Report	:	Bat and Nesting Bird Assessment: House and Garage at Kingswood, Kingsland Road, Shrewsbury SY3 7AF
Reference	:	CP/2515/20.1
Date	:	15 th March 2021
Client	:	Mr. J. & Mrs. S. Charters Kingswood Kingsland Road Shrewsbury SY3 7AF
Proposed development	:	Remodelling of the House and Garage.

Disclaimer.

Copyright © Dr R. M. Jones 2021.

Dr R. M. Jones is the holder of copyright in this report, including any drawings, images and data contained herein.

Dr R. M. Jones asserts his moral right under the Copyright, Designs and Patents Act 1988 to be identified as the author of this report.

Except as is required in relation to its commissioned purpose or with the prior written permission of Dr R. M. Jones, reproduction or transmission to any third party of all or any part of this report, whether by photocopying or storing in any medium by electronic means or otherwise, is prohibited.

The commission of any unauthorised act in relation to this report may result in civil or criminal actions.

This report has been prepared for, and in accordance with the instructions of, the commissioning party. This report may not be used other than for the purpose for which it was commissioned, without the prior written consent of Dr R. M. Jones.

This report is furnished without responsibility on the part of Dr R. M. Jones (and his servants or employees) to any party other than the commissioning party.

Dr R. M. Jones confirms that he has not sought to independently verify any documents, information or instructions supplied in association with the preparation of this report.

Star Ecolo

Client: Mr. J. & Mrs. S. Charters Kingswood Kingsland Road Shrewsbury SY3 7AF Dr. R. M. Jones MCIEEM Star Farm Colebatch Bishop's Castle Shropshire SY9 5JY

Mobile: 078 66 44 0915 Email: info@starecology.co.uk

Our Ref: CP/2515/20.1

Your Ref:

Date: 15th March 2021

Bat and Nesting Bird Assessment: House and Garage at Kingswood, Kingsland Road, Shrewsbury SY3 7AF.

1. Introduction

There is a proposal to remodel the existing House and Garage structures within the Kingswood property. Remodelling work will require the alternation or replacement of roof structures and exterior walls.

Full details of the proposed development may be obtained from Mr. J. & Mrs. S. Charters.

The House and Garage are attached to each other, forming one large building that stands at approximate National Grid Reference (NGR) 348840, 311835.

On 7th March 2021 the House and Garage were surveyed for:

- a) the potential for Bats to roost on and/or in the building;
- b) the potential for Small Breeding Birds to construct their nests on and/or in the building;
- c) physical evidence of Bats and their roosts on and within the building; and,
- d) physical evidence of nesting birds on the exteriors and within the interiors of the building.

The survey was carried out by Dr. R. M. Jones MCIEEM, Natural England Bat Licensed surveyor 2015-11179-CLS-CLS.

An assessment was made of the affect of the proposed development on Bats and Nesting Birds.

The survey/assessment has been carried out with regard to the following published guidance:

- 'Bat surveys for Professional Ecologists Good Practice Guidelines'⁽¹⁾
- the gov.uk website⁽²⁾
- BS42020:2013 'Biodiversity Code of practice for planning and development'⁽³⁾

A photographic record of the Bat and Nesting Bird Assessment is provided in Appendix 1.



2. Legislation and Policy

2.1 <u>Bat</u>

All bat species (*Rhinolophidae* and *Vespertilionidae*) are protected under the Wildlife and Countryside Act 1981 ("WCA 1981"), the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended) ("Conservation Regulations 2017").

Under the Conservation Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a bat;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead bat, or any part of, or anything derived from such a wild animal.

Under the WCA 1981, it is illegal to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection.

A bat resting place may be a structure a bat uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not bats are in occupation, as they may be re-used by bats.

All species of bat are priority species in the UK Biodiversity Action Plan (HM Government 1994 et seq.) and are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

A European Protected Species (EPS) Development Licence from Natural England may be required for development works triggering Conservation Regulations 2017 offences against bats.

2.2 <u>Nesting Bird</u>

Under the Wildlife and Countryside Act 1981, all wild birds are protected while breeding. It is 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;
- intentionally take or destroy the egg of any wild bird.

