



Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

BAT SURVEY AT 26 WOODS ROAD CAVERSHAM



**Prepared for:
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Executive Summary

Urban Tree Experts was commissioned by Mr G Garg of BuildVantage Limited to carry out a preliminary bat survey and evening emergence survey at 26 Woods Road, Caversham, Reading, RG4 6NA. This is to support a forthcoming planning application for the demolition of the existing dwelling and garage and the erection of a replacement property. This report confirms the findings of the surveys, completed by an experienced licensed bat ecologist in accordance with current best practice guidance (Hundt et al, 2012) where possible, and outlined any ecological constraints or issues with the proposed works.

No statutory or non-statutory protected features of ecological significance were present within the site boundary and there are no statutory protected features within a 1km radius of the site.

26 Woods Road is in poor condition and was not occupied during the inspections. The south western elevation is clad with hanging tiles from the ridge to ground floor ceiling level. The north eastern elevation is timber clad and there are also occasional broken tiles and gaps in the roof, for example along the ridge, providing access for crevice dwelling bat species. A single emergence survey with two surveyors was undertaken to determine if bats were using the features described above together with a separate site visit with a thermal imaging scope to assess possible emergence areas.

No evidence of bats present, or signs of historic use were found in any area of the building. In the absence of direct signs of bat presence, the potential of the building to support bats was assessed.

26 Woods Road is considered to have a low potential to support roosting bats, and there is a low risk of bats using the features present. The building therefore receives no ecological protection under wildlife legislation, and there are no ecological constraints to the proposed works.

Bats are highly mobile wild animals and may be encountered within a building following a negative survey result. If bats are found during demolition works then all works should stop, Simon Holmes (01189 762902) or Natural England (0845 601 4523) should be contacted for advice, and that advice acted upon.

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The validity of this report ceases at the prescribed time limit or after one year from the site inspection, or if the site conditions change due to unspecified works that affect the site whichever is the sooner.



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1. Introduction

1.1 Instruction

Urban Tree Experts was commissioned by Mr G Garg of BuildVantage Limited to conduct a preliminary bat survey at 26 Woods Road, Caversham, Reading, RG4 6NA, to support a forthcoming planning application to Reading Borough Council (RBC). Following the preliminary assessment we were instructed to conduct a single emergence survey in accordance with our recommendations.

1.2 Survey scope

- The preliminary survey aimed to establish baseline data on the presence/absence of bat species at the site, and to assess the potential of the building to support bats.
- The outcome of the survey has been used to inform and specify where further surveys are required, or to establish the need for and extent of any mitigation or compensation measures required as part of the proposed works.
- For the purposes of this survey, the site boundary is defined as the property and garage footprint.

1.3 Proposed Works

The survey was commissioned in connection with a forthcoming planning application to RBC that seeks to demolish the existing dwelling and garage and erect a replacement property.

1.4 Surveyor Background and Experience

The preliminary bat survey and report were completed by Simon Holmes CEnv. He holds a Class 2 Bat Licence (No.CL5003440). He has 26 years' experience of carrying out bat surveys and bat conservation work and has attended numerous training courses on bat surveys and mitigation, run by the Bat Conservation Trust, Wildwood Ecology and local bat groups.

Katie Parkhouse also assisted during the emergence survey. She has been surveying bats for two years and has received advanced training in surveying techniques, bat detector (Batlogger M) use, bat biology, identification, acoustic monitoring, echolocation analysis and netting.

2. Legislation and Planning Policy

2.1 Legislative Background

All species of British bat are protected under the Wildlife and Countryside Act 1981, as amended, and also receive additional protection via The Conservation of Species and Habitats Regulations (2010). Under this legislation it is an offence to kill or injure a bat or interfere with any roosting or resting site. A bat roost is interpreted as "any structure or place used for shelter or protection" whether or not bats are present at the time. A summary of the main legislation and planning considerations are included at Appendix 1.



