

Melendo, Congresbury
Bat Scoping Survey Report

On behalf of Julia Stuckey

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1 Executive Summary

Avondale Ecology completed a building inspection for bats and nesting birds of a detached house at Melendo, Rhodyate Hill, Congresbury in September 2021. The survey was to inform proposals for a two storey extension on the east elevation as well as construction of a new garage and single storey extensions to the north and south.

The building is in a good condition, with the roof intact and in excellent condition. In the main loft over the two storey section, four old mid-sized bat droppings (likely long-eared species) were found by the western gable end. The only obvious bat access was via a tear in underlay by the western chimney, although the entrance was cobwebbed and there was no evidence of recent use. This feature will be retained. There was no evidence of use by bats and no obvious bat access into the smaller loft above the north-east extension. There was an intact uPVC soffit on the eastern gable with no potential bat access at this location.

All other areas within the footprint of works are of low ecological value, mostly comprising paving and low diversity amenity grassland. Only low value habitats for nesting birds will be impacted. The new garage will be sited close to ornamental shrubs and conifer trees but it understood that these are likely to be retained.

The following precautionary avoidance and mitigation measures will be required:

Avoidance/Mitigation Measures;

- Further surveys are not considered to be required providing a precautionary working methodology is be followed in relation to removal of the eastern chimney;
- The methodology will involve a Toolbox Talk by a suitably qualified ecologist, pre-works inspection of the main loft before removal of the eastern chimney, eastern chimney to be removed when bats are unlikely to be present during October to April and potential bat access to loft to be retained around western chimney;
- Proposals to proceed with caution with works to cease and ecologist contacted for advice if bats or nesting birds are unexpectedly found; and
- Sensitive external lighting design to minimise light spill in accordance with best practice.

Enhancement Measures

- Additional nesting bird provision and/or bat roost feature could be installed.

Please be aware that a survey of this nature can only provide a snapshot of the site's ecological importance. Please note that the survey results and any recommendations contained within this report will remain valid for two years following the date of survey.

2 Introduction

2.1 Introduction and Aims

Avondale Ecology was commissioned by Julia Stuckey to complete a scoping survey for bats and nesting birds for a property at Melendo, Rhodyate Hill, Congresbury, BS49 5AJ (Ordnance Survey Grid Reference ST44766505). Removal of the single storey extension and replacement with a two storey extension to the east is proposed. Single storey extensions are also proposed to the front and rear (north and south) with a new garage in the south-east corner of the site. The survey focused on bat and nesting bird potential of the building.

2.2 Objectives

The survey aimed to identify features suitable for use by protected species and identify any evidence which may indicate use by protected species, particularly bats and nesting birds. This included the following objectives:

- To identify any designated nature conservation sites on or in the vicinity of the property;
- To provide an indication of protected or notable species likely to be on or in the vicinity of the site;
- To record and map the suitable features for protected species, particularly bat species;
- To record any habitats of ecological importance;
- To identify whether there is any evidence of or potential for protected or notable to be present and impacted by the proposals;
- To detail requirements for a mitigation licence(s), if needed; and
- To make suggestions for avoidance, mitigation, compensation measures and working practices to meet legislative and best practice requirements.

2.3 Legislation

There are several different Acts of legislation and regulations which refer to the protection of wildlife of relevance to the site.

There are 18 species of bats in the UK, all of which are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Wildlife and Countryside Act, the "Habitats Regulations" and the CRoW Act 2000 together make it an offence, among other things, to recklessly, intentionally or deliberately:

- Disturb roosting bats or obstruct access to their roosts;
- Disturb a significant number of bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Kill, injure or capture (or take) bats.

A bat roost is defined as “any structure or place (including trees) which any bat uses for shelter or protection”. Because bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bat(s) are present at the time.

Statutory protection is given to nesting birds in the UK under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, it is an offence to intentionally or recklessly disturb species listed on Schedule 1 of the Act while they are nest building or at/ near a nest with eggs or young, or to disturb the dependent young of such a bird.

This is a brief summary of the legislation and is not to be regarded as a definitive legal opinion. When dealing with individual cases, the client is advised to consult the full texts of the relevant legislation and obtain further legal advice.

3 Methodology

3.1 Desk Study

A Bristol Regional Environmental Records Centre (BRERC) search was not completed in this case due to the scale of the proposals. Internationally and nationally designated sites up to a 1km from the site and Special Areas of Conservation (SACs) designated for bat species up to 10km from the site were identified using the Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk). Local Wildlife Sites were searched for using North Somerset Council's Planning Map. Aerial photographs and Ordnance Survey maps were also reviewed to assess the site in context of surrounding habitats. In addition, North Somerset Council's planning portal was searched for any evidence of protected species having been a consideration in other planning applications in the area. The MAGIC website was searched for records of European Protected Species (EPS) licence applications in the area submitted between 2013-2018, great crested newt eDNA survey results and licence returns from Natural England data.

