



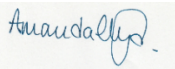
47 Coley Avenue, Reading RG1 6LJ

Final Bat Survey Report



June 2022

Document title	Final Bat Survey Report, Coley Avenue, Reading.
Date	8 June 2022
Survey dates:	24 th August 2022 26 th May 2022
Author	Amanda Lloyd
Client Name	Ben and Anne Lancaster
Site	47 Coley Avenue, Reading RG1 6LJ

Author	Amanda Lloyd	Spires Ecology Ltd	
Reviewer	Merryl Gelling	Spires Ecology Ltd	
Issued by	Merryl Gelling	Spires Ecology Ltd	

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None of the statements or advice set out in this report constitutes legal advice.

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1. EXECUTIVE SUMMARY

Site details:

The site at 47 Coley Avenue is situated on Coley Avenue, Reading in Berkshire (grid reference SU707726). The site contains a 1950's build house with more recent (1980's) rear and front extensions surrounded by a driveway, front and rear gardens and other buildings in this built-up area of Reading.

Proposed works:

To update and modernise the current dwelling, including re-roofing as required and possible extension.

Survey methodology:

A Preliminary Roost Assessment (PRA) for bats was conducted on the dwelling on 24th August 2021 at the request of the homeowner, and a single activity survey was undertaken in May 2022 by Spires Ecology Ltd.

Findings:

No evidence of bats was found within the lofts of the house. The PRA identified external features suitable for supporting roosting bats, including, but not limited to, raised ridge, slipped or raised roof tiles and raised flashing around the chimneys.

During the activity survey no bats were seen to emerge from the building. Several common and soprano pipistrelles were observed commuting through the site, but there was little foraging activity on site.

Impact Assessment:

No bats have been found to use the property for roosting, therefore there should be no risk of destruction of any bat roosts present within the building, or risk of death or injury to bats themselves.

Recommendations:

In light of current findings, no European Protected Species Mitigation licence with respect to bats is required to undertake the proposed works at 47 Coley Avenue, Reading.

2. BACKGROUND INFORMATION

Background

There are plans to update and modernise the current dwelling, including re-roofing as required and possible extension. Consequently, there is a risk of destruction of any bat roosts present within the buildings, and/or a risk of death or injury to bats themselves, hence a preliminary roost assessment (PRA) for bats was requested to assess this risk. Following findings of the PRA survey¹, a single bat activity survey was undertaken.

Legislative context

Bats and their roost sites are protected by law such that it is an offence to deliberately, intentionally, or recklessly disturb, kill, take, or injure bats or damage or destroy their roost sites. Actions that will constitute an offence in law may be mitigated against if sufficient precautions are followed and/or a mitigation license is sought from the Statutory Nature Conservation Organisation (SNCO; Natural England). Therefore, a precautionary approach has been adopted to ascertain the use, if any, bats are making of these buildings in relation to a planning application submitted to the Local Planning Authority (LPA) to better inform any subsequent decisions.

Landscape and ecological context

The house under consideration is 47 Coley Avenue, Reading Berkshire (grid reference SU 707726) and is situated along Coley Avenue, a relatively built-up area. The site contains a 1950's house with more recent extensions to the front and rear, a shared driveway and gardens with lawns, hedges and moderate sized trees. The site has other houses surrounding it with their associated gardens. There is more open space (tree-lined fields and lakes) to the south-east across the A4 Bath Road.

Objectives of the survey and report

The preliminary bat roost assessment survey included an internal and external inspection of the buildings to identify their potential to contain bat roosting sites. This involved a systematic search with binoculars and an endoscope (where appropriate) and a high-powered torch, looking for bats themselves as well as any evidence of bat use. Results from this survey indicated the property offered low suitability for roosting bats, which, following standard guidance, requires a single activity survey to provide further information (see appendix 1).

One activity survey was conducted at dusk to establish the location of any bats observed exiting or entering the building, and flight-lines in the vicinity of the building. The aim was to confirm bat presence, species, numbers, and roost status, or, to gather evidence that, beyond reasonable doubt, bats are unlikely to utilise the buildings. Bat surveys have been conducted in accordance with current guidance².

Potential appropriate mitigation, compensation and enhancement measures are assessed for this site following the legal protection given to bats under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, and any requirement for a European Protected Species

¹ 47 Coley Avenue, Reading, Preliminary Bat Roost Assessment, September 2021, Spires Ecology Ltd.

² Collins, J (ed) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Mitigation (EPSM) Licence or Bat Mitigation Class Licence (BMCL – formerly the Bat Low Impact Class Licence) is considered.