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3. Site Location and Description

3.1 Site Location

The property is located at Grid Reference SU 73247 - 75854, see Ordnance Survey (OS) extract at Figure 1. An overview of the immediate area surrounding the property is set out in Figure 2, courtesy of Google Maps.

Figure 1. 26 Woods Road, Caversham, OS extract.

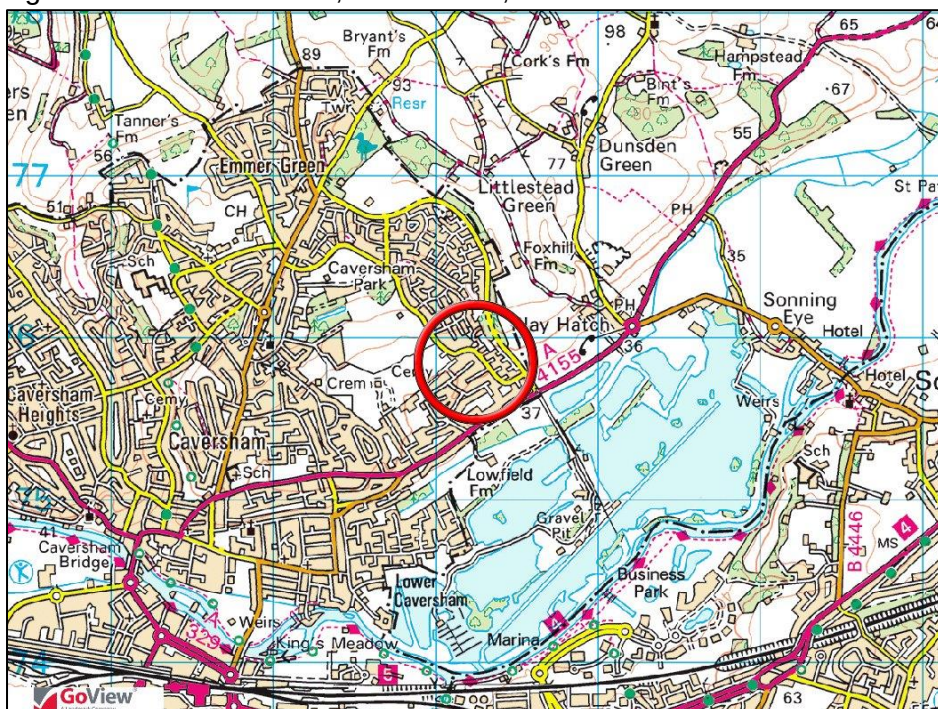
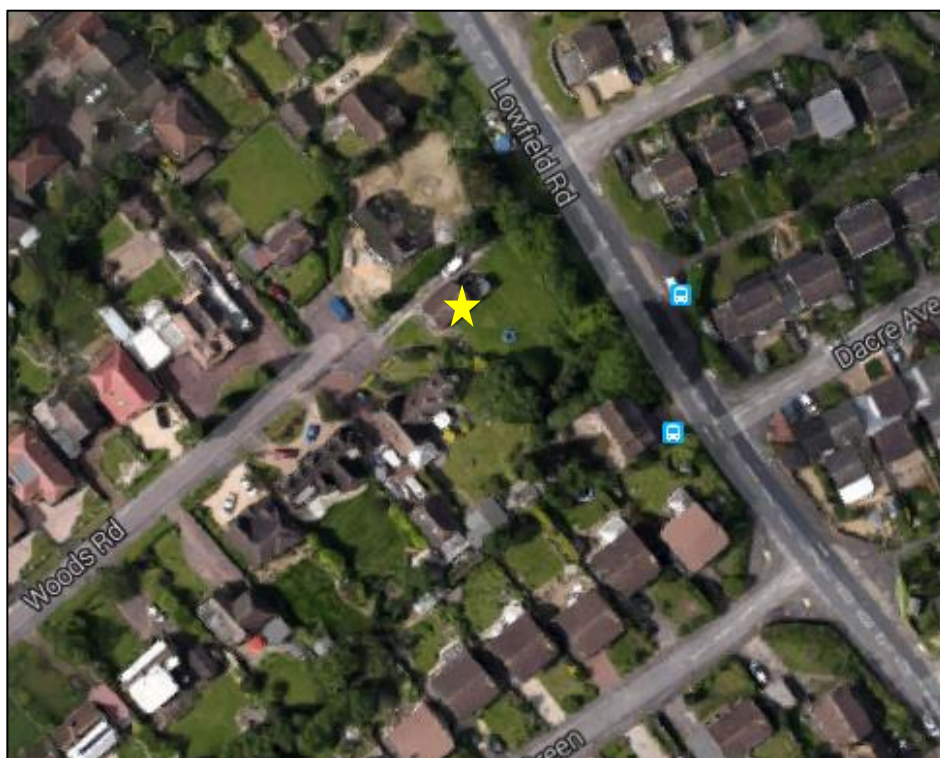


