

Bat Scoping Survey

12 Penroath Avenue, Reading

Client Space Q Studio

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Non-technical Summary

Background

In November 2020, Crossman Associates was commissioned by Space Q Studio to undertake a bat survey of 12 Penroath Avenue, Reading, Berkshire, RG30 2ED.

Development proposals involve a part two-storey part single-storey rear extension, single storey side extension, upper floor side extension and entrance porch.

Methodology

The scoping survey was undertaken by Fairbrass Knowles, a licensed bat worker and experienced ecologist.

The building was inspected both externally and internally for any evidence of bat presence, such as droppings, food remains, staining or actual bats.

Results

The property is a 1960's four-bedroom detached house located in a predominantly urban area. The house is constructed from modern and uniform materials including a well-sealed roof of modern interlocking roof tiles and tight fitting soffits. A single, uncomplicated and well-sealed loft is present. No evidence of bat activity was recorded and the house lacks features with significant potential to support roosting bats. The property has **negligible suitability** for roosting bats.

Recommendations

It is recommended that the following be undertaken as part of the development;

- Precautionary approach to the development with regard to bats.
- Fit 2 number integral sparrow boxes into the exterior wall of the new extension and 4 number tree mounted bird boxes onto mature trees within the rear garden.

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1. Background

- 1.1. In November 2020, Crossman Associates was commissioned by Space Q Studio to undertake a bat scoping survey of 12 Penroath Avenue, Reading, Berkshire, RG30 2ED; site Ordnance Survey grid reference for the site SU 6939 7297.
- 1.2. Figure 1 in Appendix I provides a site location map.
- 1.3. The proposed works include a part two-storey and part single-storey rear extension, a single storey side extension, upper floor side extension and entrance porch.
- 1.4. The objectives of the survey were to:
 - Make an assessment of the likely presence or absence of bats and birds
 - Identify any legislative or planning policy constraints relevant to the site
 - Determine the need for further surveys, compensation or mitigation

Site Description

- 1.5. The property is a c. 1960's detached, two storey 4 bedroom dwelling with simple single storey side extensions, one of which provides single bay garage. The property has a good sized and well-maintained rear garden and a front driveway and is located within a residential area set centrally in the town of Reading.
- 1.6. Immediate surroundings consist of further residential dwellings which line the edges of minor residential roads. Houses tend to have large gardens, which provides a green element within a predominantly urban setting.
- 1.7. The wider landscape is dominated by the town of Reading and includes a mixture of residential areas, shops and business parks etc, occasionally interspersed by green open spaces including nature reserves, school playing grounds and public

parks, of which the closest is Prospect Park, which occupies land to the east and provides a large expanse of grassland with scattered and groups of trees, the area also provides a small pond.

Legislation

- 1.8. In the UK all species of bats are protected under the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations, 2011 (amendment). Under this legislation it is a strict liability offence to injure or destroy a bat or to disturb damage or destroy the resting place of a bat. Under this legislation the UK is obliged to fully take into account bats within the planning process and the level of bat activity on-site must be fully assessed prior to the assessment the planning application
- 1.9. In Britain all wild birds are granted legal protection under the Wildlife & Countryside Act ((1981) (as amended)). This legislation protects the birds, their eggs and nests whilst being built or in use.

2. Methodology

Desktop Study

Data search

- 2.1. The MAGIC website was accessed to gain information on any statutory site designations within 4 km of the site that are designated for bats.

National Planning Policy

- 2.2. National Planning Policy has been reviewed for policies that relate to nature conservation relevant to the site.

Field Survey

Bat scoping survey

- 2.3. The building was methodically inspected internally and externally for any evidence of roosting bats, including actual bats, droppings, urine staining and evidence of feeding activity such as discarded insect wings and cases.
- 2.4. The building was also assessed for its suitability to support roosting bats by considering several factors including whether bats can access internal and external voids within the building and whether these voids provide adequate protection and shelter for roosting bats. If the building is not confirmed as a roost, it is assessed from High to Negligible Suitability as follows;
 - **High Suitability** – many roosting opportunities. Buildings tend to be old, large and rural
 - **Moderate Suitability** – some roosting opportunities. Building tend to be old, rural with some recent maintenance

- **Low Suitability** – few roosting opportunities. Buildings tend to be modern, urban and well maintained
- **Negligible Suitability** – insignificant roosting opportunities. Buildings tend to be small, modern, urban and very well maintained.

