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### December 2023

# A Preliminary Bat Roost Potential Assessment from

Oak Cottage for

Mr A. Hicks

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# **Table of Contents**

1. Executive Summary	
2. Introduction	3
2.1 Background to Activity/Development	3
3. Survey	3
3.1 Pre-existing Information on Bats at the Survey Site	3
3.2 Site/Habitat Description	3
3.3 Objectives of the Survey	3
3.4 Inspection Method	3
4. Results	4
5. Interpretation and Evaluation	4
5.1 Limitations	4
6. Impact Assessment	4
6.1 Predicted Impacts (Without Mitigation)	4
6.2 Predicted Scale of Impacts	4
7. Recommendations/Mitigation	4
9. Advisory Notes	5
10.1 Appendix 1. Surveyor Notes	6
10.2 Appendix 2. Photographs of the Buildings	8
	9
10.3 Appendix 3. Plans	9
10.4 Appendix 4. Bat Ecology	9
10.5 Appendix 5. Protective Legislation Pertaining to Bats	9
10.6 Appendix 6. Assessment and Evaluation Tables Used by Verdant Ecology	10
10.7 Appendix 7. References	11



# 1. Executive Summary

- Mr Hicks is applying for consent to add a house porch.
- Verdant Ecology was commissioned to provide information on bats sufficient to enable the planning authority to make an informed decision about any likely impacts and whether/how they need/can be avoided or offset.
- In December 2023, inspections found no evidence of bats and determined the property to be of 'Negligible' suitability for bats.
- No further surveys are recommended.
- Mitigation is recommended to prevent indirect impacts (e.g. pollution).
- You should seek the advice of an ecologist at least quarterly and/or if there are changes in plans.
- If (signs of) bats are subsequently discovered in other, affected parts of the building, work will stop immediately and a competent bat worker be consulted.

#### 2. Introduction

# 2.1 Background to Activity/Development

The site is Oak Cottage, Mill Lane, Chichester, PO19 3JN. OS grid reference SU83790455. An aerial view of the site can be seen at <a href="https://maps.app.goo.gl/oT2qxSwXpEiv48LVA">https://maps.app.goo.gl/oT2qxSwXpEiv48LVA</a>

Proposals are to add a front porch. Plans can be seen in Appendix 3.

# 3. Survey

# 3.1 Pre-existing Information on Bats at the Survey Site

The author has worked on a neighbouring property where bat roosts were found.

Local records were not sought because the house had negligible suitability.

# 3.2 Site/Habitat Description

The area surrounding the site is ideal for bats.

#### 3.3 Objectives of the Survey

To find physical evidence of use of the buildings by bats. If found, to determine what species are present and in what numbers, where in the building bats are roosting/entering/exiting and in what ways bats are using the building.

## 3.4 Inspection Method

In December 2023, the affected house was subject to a visual inspection, inside and out, using torches, ladders and binoculars.



# 4. Results

A description of the buildings is provided in Appendix 1 and photographs can be seen in Appendix 2.

# 5. Interpretation and Evaluation

On a scale of Negligible, Low, Moderate, High (as defined in Table 4.1 of the Bat Conservation Trust's 2016 Good Practice Guidelines), the surrounding habitats were considered to have High suitability for bats, the garage Low and the house, shed and summerhouse Negligible.

The surveyors had no reason to believe that evidence of bats had been deliberately removed.

#### 5.1 Limitations

The surveys were in line with the Bat Conservation Trust Good Practice Guidelines.

# 6. Impact Assessment

# 1.1 Potential Impacts

Potential impacts considered are;

- Loss of bat roosts (including obstruction of access/egress).
- Physical harm/disturbance to bats during work.
- Indirect impacts on foraging habitat or on any roosts that may occur in neighbouring buildings or trees nearby (run-off pollution, light, noise, vibration, fumes etc. associated with the proposed work).
- Habitat fragmentation.
- Post-development impacts.

# 6.1 Predicted Impacts (Without Mitigation)

Given that the house is considered to be of Negligible suitability, direct impacts on roosts are unlikely.

If new/replaced cladding materials may subsequently allow bat access to breathable membranes, bats may be harmed.

There is potential for indirect impacts (e.g. from toxic materials in the air or in run-off water or light pollution).

# 6.2 Predicted Scale of Impacts

If pollution is prevented, and bats do not come into contact with breathable membranes, no impacts.

# 7. Recommendations/Mitigation

- Provide this report as part of the planning application.
- If new/replaced cladding materials may subsequently allow bat access (e.g. tiles, slates, timber boards), all lining membranes must not be breathable, fibrous types. 1F 'traditional' bitumen lining is preferred but other materials (e.g. Pavatex) may be acceptable. The only 'bat-safe' breathable membrane that we are aware of that is currently approved by the necessary parties is TLX Batsafe.