Figure 2. Area surrounding 26 Woods Road highlighted.





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3.2 Site Description

The application site contains a two storey detached house with detached garage at the rear. The property and garage are unoccupied and in a poor state of repair, see pictures at Figure 3 and 4. The property has a single storey, flat roofed front porch and rear kitchen extension. The remains of the application site comprised of a garden that is laid mainly to grass with herbaceous shrubs and large trees around the boundary.

Figure 3. Rear aspect of 26 Woods Road. 15.09.2015.



Figure 4. Garage of 26 Woods Road. 15.09.2015.





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4. Survey Methodology

4.1 Pre-Survey Data Search

A search for statutory and non-statutory protected areas was undertaken on the MAGIC (magic.defra.gov.uk) website.

Due to the urbanised area, the small size of the proposed development and the very local impact that may occur, no data was sought from local biodiversity record centres.

The property is surrounded on all sides by dwellings of similar size and design and this is typical of the local topography. Habitat is limited to that of adjacent residential dwellings with some connectivity via mature trees and hedges linking to public open space (POS), for example Reading/Henley Road Cemetery and Crematorium. There are numerous features within foraging distance such as Littlestead Green, the flooded gravel pits at Play Hatch, the River Thames and agricultural land.

4.2 Daylight Survey

A preliminary bat survey of 26 Woods Road, Caversham, Reading, RG4 6NA was carried out by Simon Holmes on Tuesday 15th September 2015 at 12 noon. Equipment used included a high powered torch, a digital camera, binoculars a video recording endoscope and thermal image scope.

During this survey an internal and external inspection of the buildings was carried out to identify any signs of occupation by bats and features that could offer potential roosting sites following standard survey guidelines.

Features investigated included:

- Construction of the building – soffits, loft space, tiles/slates, lead flashings etc.
- Building condition – structure of roof and walls.
- Internal conditions – microclimate stability, draughts etc.
- Access points – potential entry and exit points for bats.
- Roosting points – cracks and crevices, between underlay and roofing tiles/slates.

Field signs that would indicate the presence of bats were searched for. These included:

- Bat droppings on the floor and walls of the building.
- Feeding remains (particularly butterfly and moth wings).
- Evidence of urine and/or oily staining around possible roost entrances.
- Presence of areas cleared of cobwebs, although this is not always reliable.
- Where a breathable roofing membrane has been fitted, staining on the membrane may suggest use by bats.
- Odour can sometimes suggest the present of bats.
- Squeaking and chattering can reveal bats roosting between the tiles and roofing underlay.