3. SURVEY METHODOLOGY

Field survey personnel

The survey was conducted by Dr Merryl Gelling CEcol MCIEEM. Dr Gelling is a Chartered Consultant Ecologist specialising in protected species and has over twenty years practical experience of wild mammal surveying in the UK. Dr Gelling has published several scientific papers on wild animal health and welfare, and is an experienced bat surveyor, holding Natural England Bat Survey Licences WML CL 19 and 20 (Levels 3 & 4; numbers 2015-13150-CLS-CLS & 201-13151-CLS-CLS), permitting disturbance of bats for the purposes of surveying for science and education or conservation, and WML CL 21 (Registered Consultant RC083), permitting the registration of individual sites under the Bat Mitigation Class Licence. Dr Gelling hold Accreditation Level 3 under the Natural England Earned Recognition pilot scheme, as well as other Natural England Protected Species and Home Office licences. A significant portion of Dr Gelling's work has focused on advising on suitable bat mitigation for development projects.

Assistance during the PRA survey was provided by Dr Amanda Lloyd MCIEEM, who also holds a level 2 Natural England Bat Survey Licence (WML CL 18 2016-23252-CLS-CLS).

The activity survey was undertaken by Dr Merryl Gelling, Dr Amanda Lloyd and Mr Karl Lofthouse (WML CL18-2015-15163-CLS-CLS).

Activity Survey for bats

The emergence activity dusk survey was conducted by three surveyors observing the outside of the building, each equipped with heterodyne and frequency division bat detectors (BatLogger M, Batbox Duet, Echo Meter 3, Anabat Walkabout). Surveyors were in position at least 15 minutes before dusk and remained for up to two hours after dusk. Three thermal cameras were used to augment the surveyors: a Pulsar Helion XP50, Flir Scion PMT166, and a Guide IR Track IR Pro19. Sound analysis was conducted with BatExplorer and Kaleidoscope. The night vision aids were set to record throughout the survey, with all footage downloaded and reviewed using VLC media player in real-time or at a maximum of 2.0x normal speed, with motion detection activated. The timestamps on bat detectors and cameras were aligned at the start of the survey, with notes made of specific areas or time periods requiring additional detailed post-survey scrutiny.

4. RESULTS

The data search results provided by TVERC (ref: TVERC/22/0171) on the 30th May 2022 detailed 431 records of bats with at least seven species that have historically been found within a 2km radius of the site, including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Daubenton's bat *Myotis daubentonii*, brown long-eared bat *Plecotus auritus*, noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, and Nathusius's pipistrelle *Pipistrellus nathusii*. There is a soprano pipistrelle roost (unknown size) approximately 1.5km to the north-east. Numerous records have come from Coley Park aural surveys with one injured soprano pipistrelle recorded in 2013 from a house close by to the site. For full details see appendix 2.

Dusk survey

Table 1: Dates and prevailing weather conditions for bat surveys at 47 Coley Avenue, Reading

Date	Dusk or Dawn	Survey start and end times	Sunset or Sunrise time	Weather Conditions (start-end)			
				Temp (°C)	Wind (Beaufort)	Cloud (Oktas/8)	Rain
26 th May 2022	Dusk	20:49-22:34	21:04	15 - 14	4-4	8-8	0 - 0

For the activity survey, three surveyors were located around the building in positions which afforded the most complete view of the external aspect. Three thermal cameras were also positioned to cover the building.

May 26th dusk survey: The earliest bat activity was recorded at 21:10 which was from commuting pipistrelle bat which was heard and seen by one surveyor on the rear elevation but was only seen by a surveyor on the front elevation. Other bats heard on site included soprano pipistrelle and common pipistrelle. No bats were seen by the surveyors or the cameras to emerge from the building.

