



RESULTS OF FURTHER BAT SURVEY WORK

on

1 BOSCOWEN ROAD, FALMOUTH, CORNWALL

August and September 2023



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**RESULTS OF FURTHER BAT SURVEY WORK ON
1 BOSCOWEN ROAD, FALMOUTH, CORNWALL**

O.S. Grid Ref:	SW 8064 3173
Survey date:	Emergence survey –25 th August and 27 th September 2023 Remote detector - 25 th September to 2 nd October 2023
Survey Lead:	Simon Barnard BSc (Hons) MSc CEcol MCIEEM Class Survey Licence Reg. Nos. 2017-32208-CLS-CLS (Level 3) & 2015-13541-CLS-CLS (Level 4) Barn Owl Class Survey Licence CL29/00170
Time spent on site:	2 x (3 x 1 ¾ hours) – Emergence surveys 2 x ½ - Remote detector deployment and collection
Taxonomic groups covered:	Bats
Report author:	Simon Barnard BSc (Hons) MSc CEcol MCIEEM
Filename & issue number:	FB_1 Boscowen Road, Falmouth_Final 1
Report for:	Ms Laura Highton, Poynton Bradbury Wynter Cole Architects
Report No:	22-389/PBWC/1 Boscowen Road, Falmouth _FB
Report completed:	20 th October 2023

Report Sign off**Document checked and
approved for issue by:**Debra Barnard MPRCh Director
**Signature:****Date:**23rd October 2023

1. SUMMARY

Wheal Grey Ecology Ltd was instructed by Ms Laura Highton, Poynton Bradbury Wynter Cole Architects, on behalf of the clients to carry out further bat survey work on 1 Boscowen Road, Falmouth, Cornwall. The proposal is to extend the property.

An initial visual survey was carried out by Wheal Grey Ecology Ltd on 4th May 2023. During this survey a small number of bat droppings were found on the floor of the roof void within the northern part of the roof void. The southern roof void could not be fully accessed or inspected. These features may be directly impacted by the proposed works. As a result, further bat survey work was recommended. The recommended further survey work was to take the form of a pair of emergence surveys, using two surveyors, and the deployment of a remote detector into the roof void for 7 consecutive nights.

No bats were seen to emerge from this building during either of the emergence surveys and no bat activity was recorded within the roof void during the remote detector deployment therefore the proposed works can proceed with a very low to negligible risk of disturbing/harming roosting bats or damaging or destroying a bat roost and no mitigation is required.

As the site appears to be well used by foraging bats, new roosting opportunities for bats could be incorporated into the building as part of these works should the owners wish to do so.

2. INTRODUCTION AND BACKGROUND

Wheal Grey Ecology Ltd was instructed by Ms Laura Highton, Poynton Bradbury Wynter Cole Architects, on behalf of the clients to carry out further bat survey work on 1 Boscowen Road, Falmouth, Cornwall. The proposal is to extend the property.

An initial visual survey was carried out by Wheal Grey Ecology Ltd on 4th May 2023. During this survey a small number of bat droppings were found on the floor of the roof void within the northern part of the roof void. The southern roof void could not be fully accessed or inspected. These features may be directly impacted by the proposed works. As a result, further bat survey work was recommended.

The recommended further survey work was to take the form of a pair of emergence surveys, using two surveyors, and the deployment of a remote detector into the roof void for 7 consecutive nights. The further survey work needs to be undertaken during the active bat survey season, May to September, with at least one of the surveys being undertaken during the peak survey period before the end of August. The surveys should be undertaken 3 to 4 weeks apart. In addition, an external re-inspection of the building was carried out.

2.1. Description of Building

The building subject to this survey is a large detached two-storey house with rooms built into the roof structure. It has a pitched roof with a number of large dormers and projections and to the rear of the house is an attached single storey garage which also has a pitched roof. It appears to be built from a combination of stone, brick and blockwork with a rendered finished externally and some areas of horizontal cladding. To the rear there is also a small single storey flat roof extension, see Photos 1 to 4.



Photo 1. Showing the house from the east



Photo 2. Showing the house from the south



Photo 3. Showing the house from the north west



Photo 4. Showing the garage from the north

There is a single roof void over the main part of the house below the ridge which is partially divided into two by a light well in the centre of the roof. The northern half of this could be accessed but the southern section could only be limited viewed. These roof voids are open from the fibreglass covered floor to the underside of the roof which is lined with timber sarking and there are gaps between each plank. There is also water tank within the northern half of this roof void, see Photos 5 and 6.



Photo 5. Showing the northern part of the roof void over the house



Photo 6. Showing the southern part of the roof void over the house

There is a second roof void over the garage which is open from the top of the ceiling to the underside of the roof which is lined with modern breathable roofing membrane. This roof void is fairly light internally due to small windows in the northern and southern gable end walls, see Photo 7. Below the house there is an extensive basement which has been used as living accommodation and is divided into a number of rooms, see Photo 8.