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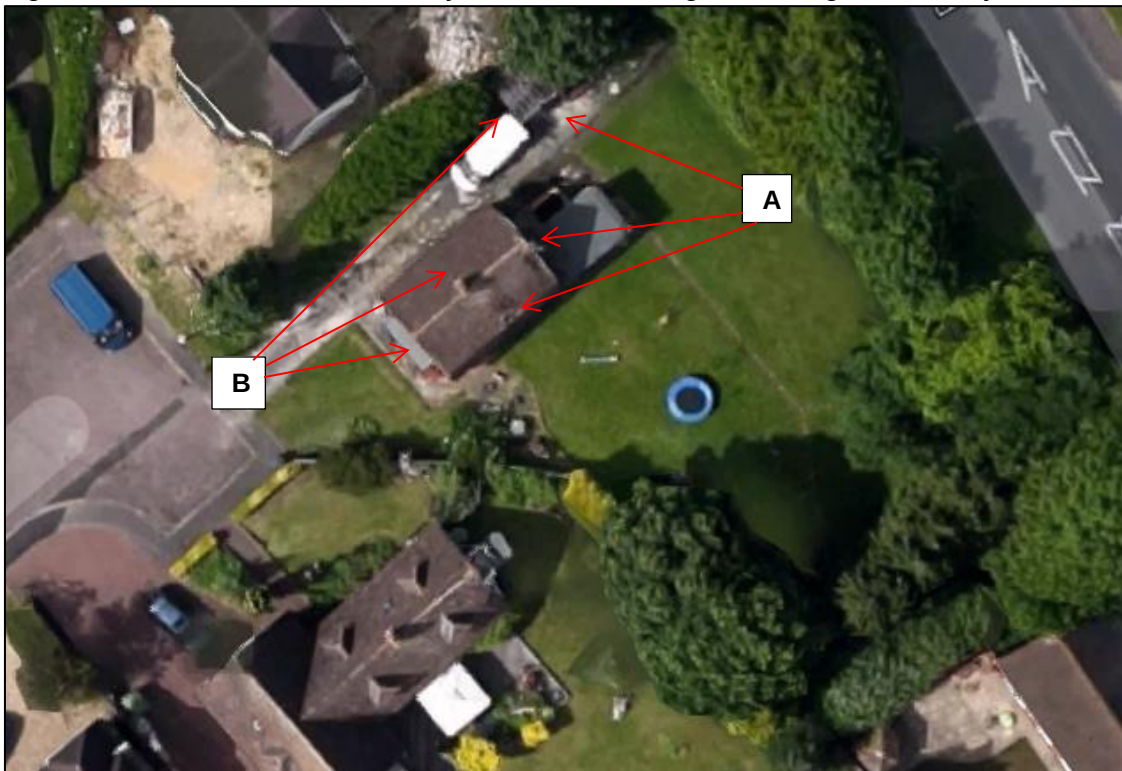
4.3 Emergence Survey

One emergence survey was conducted on Sunday 27th September 2015 in order to provide additional evidence to support the preliminary negative result. The survey was at a time of year when bats are most likely to be present. Weather conditions were suitable for the bat survey, being conducted during warm weather and when bats were likely to be active. Katie Parkhouse assisted Simon Holmes during the emergence survey. The surveyors were stationed as indicated in Figure 5 to ensure that possible emergence areas (areas of concern) could be observed.

During the surveys bat activity was also monitored using BatLogger M bat detectors. Both detectors were fitted with SD cards for recording bat activity, allowing for later analysis with Kaleidoscope Pro 3 software.

The weather conditions and surveyor details for the survey can be found in Table 1.

Figure 5 – 26 Woods Road. Surveyor locations during the emergence survey.



Following the emergence survey one further site visit was undertaken on Friday 2nd October 2015 at 7pm. A thermal imaging scope was used to assess potential emergence areas, the survey lasted 1.5 hours and consisted of a surveyor monitoring the building through the scope for signs of bats emerging. No bats were observed emerging from the building during the survey.



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Table 1 - Surveyor details and weather conditions for bat activity survey conducted at 26 Woods Road.