Birds

- 2.5. The building was also inspected for the presence of birds including house sparrow *Passer domesticus*. The building was checked for field signs including nesting material, accumulations of droppings and/or pellets.

3. Results

Desktop Study

Data Search

- 3.1. The MAGIC website informed that there are no statutory sites within 4 km of the site that are designated for bats.

Planning Policy

Field Survey

- 3.2. The National Planning Policy Framework (NPPF) contains sections of relevance to nature conservation that include:

- Paragraph 174: To protect and enhance biodiversity and geodiversity, plans should:
 - a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁵⁶; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;
 - b) and promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- Paragraph 175: When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵⁸ and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Bat scoping survey

- 3.3. Survey work was undertaken by Fairbrass Knowles an experienced ecologist and licensed bat worker (class licence ref. 12392 CLS-CLS) and took place on 03 December 2020. The building was fully accessible.
- 3.4. The external and internal conditions of the building are described in the table below and photographs can be found in Appendix II.

- 3.5. A table in Appendix III information sheets set out the criteria for the way a building is assessed for its potential to support roosting bats.

Table 1: building description and bat suitability.

Building	Feature	Feature Description	Bat suitability
12 Penroath Avenue	Overview	The property is a c. 1960's detached, two storey 4 bedroom dwelling with simple single storey side extensions, one of which provides single bay garage. Currently the property is inhabited and is in an excellent state of repair.	Confirmed roost ☐ High Suitability ☐ Moderate Suitability ☐ Low Suitability ☐ Negligible Suitability ☒
	Exterior	The supporting walls of the property are constructed from unrendered decorative brick work cavity walls, all of which are in excellent condition with no evidence of any significant cracks or gaps that could support bats. Small panels of decorative concrete hanging tiles were originally present on the front; west elevation (2 panels) and rear; east elevation (6 panels). All the upper elevation panels have been removed. One panel	

		on the western side and 3 panels on the eastern side ground floor elevations remain intact. The intact panels all provide a well-sealed feature that provides no significant crevices. All windows and doors remain in excellent condition; and all fit tightly in their respective reveals. The exterior walls of the building lacks significant bat roosting opportunities.	
	Interior	Areas of living accommodation consist of well-appointed living space composed of rooms with painted and plaster walls and ceilings. A single and spacious rectangular shaped roof void occupies the main roof and provides an open area formed from a cut and pitch roof formed from substantial gauged timbers which all remain in good condition and provide no significant complexities. Traditional type 1 f bituminous sarking felt forms the sarking layer throughout and remain well fitted and free of any significant rips or holes. To enable easier storage part of the floor of the loft has been fitted with a timber plank floor, remaining areas have glass fibre insulation laid between the floor joists. Internal gable walls are of well-pointed block work.	

		Overall, the loft is well sealed with no evidence of any potential ingress points. During the survey no bats, bat droppings or any other evidence of bats.	
	Roof	<u>Main roof</u> The roof is a simple double pitched design, clad with modern concrete interlocking Ludlow style roof tiles and simple concrete ridge tiles. All tiles are present and fit well providing a comprehensively sealed roof that overall provides no significant crevices. The roof has a single brick chimney on the southern end and this remains in good order with tightly fitted lead flashings sealing the chimney base to the roof tiles. Narrow soffitts are present along the eaves of the roof and barge boards below the verges on both gable ends. Both these features remain in good conditions and provide well-sealed areas that are tightly sealed to the eaves / gable ends. Both roof verges remain well-sealed with mortar.	

Flat roofs

Attached to the eastern and western gable ends are small and simple single storey extensions. On the southern end this consists of extended living accommodation while on the northern end it consists of extended living accommodation and single bay garage.

Both are fitted with simple, standard design flat roofs clad with bituminous felt which is folded and pinned tightly along the eaves. All felt remains in good condition and provides no significant crevices.

All roofs

All roofs provide well-sealed features that lack any significant bat roosting opportunities.

Birds

- 3.6. During the survey no birds, bird nests or other evidence of birds was found in association with the house.