3.2 Building Inspection

The internal and external building inspection of the house was undertaken in accordance with *Bat Surveys for Professional Ecologists - Good Practice Guidelines* 3rd Edition (Collins Ed., 2016), *Bat Mitigation Guidelines* (English Nature, 2004) and the *Bat Workers Manual* (Mitchell-Jones and McLeish, 2004). The survey was completed by Sarah Dale (MCIEEM and Natural England bat survey licence holder 2018-36720-CLS-CLS) on 25th August 2021. Sarah is an experienced ecologist with 15 years' professional practice.

The interior of the building was fully accessed and thoroughly searched, focusing on the two lofts of the house. The exterior of the building was observed from ground level paying particular attention to potential access points for bats. Features were searched for evidence of use by bats where access was possible and where these could be inspected with a flexible endoscope and 4m ladder. Signs of bats include live animals, corpses, noises, droppings, urine staining, feeding remains (e.g. moth and butterfly wings) and scratches. Where present, these signs were recorded and mapped. Any evidence of nesting birds was also recorded. The buildings were categorised using the criteria in Table 1.

A full habitat survey was not completed, although habitats within the footprint of works were characterised and key species recorded. Any potential for other protected and notable species to be present and impacted was also recorded.

Table 1: Bat Roost Potential Categories*(Category descriptions drawn from Colins, 2016 and Mitchell-Jones, 2004)*

Roost Potential	Description
Confirmed	Confirmed signs of bat presence/ occupation (droppings, oily staining around entry points, insect remains, odour, scratching) or actual bat presence (live or dead bats).
High	Features present with high potential to support roosting bats. These include structures with points of access to the interior through degraded/missing mortar/brickwork, proximity to good foraging habitat such as woodland or water and suitable crevices or woodpecker holes and holes within trees.
Moderate	Features with some potential to support roosting bats. Access points may include mortar cracks in brickwork or holes in soffits/fascias.
Low	Few features of bat interest. A limited number of features which may support individual bats rather than sizeable roosts.
Negligible	Negligible potential for roosting and bats very unlikely to be present. Includes structures constructed from unsuitable materials e.g. prefabricated with steel with no entrance opportunities.

3.3 Constraints

Both lofts could be fully accessed and the exterior could be viewed in its entirety. The survey was completed at an optimal time of year. There were no significant constraints to the survey and the survey is likely to be representative of typical conditions at the site.

4 Results

4.1 Desk Study

4.1.1. Designated Sites

The site is 50m north of King's Wood and Urchin Wood Site of Special Scientific Interest (SSSI) which is also a component unit of the North Somerset and Mendip Bats Special Areas of Conservation (SAC) designated for internationally-important horseshoe bat populations. The woodland supports a maternity roost of greater horseshoe *Rhinolophus ferrumequinum* and hibernation roosts of greater and lesser horseshoe *Rhinolophus hipposideros* bats. The buildings do not have potential to support roosting horseshoe bats as there is no suitable fly-in access. These species require open access features of at least 10-15cm in width e.g. defunct windows. The SSSI is also designated for woodland habitats and supports hazel dormouse. None of the habitats for which the SSSI is designated are present on site. Due to the scale and nature of the proposals (householder application), they would not meet Natural England's Impact Risk Zone criteria.

Cadbury Hill Local Nature Reserve (LNR) is situated 365m west of the property and is of value for woodland and grassland habitats. There are no other statutory designated sites within 1km. These sites are also designated as Local Wildlife Sites, a non-statutory designation which affords protection to these sites through the planning process.

4.1.2 Protected and Notable Species Records

- Bat species: The Yatton and Congresbury area is known to support at least 13 species of bat including all three British species of *Pipistrelle* bats, most species of *Myotis* bats, all three larger bat species, both species of long-eared bats and horseshoe *Rhinolophus* bats. The site is in Band A of the *North Somerset and Mendip Bats Special Area of Conservation (SAC) Guidance on Development*.
- Bird species: There are nearby known populations of bird species including Birds of Conservation Concern (RSPB, 2009). This includes red list species, which have been subject to recent declines, such as house sparrow *Passer domesticus* and starling *Sturnus vulgaris*.