Date:	27 th September 2015		
Survey Type	Dusk survey		
Surveyors and locations	Simon Holmes (A) Katie Parkhouse (B)		
Weather Conditions (Start)	20°C 5% cloud cover, Dry, Beaufort 1 Humidity 62%		
Sunset/Sunrise	18.51		
Start time	18.35		
Finish Time	20.55		
Weather Conditions (Finish)	17.1°C, 0% cloud cover, Dry, Beaufort 0 Humidity 77%		

4.4 Constraints

Full access to the site during the visit was made possible. The daylight inspection was constrained by the insulation in the roof void and limited access to the flat roof porch and kitchen extensions. The emergence survey and thermal image survey were undertaken at a time when bats are known to be active and there were no constraints to the emergence survey.

5. Survey Findings

5.1 External Inspection

The external features of the house and garage were examined for signs described in section 4.2. Windowsills, exposed features around the windows, fascias, walls and doors were inspected for any evidence of bat droppings or staining.

The property inspected is of standard brick construction with a gambrel, clay tiled roof. There are hanging tiles on the south west elevation and timber cladding on the north east elevation. The roof alignment is broadly north east to south west. There are gaps in the roof tiles and hanging tiles, see images at Figure 6 and 7 on the next page. During the external survey no sign of recent or historic bat use was observed.



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Figure 6. 26 Woods Road, gaps in hanging tiles. 15.09.15.



Figure 7. 26 Woods Road, Gasp in ridge. 15.09.15.





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The rooves over the porch and kitchen extensions are covered in bitumen felt and are in good condition, providing no access for bats to exploit, see photos at Figure 8.

Figure 8. 26 Woods Road, rear kitchen roof, 15.09.15.



5.2 Internal Inspection

The main roof void is accessed from a bedroom on the first floor. The roof consisted of a main void with central chimney stack, the floor is partially boarded, with a deep layer of insulation, see Figure 9. The roof has no lining exposing the roof tiles and various gaps were observed making the roof void cold and draughty.



Figure 9. 26 Woods Road, roof voids, 15.09.15.



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The roof void was examined for any signs of bats (as described in section 4.2). The condition of the loft areas indicated that it had not been cleaned or tidied recently and no recent or historical signs of bats were observed.

The garage was examined for any signs of bats (as described in section 4.2). The garage roof consists of concrete or asbestos sheets with various gaps, making the space cold and draughty, see photo at Figure 10.

Figure 10. 26 Woods Road, internal view with gaps in garage roof, 15.09.15.



The condition of the garage indicated that it had not been cleaned or tidied recently and no recent or historical signs of bats were observed.



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5.3 Emergence survey

During the dusk survey no bats were seen emerging from or returning to the house or garage to roost. In total four different species were recorded foraging within the vicinity of the house and commuting across the site. Bat passes were low around the site, a simple summary of the bats recorded can be seen in Table 2 on the next page and the most frequently used flight paths are shown in Figure 11 below.

Figure 11. Commonly used bat flight paths at 26 Woods Road. 27.09.15.





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Table 2. Bat recording/observations in the vicinity of 26 Woods Road. 27.09.2015.

Date	Surveyor Position	Time	Seen	Heard	Species	Comments
27/09/2015	A	19.12	Y	Y	55 Pip	In transit south across site
		19.22	Y	Y	55 Pip	Foraging over garden
		19.23 to 19.31	Y	Y	55 Pip	Period of constant foraging from back to front of house and back again
		19.36	N	Y	45 pip	Foraging
		19.47	N	Y	BLE	In transit
		19.53	N	Y	BLE	Foraging
		19.55 to 19.58	N	Y	Noctule and 55 pip	Both species foraging
		20.01 to 20.04	N	Y	45 and 55 pip	Foraging around garden
		20.10 to 20.12	N	Y	BLE, 45 and 55 pip	All bats foraging over site
		20.17	N	Y	55 pip	
		20.23	N	Y	55 pip	No further activity until closure
27/09/2015	B	19.08	Y	Y	Noctule	From back to front of house. Transit along hedge
		19.18	N	Y	55 Pip	Foraging – faint
		19.21 to 19.29	Y	Y	55 Pip	Period of constant foraging from back to front of house and back again
		19.31	Y	Y	55 Pip	Foraging around house
		19.36	N	Y	45 & 55 Pip	Foraging
		19.49	N	Y	BLE	Transit
		19.55	N	Y	BLE	Transit
		19.56	N	Y	Noctule	Transit
		19.57	N	Y	55 Pip	Foraging
		19.57 to 19.59	N	Y	BLE	Foraging
		20.02 to 20.04	N	Y	55 Pip	Transit
		20.09	N	Y	BLE	Transit
		20.11 to 20.14	N	Y	BLE and 55 Pip	BLE very clear foraging along with sop pip,
		20.17	N	Y	55 Pip	Foraging
		20.31	N	Y	55 Pip	No further activity