3. Historical records of bat

A formal search of historical records of bat within the vicinity of the House and Garage was not commissioned. Considering the nature, scale and location of the proposed development; the constraint of not carrying out an historical biodiversity record search is considered negligible.

The owner/s of Kingswood is/are not aware of bats roosting within the House or Garage



4. House Description

Brief descriptions of the House and Garage are provided here. At the time of survey, the House was occupied and was in a good and maintained condition.

For ease of reference the different structural sections of the House and Garage have been labelled Sections A – E.

A diagram indicating the locations of Sections A – E is shown below:



4.1 Section A

Two-storey concrete-block and brick with some parts of exterior walls rendered and some parts of exterior walls clad with (ornamental) purpose-made composite 'club' vertical hanging tiles.

Star Ecology

Apex roof covered with inter-locking composite roof tiles.

The roof apex is covered with abutting composite tiles that are bedded on mortar. Roof-slopes are underlined with bitumastic/hessian (1F) roofing felt. The roof-structure is supported by gable walls, a central purlin-supporting wall, and modern-type `W' shaped roof trusses.

The north part of the east elevation gable and the west elevation gable are constructed of brick. Timber barge boards are attached direct to the brick walls.

The south part of the east elevation gable is clad with (ornamental) composite 'club' vertical hanging tiles. The roof structure overhangs the hanging tiles and a (gable) timber soffit box has been formed.

Mortared roof tile verges oversail (all) barge boards and are supported by composite-board under-cloaking.

Eaves overhang and are enclosed with soffit boxes that are formed with timber fascia boards and tongue-and-groove soffit boards.

Three brick chimney stacks are present within the roof structure; two within the roof apex and one at the west-end of the south elevation roof-slope. Lead flashings and aprons provide weather-tight seals between the chimney stacks and the roof structure.

A plastic (or similar) vent-pipe (or similar) is situated within the north elevation roof-slope. A purpose-made rubber (or similar) surround/flashing provides a weather-tight seal between the vent-pipe and the roof structure.

A single roof-space is present, occupying the length of Section A and the area between eave height and the underside of the roof apex. The roof space has an approximate internal height of 1.9m (between the top surfaces of floor joists and the underside of the ridge board) and an approximate internal width of 3.5m (at the base). The floor of the roof-space is lined with quilt insulation and parts of the roof-space are boarded-out and used for the storage of general household items.

4.2 Section B

Single-storey concrete-block and brick domestic garage.

Apex roof covered with inter-locking composite roof tiles. The roof apex is covered with abutting composite tiles that are bedded on mortar. Roof-slopes are underlined with bitumastic/hessian (1F) roofing felt. The roof structure has been formed in an open/cut style with multiple tie-beams and occasional collars.

Timber barge boards are attached direct to the north elevation gable. Mortared roof tile verges oversail the barge boards and are supported by composite-board under-cloaking. The roof structure overhangs the east elevation eave and is enclosed with a timber-board soffit box.

Lead soakers and flashings are present between the south-end of the Section B roof structures and the adjoining part of the Section A north elevation wall.

The west elevation eave is flush and timber fascia boards are attached direct to the exterior wall surface.

No ceiling structure(s) is/are present. No roof-space(s) is/are present.



4.3 Section C

Single-storey, brick, with a rubber sheet (EPDM, or similar) covered 'flat' roof. The rubber sheet roof covering extends upwards (forming a flashing) between the roof structure and the adjoining part of the Section A south elevation wall. Parapet walls are present at the east, south and west and the rubber sheet roof covering extends upwards (forming flashings) between the roof structure and the parapet walls. Parapet walls are capped with plastisol (or similar) coated sheet-metal. No roof-space(s) is/are present.

4.4 Section D

Single-storey brick with a roofing-felt covered 'flat' roof.

Timber fascia boards are attached direct to exterior wall surfaces.

A lead flashing is present between the Section D roof structure and the adjoining part of the Section A north elevation wall.

No roof-space(s) is/are present.

4.5 Section E

Single-storey open-fronted/sided over-hanging porch with a roofing-felt covered 'flat' roof. A lead flashing is present between the Section E roof structure and the adjoining part of the Section A east elevation wall.

No roof-space(s) is/are present.