Evaluation

Bats

- 3.7. During the scoping survey no droppings, staining, feeding remains or actual bats were observed.
- 3.8. Roofs are composed of pitched roofs fitted with modern, interlocking roof tiles, flat felt clad roofs, tight fitting soffits / bargeboards and mortar filled verges, this leave no gaps suitable as ingress points for roosting bats.
- 3.9. The property is also set within an urban environment offering sub-optimal foraging / commuting opportunities for bats.
- 3.10. The building is considered to possess **negligible suitability** for roosting bats.

4. Recommendations

- 4.1. The recommendations in the paragraphs below are provided to help ensure that wildlife and important ecological features are protected during the course of works. Recommendations also set out mitigation measures to minimise harm where this cannot be avoided and provide compensation measures to allow the proposals to meet current legislative and planning policy objectives.
- 4.2. Under the Government's National Planning Policy Framework (NPPF) opportunities to incorporate biodiversity in and around developments should be encouraged.
- 4.3. The Natural Environment and Rural Communities (NERC) Act (2006) states that a public authority must 'in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.
- 4.4. Paragraph 174b) of the NPPF (2018) states 'Plans should ...identify and pursue opportunities for securing measurable net gains for biodiversity' and Paragraph 175d) states that '...opportunities to incorporate biodiversity improvements in and around developments should be encouraged especially where this can secure measurable net gains for biodiversity'.

Species recommendations

Bats

- 4.5. The property has **negligible suitability** for roosting bats. It is not considered necessary or beneficial to undertake any further survey work on the building in relation to bats.

- 4.6. Bats are transient in nature and can sometimes utilise buildings on an occasional or temporary basis. It is therefore recommended that works to the building are undertaken using a precautionary approach with all roof panels and cavity walls (where present) being dismantled cautiously by hand. In the unlikely event that a bat is found, works should stop immediately and further advice should be sought from Crossman Associates or Natural England.

Ecological enhancements

- 4.7. During the construction phase of the new development there is a good opportunity to incorporate inexpensive ecological compensation and enhancements that aim to increase the biodiversity of the site.

Tree mounted bat boxes

- 4.8. The rear garden has a number of mature trees which provide a good location for fitting bird nest boxes and the following models are recommended.

- 2 no. Vivara Barcelona open nest box (suitable for song thrush and blackbird)
- 2 no. Vivara Woodstone enclosed nest box fitted with 32 mm hole (suitable for blue, great and coal tits).

- 4.9. Bird boxes should be securely fixed to the trunks of mature trees and be tilted forward slightly to prevent rain ingress. For further information see <http://www.rspb.org.uk/birds-and-wildlife/read-and-learn/helping-birds/nestboxes/smallbirds/siting.aspx>.

- 4.10. Bird boxes are available from www.wildlifeservices.co.uk or www.nhbs.com.

Integral sparrow nest boxes

- 4.11. New nesting opportunities should be provided for the local bird population with a particular emphasis on house sparrows (which have suffered significant decline) and it is recommended that the extension is fitted with 1 no. sparrow nest box.

- 4.12. Sparrow nest boxes are ideally fitted below eaves or on gable walls. Suitable models include the Schwegler 1SP, which is suitable for surface mounting as well as integral mounting. This model is strong, durable, long lasting and available in brown or stone colour. An information sheet on integral bird nesting boxes is included in Appendix III.
- 4.13. Bird boxes are available from www.wildlifeservices.co.uk or www.habibat.co.uk.
- 4.14. The siting of the bird boxes should be done in consultation with a suitably qualified ecologist.

Limitations

- 4.15. This report records wildlife found during the survey and anecdotal evidence of sightings. It does not record any plants or animals that may appear at other times of the year and were therefore not evident at the time of visit.
- 4.16. This report represents a preliminary assessment only. Recommendations and conclusions are subject to change should further findings significantly differ from those collected from the survey efforts to date.
- 4.17. The advice contained in this report relate primarily to factual survey results and general guidance only. On all legal matters you are advised to take legal advice.