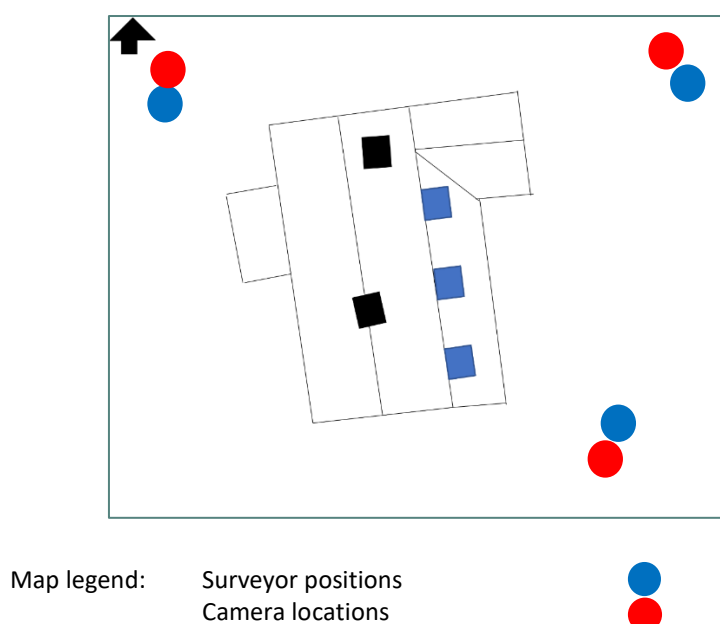
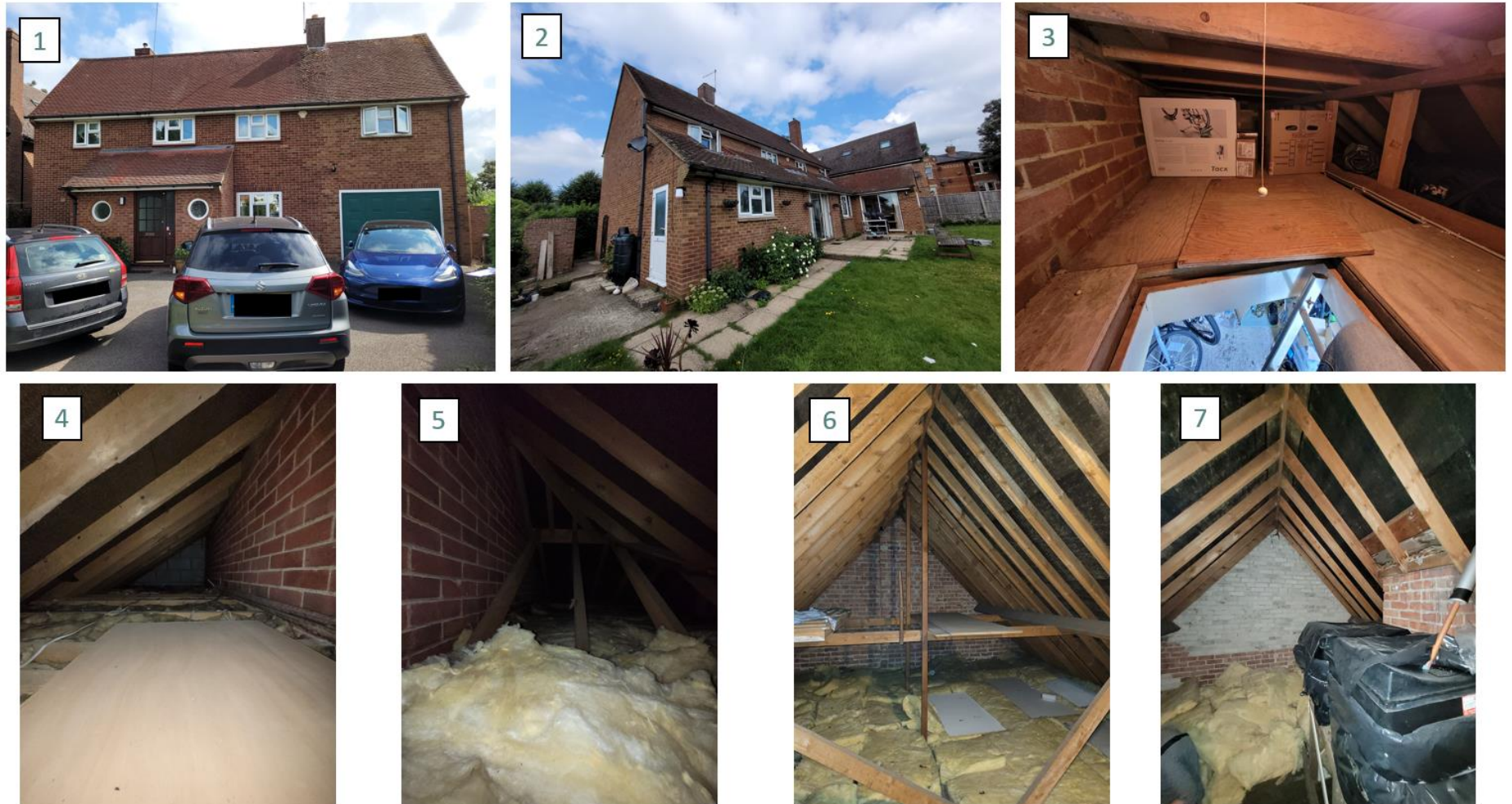


Figure 1: Photos of the site



*1: West elevation (front) of the house. 2: East (rear) elevation of the house. 3: Void two. 4: loft one. 5: loft three. 6: loft four (main house).
7: Loft four showing water tanks*



8: Loft five, chimney separating lofts 4 and 5 just seen. 9: Gable end of loft five showing cobwebs

6. CONCLUSIONS

Summary of Findings

No evidence of bats was found in any of the loft voids of the building at 47 Coley Avenue, Reading. Due to the condition of the roof tiles, there is low potential for crevice-dwelling bats to roost under gaps associated with the roof tiles, raised flashing and some raised ridge tiles.