- Commit and adhere to a pollution prevention plan in line with the COSHH Regulations and the Environment Agency's Pollution Prevention Guidelines series.
- External lighting will be minimised/subdued. It will be in line with whatever is the appropriate standard at the time of construction. Currently this is: Bat Conservation Trust (2014): Artificial Lighting and Wildlife, meaning it will not illuminate any access/egress holes intended for bats. It will use the minimum possible number of fittings, lowest possible fittings (and certainly no higher than 2m from ground level), hooded, downcast, with timers and automated cut-offs. Light sources should be narrow-spectrum, emit minimal UV components, peak over 550nm and avoid white/blue wavelengths and where white light sources are required in order to manage the blue short wave length content they should be of a warm/neutral colour, temperature <4,200 kelvin.
- Provide enhancements. Examples include bat and/or bird boxes or new tree planting.

# 8. Summary

- The house has Negligible suitability for bat roosts and the impacts are confined to a very small portion of the house.
- Direct impacts on bats are unlikely.
- Impacts from pollution, including lighting and use of unsuitable breathable membranes remain as potential negative impacts on bats but can be prevented.
- Bats need not be a reason for refusing planning consent.
- The consent should include a condition to comply with the recommendations herein.

# 9. Advisory Notes

- Regardless of planning consent, you must stop work immediately and seek the advice of an ecologist should unexpected bats or signs of bats be found during work.
- You should seek the advice of an ecologist approximately quarterly and/or if there are changes in plans or plans to include impacts on the garage.



# 10. Appendices

# 10.1 Appendix 1. Surveyor Notes

Site address	Oak Cottage,	Site name				
	Mill Lane,					
	Fishbourne	Grid reference (6 figure)			SU 83798 04554	
	PO19 3JN					
Site manager	Tony Hicks	Contact phone number			07776362836	
Surveyor(s)	Nick Gray	Weather conditions:				
		Temp. (°C)	RH%	Precipitation	Wind	Cloud
					(Beaufort)	cover
						(%)
		9	62	Nil	0	20
Date of	15 December 2023	Time at start of survey		10:15		
survey						

The Site was located in a suburban residential setting, comprising detached dwellings with medium-sized mature gardens. There were two large ponds located to the south-west. There were many mature trees and shrubs within the habitat surrounding the site (although there were none present within the site itself). The adjacent habitat provided good foraging potential for bats and connectivity to the wider landscape, including Chichester Harbour, which is located to the south.

Structures within the site included a detached bungalow (occupied dwelling), with a small, detached garage, a wooden shed and a small wooden summerhouse.

# Garden

The garden was mostly comprised of short amenity grassland (lawn) with scattered mature shrubs and herbs. A hedge was present on the southern and eastern boundary.

### **Bungalow**

An internal inspection of the bungalow found the roof area to be in use for residential habitation. It retained only a small partial skeeling void, with no access hatch. In addition to this there were two crawl spaces under the eaves – only the eastern crawl space was accessible, which was via a small hatchway. The interior of the eastern crawl space was boarded. The rafters were visible beneath a roof lining comprising 1F hessian-backed bituminous felt. There were no tears or holes suitable for bat access in the lining. No daylight was visible. The void contained some household items, which were in storage. No evidence of bats or other animals was found within this space.

An external inspection of the bungalow found it to be constructed from clay brick with a gabled apex roof design. The roof was covered with close fitting cement tiles. Three short lines of thicker vent tiles were observed on each roof elevation, per the example shown in Photo 1. However, close examination revealed that there was no gap beneath these tiles. There were two Velux style roof lights on the western roof elevation and three similar ones on the eastern roof elevation. The doors and windows were in good order and the frames were well



sealed. UPVC soffit boxes were present on the west and east elevations only. These were also in good order and were well sealed. There were no bargeboards present on either of the gables. The exterior of the bungalow revealed no features suitable for bats to use or for bats to gain access into the building. Thus, 'Negligible' potential for roosting bats.

#### Garage

The Garage was located in the rear garden, to the south-east of the bungalow (well away from the proposed impact area at the front entrance of the bungalow, on the west elevation) and was constructed from clay brick with a gabled apex roof design. The roof was covered with loose fitting cement tiles, which were considered to offer potential for bats to access (Photo 13). The doors were close fitting and provided no access features for bats. There were three large windows within the walls, which allowed plenty of natural light to enter the building. The interior space was open to the rafters, visible beneath a 1F hessian-backed bituminous felt roof lining. The lining had a small tear, which exposed the tiles above. No evidence of bats was found within the garage, but there was a 'Low' potential for bats to roost between the tiles and the lining of the roof, and to gain access into the garage space.

#### **Shed and Summerhouse**

The garden also contained a wooden shed and a wooden summerhouse. However, these were both considered to offer 'Negligible' potential for bats.

# **Biodiversity Gain**

There is potential to site a bat and/or bird box on the southern gable of the bungalow, which is partially shaded by tall shrubs and trees, and also on the east ern gable of the garage (although this is not so high). There were no mature trees within the curtilage. The client expressed a desire to make his own bat box. I suspect he may require guidance from you on this matter. FYI, he advised me that his planning application has a deadline for next Thursday 21 December 2023.



# Appendix 2. Photographs of the Buildings

# House front/west

10.2





Summerhouse



Garage



Roof void





#### 10.3 Appendix 3. Plans



# 10.4 Appendix 4. Bat Ecology

The ecology of bats varies somewhat according to species but the following generic information gives an idea of their habits.