4.1.3 Additional Information

There was one recent application with ecological information from the BS49 5AJ postcode area. Bat scoping surveys were completed for 21/P/2058/FUH and 20/P/1533/FUH. The findings are detailed in *Bat Roost Survey* report (Phil Quinn, August 2021) and *Preliminary Roost Assessment Survey* (Arbtech, June 2020). No evidence and negligible potential for roosting bats to be impacted was found. Avondale Ecology have recorded individual common pipistrelle, soprano pipistrelle and transitional lesser horseshoe bat roosts 730m south, 250m south and 450m south-west respectively. There is a previous protected species licence 300m north-west for brown long-eared and common pipistrelle bats. There are no ponds shown on Ordnance Survey mapping within 250m, although there are great crested newt *Triturus cristatus* records within 1km.

4.2 Site Description

The detached house is situated immediately north of the A370 (Bristol Road). The area of works comprises the building itself, a small area of hardstanding and amenity grassland. There is a row of ornamental shrubs and semi-mature conifers along the A370 (south) boundary although this has been recently thinned. The grassland appears to be species-poor and is regularly mown, dominated by perennial ryegrass *Lolium perenne* with fescue *Festuca* sp., creeping buttercup *Ranunculus repens* and dandelion *Taraxacum* agg. also prevalent. The property borders open pasture to the north and there are areas of woodland on Cadbury Hill and King's Wood in the immediate vicinity, which are known to support important wildlife species.

4.3 Building Inspection

The detached house appears to date from the 1960/70s and is constructed of concrete block and brick with intact render. Externally, the building is in excellent condition. uPVC soffits are intact and flush to the wall with no access for bats or nesting birds under the eaves or on gable ends. Brickwork and flashing around the chimneys is intact. Interlocking concrete tiles are in good condition with no obvious slipped tiles and mortar under ridge tiles appears to be entirely intact. There were no obvious accessible features suitable for roosting bats on the exterior. The roof on the extension is in excellent condition.

Internally, there are two lofts. The loft above the single storey extension is approximately 2m high (maximum), 3.5m long and 6m wide. The trussed construction using softwood timbers is cluttered. Bitumen underlay appears entirely intact. End rafters are flush with the block wall and the loft appears to be entirely sealed to bats, particularly as there is thick insulation under the eaves. A vent on the eastern gable end has a grill with 5mm x 5mm holes which is too small for bats to access. There was no evidence of use by bats, although there were occasional mouse droppings.

The main loft above the two storey section of the house is approximately 2.5m high, 11m long and 6m wide. The loft was noticeably very warm at 24°C (5°C above the outside temperature). The two chimney stacks constrain the space but otherwise, the loft is open and uncluttered. The roof is lined with bitumen underlay which is intact except for one small tear around the western chimney. There was no evidence of recent use of this feature by bats accessing the loft as thick cobwebs were evident around the feature and chimney. There were possible gaps around brick and block at the gable ends, although expanding foam was present in some areas. Access at these locations would be prevented by the intact and sealed external soffits in any case. There were 4 old (>6 months) mid-sized bat droppings, typical of long-eared species, close to the western gable. The most likely location for access would be around the western chimney. There were insufficient droppings to gather to send off for DNA analysis.

The building appears to have negligible potential to support hibernating bats and low potential to support summer roosting bats. The area of works (single storey extension and north-east gable) appears to have negligible potential to support roosting bats.

There will not be loss of any foraging habitat or commuting corridors of note for bats.

Due to the excellent condition of the building, there is a very low risk of nesting birds being present, although nesting is possible in the shrubs along the southern boundary.

There is a negligible risk of any other protected or notable species being present and impacted.

5 Impact Assessment

5.1 Designated Sites and Habitats

There will be no impacts on designated sites due to the scale and location of the proposals. The proposals involve extensions to an existing property and will not impact on key habitat for horseshoe bats. There is no risk of significant adverse effects on the North Somerset and Mendip Bats SAC.

5.2 Bat Species

Bat roosts, defined as a 'place of rest or shelter', are protected from destruction, modification or obstruction under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Bats are protected from deliberate or reckless killing or injury. Bats are also protected from disturbance whilst in a roost or significant disturbance to their ability to survive or reproduce. Roosts are protected even if bats are not present at the time of works.

