

Parsonage Farm Barn
Cobham
Kent

Bat Survey Report

ADRIAN SCRIPPS LTD

VERSION 2

Final

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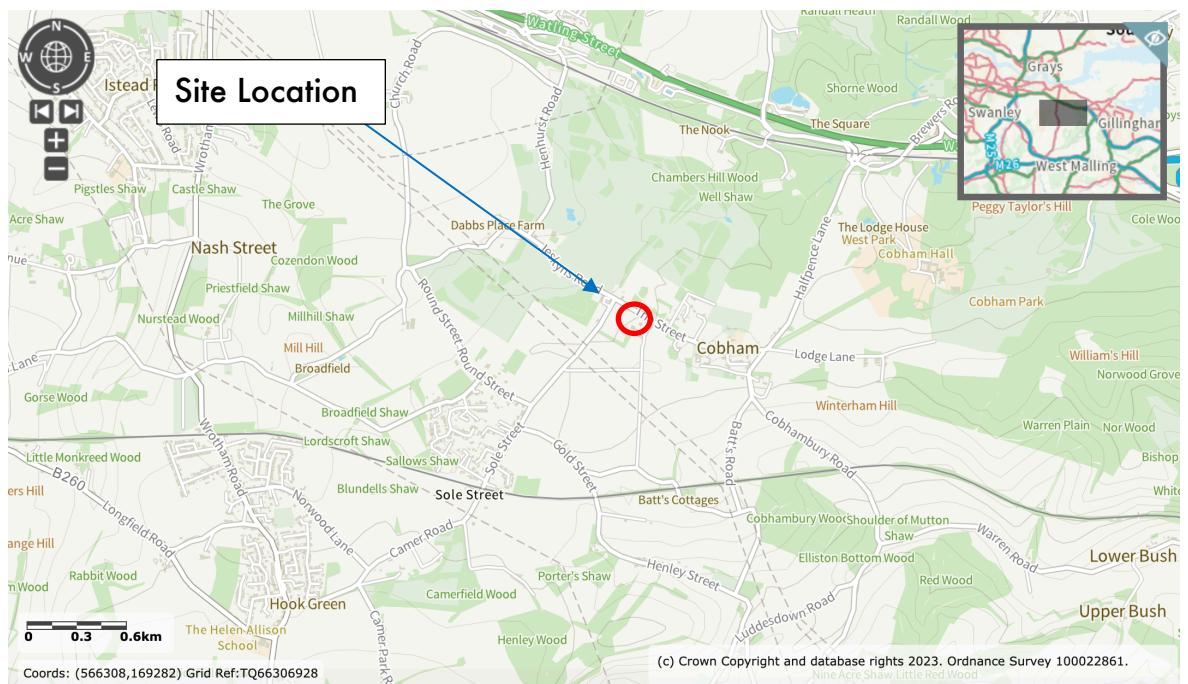
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1. Introduction

BiOME Consulting Ltd was commissioned by Alder King LLP on behalf of their client, Adrian Scripps Ltd, in April 2023 to undertake an update Preliminary Roost Assessment (PRA) survey and subsequent dusk emergence survey of Parsonage Farm Barn, Cobham, Kent ('the site') (**Figure 1**) to assess the presence/likely absence of roosting bats. The site is centred on National Grid Reference TQ66656857.

Figure 1. Site location



The barn had previously been subject to PRA and two nocturnal dusk emergence/dawn re-entry surveys¹ and 2009 (Lloyd Bore Ecology – referred to within Ecology@Tarvidel report). No bats were confirmed as roosting in the barn during any of these surveys.

¹ Ecology@Tarvidel Ltd (2017). *Bat Survey: Parsonage Farm Barn, Cobham, Kent*

Due to the nature of the proposed works, this ecological appraisal focussed on assessing potential impacts to roosting bats and nesting birds.

1.1. Site Description

The barn (single-skin lapped timber cladding on brick sill) is located ca. 0.5km to the northwest of the Cobham village centre, ca. 50m southwest of The Street. The site is surrounded by predominantly agricultural land (to the south, west and east), and by houses/gardens to the north.

Photograph 1. Parsonage Farm Barn



2. Legislative Background

2.1. Bats

All British bat species are fully protected at national and European levels, through their inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)² and in Schedule 2 of the Conservation of Habitat and Species Regulations 2010³. Under this legislation, it is an offence to deliberately kill, injure or take a bat as well as intentionally or recklessly damage, destroy or obstruct access to any structure or resting place used for shelter or protection by a bat or disturb an animal while it is occupying a structure or place which it uses for that purpose.