All British bats are insectivorous and forage in most habitats (often many kilometres from their roosts) but waterbodies, wetlands and wooded habitats are favoured. They are free-roaming (whilst often showing site fidelity) and use a variety of roosts in sequences that may be hard to predict for resting, giving birth, raising young and 'hibernating'. Roosts may be found in crevices in trees, buildings, tunnels mines and natural stone features such as caves. Some bat species have a tendency to follow linear features (commuting) such as treelines. They mate in the autumn, and females give birth the following summer. They are relatively inactive over winter, 'hibernating' for extended periods. Although some species are widespread and often locally common in England, they are of conservation concern because they are believed to be in rapid decline and because some species are considered especially rare, local or vulnerable.

### 10.5 Appendix 5. Protective Legislation Pertaining to Bats

The main items of legislation protecting bats in England are;

- The Conservation of Habitats and Species Regulations 2010 (a consolidation of The Conservation (Natural Habitats & c.) Regulations 1994 and subsequent amendments).
- The Wildlife and Countryside Act 1981 (as amended).

Combining the legislation means it is an offence to;

Intentionally or recklessly kill, injure, take or disturb bats, or to damage, destroy or obstruct access to any structure or place used for shelter, breeding or protection. Bat roosts are protected even if unoccupied.





Additionally, some bat species are 'Priority Species' in the UK Biodiversity Action Plan and Local Biodiversity Action Plans may also be in place for certain bat species. The Countryside and Rights of Way Act 2000 and The Natural Environment and Rural Communities Act 2006 expect those in a position of influence to consider the impacts of their actions on biodiversity, especially Biodiversity Action Plan features and to seek opportunities to benefit them.

Bats are a material consideration in planning decisions under the National Planning Policy Framework, meaning that local planning authorities must consider the potential impacts of development on bats before granting permission.

Bats may also be indirectly protected by virtue of their association with trees (also a material consideration), veteran trees and habitats that serve to connect (both specifically mentioned in PPS9) and hedgerows (Hedgerow Regulations 1997).

#### What This Means for You 10 5 1

Surveys will be needed if bats are likely to be present and likely to be affected. Survey data and deliverable mitigation (if needed) must inform the planning decision. Planning permission should only be given if the status of the affected protected species can be maintained or enhanced and if measures are taken to avoid harming individuals. Recent changes in legislation and policy are increasing the emphasis on expecting improvements or enhancements.

Changes to the law in 2007 also removed certain defences - the most significant of which was that of an offence being excusable when 'an incidental result of an otherwise lawful operation' (such as planning permission). Further changes in early 2009 mean remaining defences (such as health and safety issues) no longer apply if there was a suitable alternative and the action negatively affects the favourable conservation status of the species concerned (individuals are still protected from harm by the Wildlife and Countryside Act).

The onus is on the developer to provide enough information to enable the planning authority to make an informed decision as to whether the development will have negative impacts on the local bat population.

If bats are found to be using an affected feature, the developer must demonstrate to the planning authority how, in principle, the work can be carried out without negatively affecting bats.

If planning permission is granted, a European Protected Species mitigation licence from Natural England may be available - to protect you from what may otherwise be an offence (disturbance, destruction of roosts, etc.). Such a licence is only granted if;

- there is no reasonable alternative.
- it is in the overriding interest of the public (i.e. there is a need for the work),
- the population of concern will remain in favourable conservation status.

Court cases have decided that local authorities should also consider these three conditions in making their decision.

The licence application (if needed) will have to justify the need for your proposed actions. It will also have to include a comprehensive plan that seeks to preserve habitats and any roosts, minimise disturbance, prevent killing or injury, ensure a continuation of suitable habitat and provide enhancements. It is usual for several years post-construction monitoring of bat populations to be a condition of licensing.

# Appendix 6. Assessment and Evaluation Tables Used by Verdant Ecology

2016 Bat Surveys for Professional Ecologists – Good Practice Guidelines Roost or habitat suitability on a scale of

Negligible

Low

Moderate

High





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# Relative Terms in Assessment and Evaluation of Ecological Features and Potential Impacts

Importance of Ecological Feature	Area of Impact
Negligible	Negligible
Local/Site	Local/Site
District/Borough	District/Borough
County	County
Regional	Regional
National	National
International	International
Duration	Extent of Change
	Major negative
Short term (1-5 years)	Minor negative
Medium term (5-20 years)	Negligible/Neutral
Long term (>20 years)	Minor positive
	Major positive

#### Matrix for Estimating the Significance of Impacts

		Degree of Impact				
		Major negative	Minor negative	Negligible	Minor positive	Major positive
Geographic Scale	International	Major	Major	Negligible	Major	Major
	National	Major	Major	Negligible	Major	Major
	Regional	Major	Moderate	Negligible	Moderate	Major
	County	Moderate	Minor	Negligible	Minor	Moderate
	District/ Borough	Moderate	Minor	Negligible	Minor	Moderate
	Local/Site	Minor	Negligible	Negligible	Negligible	Minor

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