Photo 7. Showing the roof void over the garage



Photo 8. Showing the basement

Externally the building appears to be well sealed with tight fitting fascia and soffit boards, well sealed ridge tiles and slates. There are some small gaps which could be used by day roosting bats either to access the roof voids or for roosting in themselves at the junctions between the roof and the dormers.

2.2. Surrounding landscape

The property subject to this survey is within the town of Falmouth, to the south of the centre, close to the seafront. It is surrounded by houses in fairly large mature gardens with the tree lined Falmouth branch line to the north and a large area of open and tree lined ground to the west, comprising Falmouth Cemetery, and Swanpool Nature Reserve, see Figure 1.

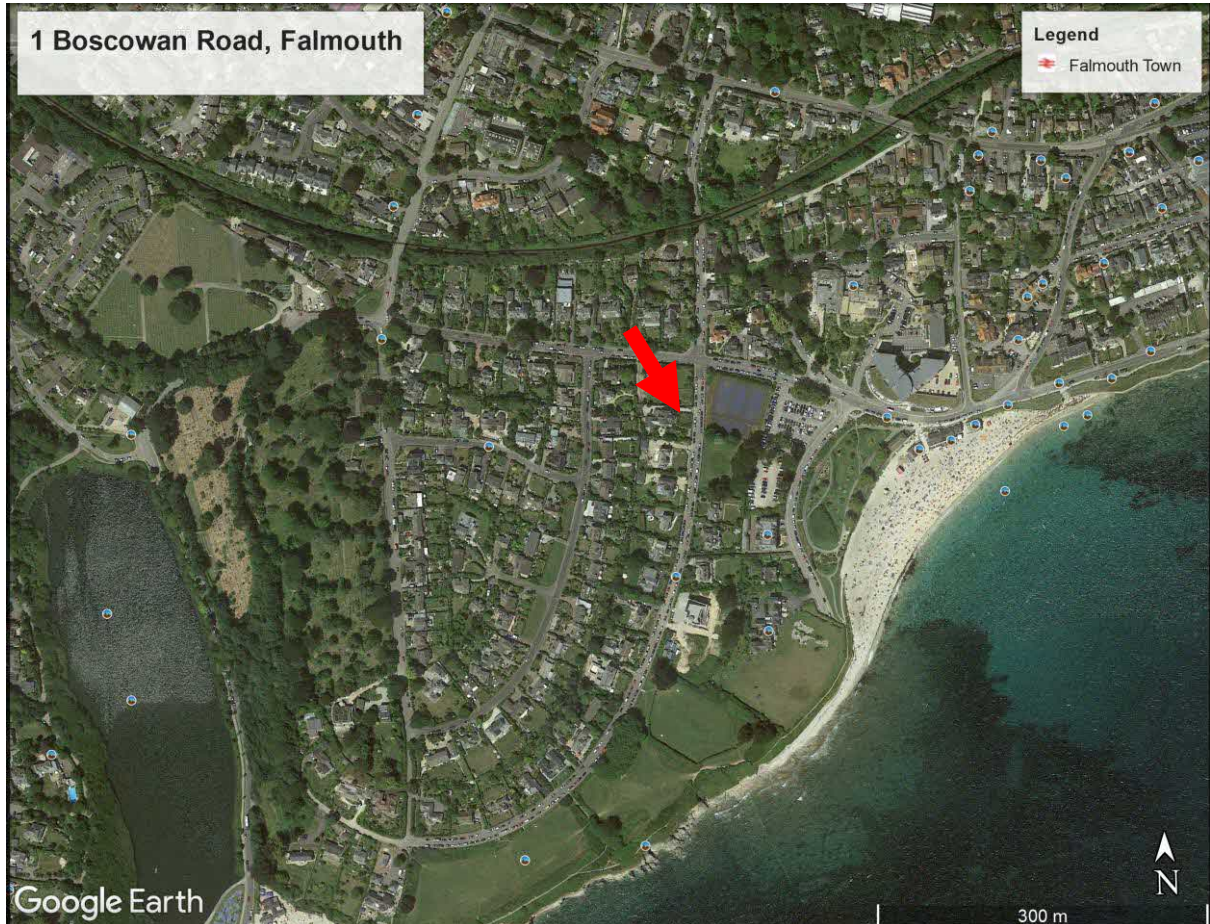


Figure 1. Google Earth image showing the location of the property (red arrow) and surrounding landscape

The habitats surrounding the property represent good urban bat foraging habitat which is well linked into the surrounding landscape and the wider countryside which is known to be used by a number of species of bat for foraging and roosting including Common and Soprano Pipistrelles, Whiskered bats, Natterer's, Brown Long-eared bats and Lesser Horseshoes.