5. References

Bat Conservation Trust (BCT) *Bats and Lighting in the UK* BCT

HMSO (1981) *Wildlife and Countryside Act 1981 (and subsequent amendments)*. HMSO

HMSO (1995) *Biodiversity*. The UK Steering Group Report

Joint Nature Conservation Committee (JNCC) *Common Standards Monitoring Guidance for Reptiles and Amphibians* (2004) JNCC

Mitchell-Jones, A.J (2004) *Bat Mitigation Guidelines* English Nature

Mitchell-Jones, A.J , & McLeish A.P. (2012) *The Bat Worker's Manual* (4th Edition)

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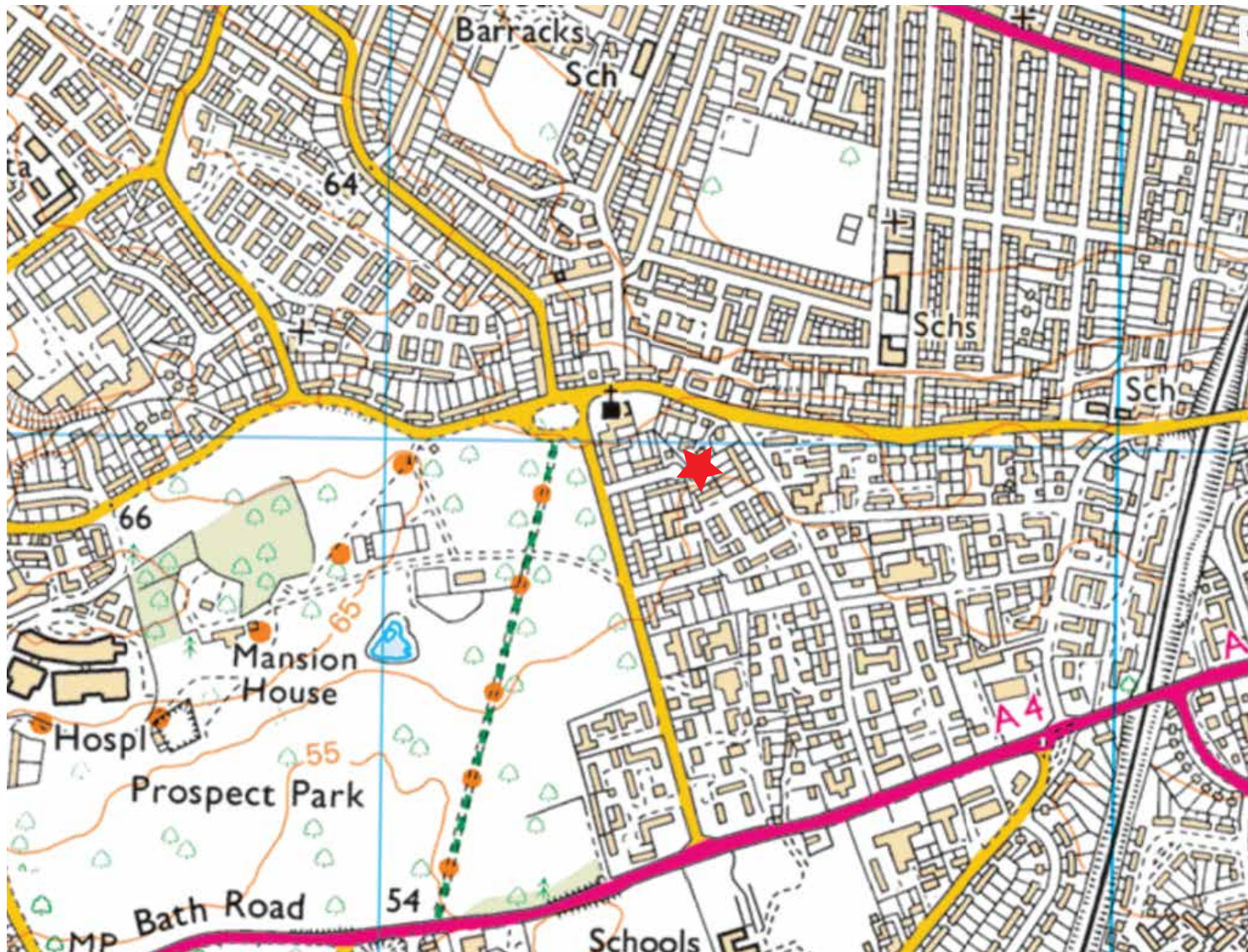
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TSO (2006) *Natural Environment and Rural Communities Act* TSO

Appendix I – Site Figures



Site location



Client Space Q Studio

Title Site Location

Site 12 Penroath Avenue, Reading

Figure 1

Date 04 December 2020

Scale Indicative



Appendix II – Site Photographs

Photographs 1- 3



Photograph 1:

