scale of impact. The mitigation strategy also sets out recommended timings and methods and recommends that a European protected species licence is obtained before alterations to the dormer commence.

In view of the survey findings, and provided the recommendations set out above are followed, the planning authority can be confident that the development would accord with relevant planning policy, legislation and caselaw.

7. References

- **Altringham J D, 2003**, British Bats, Collins New Naturalist
- **Bat Conservation Trust, 2016**, BCT Bat Survey Guidelines Third edition
- **Chartered Institute of Ecology and Environmental Management, 2017**, *Guidelines for Preliminary Ecological Appraisal*. CIEEM, Winchester
- **ILP and BCT, 2018** *Bats and Artificial Lighting in the UK: Guidance Note 08/18*. ILP, Warwickshire.
- **MHCLG, 2018**. *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government; London.
- **Mitchell Jones AJ, 2004**, *Bat Mitigation guidelines*, English Nature
- **Mitchell Jones AJ and McLeish A P, The Bat Workers Manual**, JNCC
- **Natural Environment and Rural Communities Act 2006**, Ch 3, s. 40
- **Natural England, 2011** Frequently asked wildlife questions: Bats. Natural England

Appendix 1 – Proposal plan





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