Four species of bat, Greater Horseshoe Bat *Rhinolophus ferrumequinum*, Lesser Horseshoe Bat *R. hipposideros*, Bechstein's Bat *Myotis bechsteinii* and Western Barbastelle *Barbastella barbastellus*, are included on Annex II of the Habitats Directive⁴, which requires the designation of Special Areas of Conservation to ensure the maintenance of favourable conservation status (and these are therefore generally considered as perhaps the most important UK species). Seven bat species are listed as Section 41⁵ priority species; Barbastelle, Bechstein's Bat, Noctule *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat and Lesser Horseshoe Bat.

2.2. Nesting Birds

All birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions, to:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.

² The Wildlife and Countryside Act 1981 (as amended)

³ The Conservation of Habitats and Species Regulations 2010

⁴ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

⁵ Of the Natural Environment and Rural Communities Act 2006

- Intentionally take or destroy the egg of any wild bird.
- Have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954.
- Have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954.
- Use traps or similar items to kill, injure or take wild birds.
- Have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations (see Schedules).
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Penalties that can be imposed for criminal offences in respect of a single bird, nest or egg contrary to the Wildlife and Countryside Act 1981 (as amended) is an unlimited fine, up to six months imprisonment or both.

3. Methodologies

3.1. Desk Study

Details in relation to internationally designated sites and nationally designated sites with 2km were obtained from www.magic.gov.uk. A search was also completed for any European Protected Species (EPS) development licences in relation to bats granted within 2km of the site.

3.2. Bats

3.2.1. Preliminary Roost Assessment

An update PRA survey was completed on 1 February by James Grundy in line with appropriate survey guidance⁶.

James is an experienced and qualified ecologist, and full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). James was working as an 'Assistant' under the Natural England bat survey licence (2015-12259-CLS-CLS) of Richard Moores, which derogates the law with regard to disturbance of these species.

The survey involved a systematic search of the exterior and interior of the building to be impacted by the proposals to identify potential or actual bat access points and roosting sites, and to locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining and/or squeaking noises. It should be noted that sometimes bats leave no visible sign of their presence on the outside of a building (and even when they do wet weather can wash away evidence).

The external inspection also included the examination of the ground, particularly beneath any potential bat access points, for example any windowsills, window panes, walls, hanging tiles, weatherboarding, eaves, soffit boxes, fascias, lead flashing, gaps under felt, and under tiles/slates.

⁶ Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn.). The Bat Conservation Trust, London

The inspection of buildings and built structures for evidence of bats, which can be conducted at all times of year was facilitated by the use of scaffolding erected on the building, a high-powered torch, endoscope and small dental mirrors to inspect accessible crevices considered likely to support bats. Weather conditions on the day of the survey were appropriate for undertaking ecological fieldwork (sunny and dry).

The potential suitability of the buildings for roosting bats was assessed in line with relevant guidelines¹⁰ and allocated to one of the categories detailed within **Table 1**.

Table 1. Guidelines for assessing the potential suitability of proposed development sites for bats

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure/tree 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).
Moderate	A structure/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).
High	A structure/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.

3.2.2. Nocturnal Survey

Following the identification of features with the potential to support roosting bats a single nocturnal bat survey was completed (**Table 2**), by James Grundy and David Campbell (also an experienced ecologist).

The surveyors were equipped with electronic bat detectors (EM Touch Pro 2/Batscanner) and sound files were analysed with appropriate bat analysis software (Kaleidoscope) once the survey was completed, if necessary. Infra-red

cameras (Canon XA90) and additional infrared lighting (Nightfox XB5 IR and flood lamps) were used, with cameras positioned to ensure that all areas that may be impacted directly or indirectly were covered. Following the survey, recorded footage was analysed.

The nocturnal bat survey was undertaken in weather conditions considered appropriate for surveys of this kind (Table 2).

Table 2. Nocturnal bat activity survey information

Date	Sunset/ rise	Time		Cloud (octets)	Wind (Beaufort/ Direction)	Min. Temp (°C)	Precip.
		Start	Finish				
03/05/2023	20.24	20.09	22.24	5	2-3/NE	10	Nil

3.3. Nesting Birds

Areas to be impacted were inspected and assessed to determine presence/potential presence of nesting birds.

3.4. Limitations

The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of plants and animals, such as the time of year, migration patterns and behaviour.

4. Results

4.1. Desk Study

There are no internationally designated sites within 2km. Nationally designated site details are provided within **Table 3**.