Although there was evidence of use of the main loft, this was more indicative of an exploratory visit rather than regular or even intermittent use as a place of rest or shelter. The potential bat access feature close to the western chimney will be retained. The extension which will be rebuilt and the eastern gable where the extension will tie into had negligible bat roost potential and no obvious potential external access features to either loft. The eastern chimney stack in the main loft will be removed but otherwise the loft will be retained. There was no evidence of potential bat roost features associated with the chimney. The works are likely to take 1-2 days so, in a worst case and unlikely scenario would result in temporary disturbance to an individual bat. An offence is unlikely to occur and a precautionary methodology is detailed in Section 6. The single storey extensions will not have an impact on bat roost features.

Some bat species are sensitive to high levels of light pollution and would be impacted by indiscriminate light spill, although there is existing street lighting on the A370. The lack of windows on the garage reduces the risk of light spill onto the A370 or nearby habitats. There will be a small increase in glazing but the proposals are unlikely to result in substantial light spill onto important dispersal corridors for horseshoe bats (light spill onto hardstanding/garden). Best practice will need to be followed to minimise additional external light spill onto nearby habitats suitable for light sensitive species such as horseshoe bats.

5.3 Other Species

It is an offence to kill a wild bird or damage or destroy their nests or eggs under Section 1 of the Wildlife and Countryside Act 1981 (as amended). There was no evidence of recent or historic activity by nesting birds and negligible/very low potential for nesting birds to be using the building. No other protected or notable species will be impacted.

6 Recommendations

6.1 Mitigation and Avoidance Measures

6.1.1 Bat Species

No further bat emergence/re-entry surveys are required as the area impacted by the proposals has negligible bat roost potential. Also, there will not be 'reasonable likelihood' (as in paragraph 99 of ODPM Circular 06/2005) of impacting on bat roosts as there are no obvious or potential bat roost features within the area of works. There is a low risk of works to chimney temporarily disturbing an individual bat, although there is not reasonable likelihood of an offence due to the very limited evidence of bat activity found. As a precautionary measure, the following approach should be implemented:

- A Toolbox Talk by a suitably qualified ecologist to any contractors and pre-works inspection of the main loft before removal of the eastern chimney;
- Eastern chimney to be removed when bats are unlikely to be present during October to April inclusive;
- Potential bat access to loft to be retained around western chimney;
- Work to be completed as quick as possible (within 1-2 days ideally) and roof to be reinstated; and
- If a roosting bat(s) is unexpectedly present at the time of works or if evidence has substantially increased, the licensed ecologist will agree a revised methodology which may require a Natural England licence.

If bats or their roosts (e.g. accumulations of droppings) are unexpectedly found during works, all activities must cease and an ecologist contacted for advice. A Natural England licence may then be required for works to proceed lawfully.

Best practice should be followed including designing lighting sensitively in accordance with *Guidance Note 8: Bats and Artificial Lighting* (ILP, 2018). External lighting should only be used where necessary. Features such as PIR sensors or short-duration timers and wall mounted, bollard and/or downward-facing lights should be used for external lights.

6.1.2 Nesting Birds

It is unlikely that nesting birds will be present, but contractors should be instructed to remain vigilant. If any active birds' nests are found or suspected to be present, works must cease immediately and an ecologist contacted for advice. If active nests are unexpectedly found during works, they will need to be left along with a suitable buffer area until the chicks have fledged. The time until fledging varies dependent on species but can take up to six weeks. The main bird nesting season is March to September.

6.2 Enhancement Measures

An additional feature for nesting birds such as a house sparrow terrace (e.g. Schwegler 1SP) or swift brick (e.g. the S brick [Action for Swifts: The S Brick](#)) could be integrated into or attached to the new building. If appropriate for these to be included, these should be sited at least 3m (and 4m from swift features) above ground level and in a location where they are unlikely to be disturbed or accessible to predators.

A bat box could be incorporated into the new roof structure. Options for bat roost creation include:

- Roost feature in new soffit/fascias created by leaving 2-3cm access gaps or holes or installing a soffit bat box (see www.wildcareshop.com/soffit-bat-box.html). Ideally, the soffit would be wood or rough-surfaced (i.e. not uPVC) for this option to be most effective;
- Bat tubes such as Schwegler 1FR;
- Bat bricks such as Ibstock brick or Habibat box; or
- Attached bat boxes such as Schwegler 2FE or Beaumaris woodstone boxes, although these often degrade more rapidly or become detached over time.

These features are fully enclosed and so would prevent bats accessing any living space or lofts within the property.

References

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Appendices

Appendix A Site Photographs



A.1 South elevation



A.2 North elevation



A.3 East extension



A.4 Sealed soffit on eastern gable



A.5 Loft above single storey extension



A.6 Sealed end rafter in extension loft



A.7 Main loft above two storey section



A.8 Small tear beside chimney