Front; western elevation



Photograph 2:

Rear; eastern elevation



Photograph 3:

Northern gable and side extension

Photographs 4 - 6



Photograph 4:

Southern gable and small extension



Photograph 5:

Felt roof; detail showing well sealed eaves; typical throughout



Photograph 6:

Pitched roof; detail showing well sealed soffits; typical throughout

Photographs 7 - 9



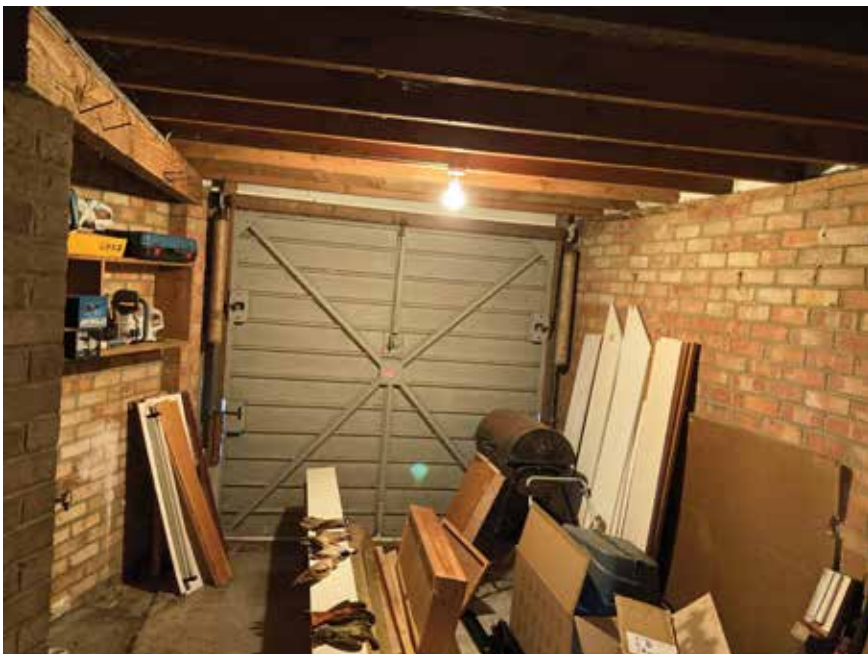
Photograph 7:

Detail; rear; eastern elevation; showing removed panels of hanging tile.



Photograph 8:

Ground floor panel of hanging tile; all tiles remain well fitted



Photograph 9:

Garage

Photographs 10 - 11



Photograph 10:

Roof void



Photograph 11:

Detail; showing the sarking felt which remains well-sealed throughout.



Appendix III– Information Sheets

Bat Habitat Suitably Criteria

Bat Roosting Suitability	Criteria	Survey requirement to prove likely absence
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further survey work required
Low	A building, structure or tree with one or more potential roosting sites that could be used by individual bats opportunistically; however, these possible roost sites do not provide enough space, shelter, protection and/or suitable surrounding habitat to be used by large numbers of bats and are unlikely to be suitable for maternity or hibernation roosts.	One activity survey
Medium	A building, structure or tree with one or more potential roost sites that could be used by bats due to the size, shelter, protection, conditions and surrounding habit, but is unlikely to support a roost of high conservation status.	Two activity surveys
High	A building, structure or 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.	Three activity surveys

Survey requirements are taken from Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016), which is the recognised industry standard guidance used by local planning authorities and other statutory consultees.

Information sheet Artificial bird nesting boxes for Buildings: Swifts, house martins and house sparrows



Habibat house
sparrow nest box



Vivara woodstone sparrow
nest box; suitable for both
integral fitment or surface
mounting

Ibstock Swift boxes are also suitable for house sparrows. Can be customised to suit any exterior finish. Site boxes under eaves, away from windows and direct sunlight.

Sparrow boxes should be grouped together and be at least 2 m of the ground. The boxes can be also be sited on gable walls. At least 3 per averaged size house.

Swifts boxes should be at least 5 m above the ground with an clear un-obstructed flight path.

Schwegler house martin box model 9 b double is a suitable box for house martins and can be used to encourage the uptake of a building by this species. The boxes can be attached to the exterior walls in a sheltered position; ideally beneath the eaves. At least two sets should be placed on an averaged size house.

Ibstock Box



Schwegler model 9b