5. Bat Assessment

5.1 <u>Method</u>

5.1.1 Bat roosting potential

The House and Garage were assessed for their potential to support bats and the type and number of bat roosts.

This involves consideration of a number of abiotic factors including:

- Access to the interiors of the buildings
- Age
- Construction fabric
- Habitat context
- Light levels
- Previous use of, and activity within, the buildings
- Temperature regime and protection from weather

5.1.2 Physical evidence of bat occupation

The House and Garage were searched for the presence of bats and their roosts.

Search methods included the use of mirrors, torches (including a Fenix RC40 3800 lumen torch and a DeWalt DCL043 1000 lumen torch), binoculars (Zeiss 10x42), borescope (Visual Optics VO18 5.8mm Fibre Optic), fibrescope (Provision PV2636-21 5.8mm), video-scope (Draper 05163 Recording Flexi Inspection Camera), 3.8m Telescopic ladder, 4.1m Telescopic ladder, 8.15m Combination ladder, 3.6m Double Extending Roof Ladder; and combinations of these.

A search was also made for notable signs of past and/or present bat roost activity, including bat urine stains, fur oil stains, scratch marks and faeces. These may be found around a bat roost entrance, within a roost, and within flight/foraging areas.



5.1.3 Limitations

Considering the structural fabrics of the House and Garage; it is not considered that there are limitations to the survey.

5.2 <u>Results</u>

5.2.1 Weather conditions

The survey was carried out in bright and fine conditions with no breeze.

5.2.2 Potential for Bats

The House and Garage are situated within the Kingswood domestic property – which is situated within the urban area of Shrewsbury Town. The Kingswood property is immediately surrounded by highways and domestic properties.

Section A

Section A does not provide bat roosting potential.

The roof is in good structural condition and does not provide bat roost habitat. All roof tiles are intact, *in* situ and close-fitting and do not provide bat roost habitat. Ridge tiles are close-fitting and bedded on intact mortar and do not provide bat roost habitat. There is no potential bat access to the Section A roof-space.

Barge boards are intact, *in situ* and close-fitting and do not provide bat roost habitat. The (east elevation) soffit box is well-formed, intact, *in situ* and close-fitting and does not provide bat roost habitat.

Eave soffit boxes are well-formed, intact, *in situ* and close-fitting and do not provide bat roost habitat.

All roof (tile) verges are well pointed with intact mortar, are closed and do not provide bat roost habitat.

Lead abutments are well formed, intact, *in situ* and close-fitting and do not provide bat roost habitat.

The vent-pipe surround/flashing is intact and close-fitting and does not provide bat roost habitat.

All hanging tiles are intact, *in situ* and close-fitting and do not provide bat roost habitat.

There are no missing-mortar crevices (or similar) within exterior walls (that may provide suitable bat roosting habitat).

There is no potential bat access to the interior of Section A, including the roof-space. Exterior windows and window frames are intact.

Exterior doors and door frames are intact.

Section B

Section B does not provide bat roosting potential.

The roof is in good structural condition and does not provide bat roost habitat. All roof tiles are intact, *in* situ and close-fitting and do not provide bat roost habitat. Ridge tiles are close-fitting and bedded on intact mortar and do not provide bat roost habitat.

Barge boards are intact, in situ and close-fitting and do not provide bat roost habitat.



The (east elevation) eave soffit box is well-formed, intact, *in situ* and close-fitting and does not provide bat roost habitat.

Lead flashings between the Section B roof structure and Section A are well-formed, intact, *in situ* and close-fitting and do not provide bat roost habitat.

The (west elevation) fascia boards are intact, *in situ* and close-fitting and do not provide bat roost habitat.

There are no missing-mortar crevices (or similar) within exterior walls (that may provide suitable bat roosting habitat).

There is no potential bat access to the interior of Section B.

Exterior windows and window frames are intact.

Exterior doors and door frames are intact.

<u>Section C, Section D and Section E</u> Section C, Section D and Section E do not provide bat roost habitat.

All 'flat' roof structures are intact and close-fitting and do not provide bat roost habitat. All lead flashings are intact, *in situ* and close-fitting and do not provide bat roost habitat.

Section C parapet wall covers are intact, *in situ* and close-fitting and do not provide bat roost habitat.

There are no missing-mortar crevices (or similar) within exterior walls (that may provide suitable bat roosting habitat).