Table 3. Designated site details

Site	Approx. distance from site centre/direction	Description
Nationally Designated Sites (2km)		
Shorne and Asbenbank Woods Site of Special Scientific Interest (SSSI)	0.65km/NE	Shorne and Ashenbank Woods form a complex of ancient and plantation woodland, and include a variety of stand-types associated with Tertiary gravels, clays and sands.
Cobham Woods SSSI	1.62km/E	This woodland and old parkland is representative of woods in North Kent which occur in part on acidic Thanet Sands and in part on chalk soils. One nationally rare plant species occurs in the arable land close to the wood. An outstanding assemblage of plants is present at this site which is also of importance for its breeding birds.

Details of one EPS development licence granted within 2km of the site was available. This related to the destruction of a resting place of Whiskered Bat *Myotis mystacinus* and Brown Long-eared Bat *Plecotus auritus*, in 2020, located 1.76km to the east of the site.

4.2. Preliminary Roost Assessment

The barn appeared to have remained broadly the same since the previous PRA with little regular use by the owner (in use for storage).

Whilst potential access points into the barn were numerous, PRFs were limited and no evidence of bats was found within the barn during the survey or during extensive survey work completed at the site previously. Overall, the barn was assessed to be of **LOW** suitability for roosting bats (**Table 1**).

4.3. Nocturnal Surveys

Following the identification of features with the potential to support roosting bats, one nocturnal bat survey was completed.

3 May 2021 (Dusk)

No bats emerged from roost sites in the building and activity was low, with a single pass of Common Pipistrelle logged at 21.04 (flew in from north), and infrequent, usually distant, passes by Noctule *Nyctalus noctula*/Leisler's Bat *Nyctalus leisleri* from 21.38 to the survey end.

4.4. Nesting Birds

Nesting Feral Pigeons *Columba livia domestica* were numerous and an old Swallow *Hirundo rustica* was also present. No evidence of Barn Owl *Tyto alba* was recorded and it was considered unsuitable for this species.

5. Conclusions and Required Actions

5.1. Designated Sites

No adverse impacts are predicted likely to occur to any statutory site due to the proposed renovations and no further works in relation to designated sites are deemed necessary.

5.2. General Mitigation

Standard pollution control measures should be implemented during construction to protect habitats on/adjacent to the site.

5.3. Bats – Roosts

Bat surveys (in 2009 and as detailed within this report) have indicated likely absence of roosting bats from the barn; works can continue without limitation in relation to roosting bats. In the apparently unlikely event that bats are encountered during works all works must cease and the advice of a Suitably Qualified Ecologist (SQE) sought immediately.

5.4. Lighting

To minimise impacts to bats during construction, works during the period between 15 minutes before sunset and 15 minutes after sunrise should be avoided/minimised so far as practicably possible. If temporary lighting is necessary, it should be directed to where it is needed, and light spillage avoided.

To ensure that impacts commuting/foraging bats from permanent lighting are minimised so far as practicably possible, lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only.

The height of lighting columns in general should be as short as is possible as light at a low level reduces any ecological impact. However, there are cases where a taller column will enable light to be directed downwards at a more acute angle and thereby reducing horizontal spill. For access lighting this can take the form of low-level lighting that is as directional as possible and below 3 lux at ground level.

Light levels should be as low as possible and if lighting is not needed, it should be avoided.

Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed. If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'. The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats and other wildlife.

5.5. Nesting Birds

The active nests of wild bird species (with certain exceptions) are legally protected from deliberate disturbance or destruction. Therefore, if the commencement of works are proposed for the bird nesting season (March-August inclusive), it will be necessary to appoint SQE to complete a check for active birds' nests in areas to be impacted. Should any active nests be found then it would be necessary to delay works until the nesting attempt has reached a natural conclusion. If works are planned for outside of the bird nesting period, then no such check is necessary.

5.6. Opportunities for Enhancement

The National Planning Policy Framework (NPPF) sets out national planning policies for the protection of biodiversity (and geological) conservation through the planning system. A key principle of NPPF is that, '*Opportunities to incorporate biodiversity in and around developments should be encouraged*'. Taking the requirements of NPPF into account, opportunities should be sought where possible for nature conservation enhancement at this site.

Opportunities also exist to enhance the site for bat and bird species through the incorporation of bat/bird boxes into built structures or on trees. Section 41 priority species could potentially benefit from the provision of appropriate boxes. Such measures would therefore be beneficial to nature conservation and show compliance with the latest policy guidance.

5.7. Validity of Survey Data

The findings of this survey/report are considered valid for a period of 12 months from the date of this report. If works are delayed beyond this date, then consideration should be given to undertaking an update survey.