6. Evaluation

The bat roost potential of the features within the site have been assessed with reference to the criteria laid out in the Bat Mitigation Guidelines (Mitchell-Jones, 2004), with any relevant features **highlighted in bold**.

The likelihood of bat roosts being present will be higher where structures:

- are of a pre-20th Century construction;
- are in a lowland rural setting;
- **have woodland, mature trees, species-rich grassland and/or water nearby;**
- have large dimension roof timbers with cracks, joints and holes;
- **have numerous crevices in stonework and structures;**
- **have an uneven roof covering with gaps,** though not too draughty;
- **have hanging tiles** or roof cladding, especially on south-facing walls;
- **have a roof warmed by the sun;**
- are disused or little used; largely undisturbed; or
- provide appropriate hibernation conditions, such as abandoned mines, tunnels, kilns, or fortifications;
- recent or historical records of bats on the site, or bat roosts in the general area.

The likelihood of bat roosts being present will be lower where structures:

- are in an urban setting with little green space;
- **are subject to heavy disturbance (constant movement due to draughts and noise, also unstable microclimate);**
- have a small, cluttered roof void (particularly for brown long-eared);
- are of a modern construction with few gaps or crevices that bats can fly or crawl through (though pipistrelle bats may still be present);
- **are comprised of prefabricated of steel or sheet materials; (some sections)**
- are active industrial premises.

Please note that the above list provides generic screening criteria only and there are exceptions to consider.

7. Conclusions

7.1 Interpretation

No evidence of bat presence or historic bat activity was found within 26 Woods Road. It is considered that the building presents negligible roosting potential for bats and there is a low risk that bats roost within the building.

The main areas of concern, roof and end elevations, did not identify any bats leaving or entering the building. A noctule bat was seen and heard in transit 17 minutes after sunset and soprano pipistrelles were detected 27 minutes after sunset. The timings indicate the bats are roosting somewhere nearby. The noctule bat was seen in transit between the houses flying from the rear of the property towards the front. As the surveyors had a clear view of the property and possible entry/exit points at the time the calls were detected it may be concluded that the early bats did not emerge from the house.



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The lack of evidence both internal and external, coupled with the emergence survey, thermal observations and calls provides a reasonable level of confidence that bats are not using the property to roost.

The suggested works should not cause disturbance to any bats, therefore a European Protected Species licence will not be required prior to the works being undertaken. Further surveys are not considered necessary or appropriate.

Bats are highly mobile wild animals and may be encountered within a building following a negative survey result. Therefore if bats are found during demolition works then all works should stop, Simon Holmes (01189 762902) or Natural England (0845 601 4523) should be contacted for advice, and that advice acted upon.

8. Recommendations

If, for whatever reason, there is a time delay of greater than 12 months between this survey and the commencement of work then the survey should be re-done.

9. References

Hundt, L. (2012) Bat Surveys: Good Practice Guidelines, 2nd edition. Bat Conservation Trust.

10. Queries

Any queries regarding this report should be addressed, in the first instance, to Urban Tree Experts:

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