5.2.3 Physical evidence of Bats

No physical evidence of bat was found on the exterior of the House or Garage. No physical evidence of bat was found within the House or Garage.

6. Nesting Bird Assessment

6.1 <u>Method</u>

The House and Garage were searched for the presence of bird nests, active (in current use) and inactive (not in current use).

6.2 Results

No evidence of bird nesting was found.



7. Conclusion

7.1 <u>Bat</u>

7.1.1 Survey results

The House and Garage do not provide bat roost habitat. No physical evidence of bat was found on or within the House or Garage.

Bats do not impose a constraint on the proposed development.

It is not considered necessary for further bat survey work to be carried out to inform the proposed development.

It is not necessary for a European Protected Species Licence for bats to be granted by Natural England to allow the proposed development to lawfully proceed.

7.1.2 Mitigation

Bats do not impose timing or work method constraints on the proposed development.

7.1.3 Enhancement

It is likely that the Kingswood property and its immediate environs will be used by bats (that roost elsewhere) for commuting and/or foraging purposes.

External lighting that may be installed within the Kingswood property (as part of the proposed development) should be sensitive to bats.

In order to avoid any unnecessary disturbance to bats in the future, any external lighting to be installed at Kingswood should:

- use Light emitting diodes (LED) luminaries
- have a warm white spectrum <2700° Kelvin (degrees colour temperature)
- have peak wavelengths higher than 550nm
- be set on motion-sensors
- use short duration (e.g. one minute) timers
- not be in the vicinity of, or shine towards, bat roost openings
- not shine towards (the) roof structure(s)
- not be in the vicinity of, or shine towards, boundary vegetation

7.2 <u>Nesting Bird</u>

7.2.1 Survey results

No evidence of bird nesting was found.

However, it is possible that birds may nest on the House in the future.

Should the proposed development receive approval; mitigation for nesting birds – provided in Section 7.2.2 – should be adhered to.



7.2.2 Mitigation

Ideally, development work should not be started between 1^{st} March and 1^{st} October (inclusive).

Should it not be possible to time development work to avoid disturbance to nesting birds, potential access points to bird nesting locations should be closed off with mesh or fabric barriers, in order to prevent birds from nesting.

Should it be required that development works commence between March and September, the House and Garage should be inspected by a suitably qualified ecologist for evidence of nesting birds.

No works may commence if birds have started to build, or if they already occupy, nests. If birds start nesting on/within the House and/or Garage – prior to or during development work - delays will be inevitable up to the moment when the young birds leave the nest.

8. Relevant publications

- 1: Collins, J. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed., Bat Conservation Trust.
- 2: 'Bats: surveys and mitigation for development projects' (28th March 2015 28th February 2020). United Kingdom Government Website: https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects
- 3: BS42020:2013 'Biodiversity Code of practice for planning and development.' British Standards Limited.

Star Ecology

Appendix 1 – Assessment photographs



Photograph 1. Far left: part of the East elevation of Section A. Lower far-left: part of the North and East elevations of Section E. Left and upper centre: North elevation of Section A. Lower centre: North and East elevations of Section D. Right: part of the East elevation of Section B. Far right: part of the Section B North elevation.





Photograph 2. Far left and upper left: part of the North elevation of Section A. Lower left: North and East elevations of Section D. Centre and right: part of the East elevation of Section B.





Photograph 3. Extreme lower left: part of the West elevation of Section B. Far left: part of the West elevation of Section A. Lower left: West elevation of Section C. Lower centre and lower right: South elevation of Section C. Upper left, upper centre and right: part of the South elevation of Section A.





Photograph 4. Far lower-left: part of the West elevation of Section B. Left: part of the West elevation of Section A. Upper right-of-centre: part of the South elevation of Section A. Lower centre and lower right: part of the West elevation of Section C.





Photograph 5. Left, centre and lower right: part of the North elevation roof-slope of Section A. Mid-ground right: part of the East elevation roof-slope of Section B. Looking west from east.





Photograph 6. View of part of the south elevation roof-slope of Section A. Looking east from west.





Photograph 7. View of part of the Section A roof-space. Looking west from east.





Photograph 8. View of part of the Section B roof structure. Looking north from south.