During the activity survey no bats were seen to emerge from the building. No derogation license for bats is required to undertake the proposed works on 47 Coley Avenue.

Potential impacts of development and timing of works

There are no foreseen impacts or timing issues on the development works planned, however in the unlikely event a bat is unexpectedly encountered during any works, the feature should be replaced gently to protect the bat, works MUST stop and a suitably qualified ecologist should be contacted for advice.

Constraints

There were no constraints during the external survey, however due to health and safety considerations many of the loft voids were only surveyed from the loft hatch.

Further survey

No further surveys are required, assuming works commence within one year of the date of this report.

Future considerations

Planning permission

The National Planning Policy Framework (NPPF, 2019) is concerned with sustainable development under three mutually dependent elements: economic, social, and environmental. The environmental element aims to contribute to protecting and enhancing our natural, built, and historic environment and, as part of this, help to improve biodiversity. This provides guidance to local planning authorities when considering biodiversity and conservation, indicating that if significant harm to local biodiversity cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused. It is vital that appropriate survey work is undertaken and mitigation recommendations, if required, are proposed before a developer submits a planning application. Where planning has been consented with conditions, it is necessary to demonstrate that all conditions have been met before works commence.

License requirements

No licence is required to undertake the proposed works at 47 Coley Avenue, Reading. However, if during any works a bat is unexpectedly found, the feature should be gently replaced to protect the bat and all works MUST stop until a suitably qualified ecologist has been contacted for advice.

Potential mitigation and enhancements

No mitigation is required; however, the site could be enhanced by providing roosting opportunities on the new extensions using either an integrated bat box (Habibat) or attaching an external bat box to the building. Native ideally night-flowering plants could also be planted within the front and rear gardens to increase the local insect population.

Additional ecological considerations

Badgers are known to use the rear garden as a commuting route, and muntjac deer and fox have also been seen. A working method statement should be followed during any works; including, but not limited to, covering trenches overnight or providing a ramp to ensure no animals get trapped and no night working or increased illumination on site.

Limitations

This report has been prepared for sole use by the Client and their agents and must not be relied upon by any other party without the prior express written permission of Dr Merryl Gelling (Spires Ecology Ltd.).

7. APPENDIX 1

Guidelines for assessing potential suitability of sites to support bat roosts³.

<i>Suitability</i>	<i>Description of roosting habitats</i>	<i>Minimum further survey requirements</i>
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further surveys required
Low	A structure 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).	One dusk emergence or dawn re-entry survey. May to August.
Moderate	A structure 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).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. May to September with at least one survey between May to August.
High	A structure 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.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third survey could be either dusk or dawn. May to September, with at least two surveys between May and August.

³ Taken and adapted from Tables 4.1, 7.1 and 7.3 in Collins, J (ed) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

8. APPENDIX 2

Data search results held by the Thames Valley Environmental Records Centre (TVERC)

Taxon Group	Common Name	Latin Name	European Directives	UK Legislation	NERC s41	Other Designations	No of records	Earliest Record	Latest Record
Mammals - Terrestrial (bats)	Bats	Chiroptera	HabDir-A2np, HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	RL-Global-post2001-NT	6	01/09/2009	13/12/2019
	Brown Long-eared Bat	Plecotus auritus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	NA	15	13/05/2015	10/06/2017
	Common Pipistrelle	Pipistrellus pipistrellus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NA	NA	179	15/06/2009	26/08/2019
	Daubenton's Bat	Myotis daubentonii	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NA	NA	14	17/06/2001	31/08/2016
	Long-eared Bat species	Plecotus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	NA	4	27/09/2012	25/05/2018
	Nathusius's Pipistrelle	Pipistrellus nathusii	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NA	NA	1	01/09/2014	23/09/2014
	Noctule Bat	Nyctalus noctula	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	NA	49	01/01/1999	26/08/2019
	Nyctalus Bat species	Nyctalus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	NA	2	11/06/2013	25/07/2013
	Pipistrelle Bat species	Pipistrellus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	NA	20	01/01/1994	02/05/2017
	Serotine	Eptesicus serotinus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NA	NA	3	01/06/2010	25/05/2018
	Soprano Pipistrelle	Pipistrellus pygmaeus	HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	NA	128	01/05/2010	26/08/2019
	Unidentified Bat	Myotis	HabDir-A2np, HabDir-A4	HabReg-Sch2, WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	RL-Global-post2001-NT	10	30/06/2009	25/05/2018