3. METHODS

3.1. Emergence surveys

Emergence surveys aim to establish if the building being surveyed is used for day roosting by bats, and if so, to establish the levels of use, confirm the species present, identify the number of individuals present and identify the access points. In this instance a pair of emergence surveys was carried out, using three trained and experienced bat surveyors all equipped with night vision aids.

An emergence survey involves positioning surveyors, experienced with the use of bat detectors and undertaking emergence surveys, around the outside of the building identified as having the potential to support roosting bats. These surveyors watch the roof line, openings and other features identified as having the potential to support roosting bats or which would allow access into the building from a quarter of an hour before sunset until at least an hour afterwards for emerging bats. The emergence times, locations any bats are seen to emerge from and the time are recorded along with the time the first bat was heard or seen. Any interesting behaviour observed from bats either relating to the building or passing within the range detectable by the surveyors is also noted down along with the weather conditions and any other relevant information. Each surveyor was equipped with a Canon XA Professional Camcorder in infra-red mode paired with a pair of Nightfox XC5 Infrared torches to illuminate the outside of the building to allow better detection of late emerging bats.

3.1.1. 1st Emergence Survey, 25th August 2023

On 25th August 2023, Simon Barnard, Rebecca Haines and James Walker were positioned around the outside of the building so that all aspects could be watched, see Figure 2 for the locations of the surveyors.

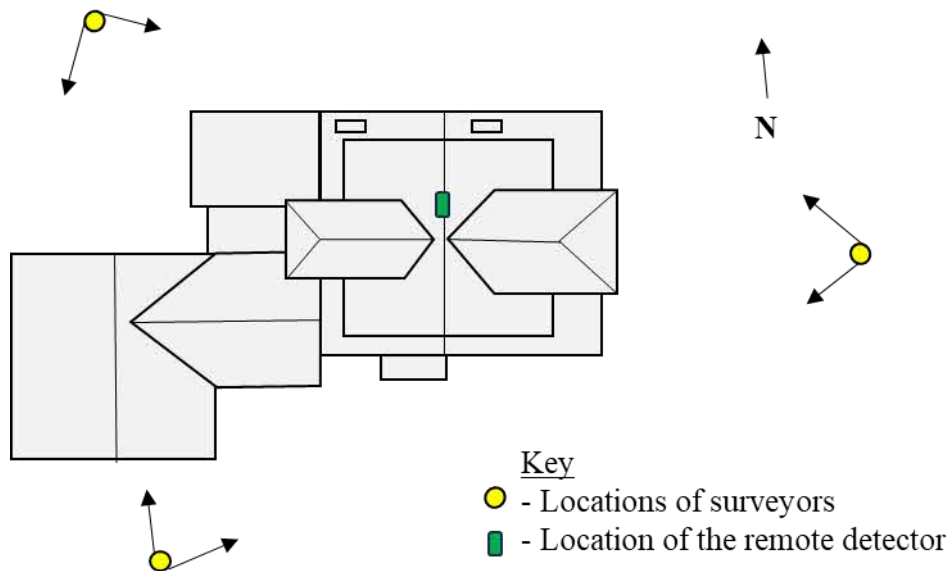


Figure 2. The Locations of the surveyors during the emergence surveys.

The survey was carried out during suitable weather conditions for bat activity with the weather being still and calm with 20% cloud cover and a starting temperature of 19°C dropping down to 18 °C. The survey started at 20:05 and continued until 21:50 with sunset being at 20:20.

Bat activity was recorded using an Elekon Batlogger M and two Batlogger M2's.

3.1.2. 2nd emergence survey, 27th September 2023

On 27th September 2023, Simon Barnard, Mathew Thurlow and James Walker were positioned around the outside of the building so that all aspects could be watched, see Figure 2 for the locations of the surveyors. The survey was carried out during suitable weather conditions for bat activity with the weather being overcast with two light rain showers lasting less than 3 minutes each with a moderate breeze, 100% cloud cover, and a steady temperature of 16°C. The survey started at 18:53 and continued until 20:38 with sunset being at 19:08.

Bat activity was recorded using an Elekon Batlogger M and two Batlogger M2's.

3.2. Remote detector

A remote detector survey involves the deployment of a remote or static detector into the building subject to the survey for a set number of nights. As the detectors can record through the night, and if required the day, they can be used to gain further information on the use of the building by bats, in particular by species which may only visit the building during the night (for night roosting or as a feeding perch) or reveal the presence of late emerging species of bat which could be missed otherwise. The detector is triggered by bat calls and records and time stamps it allowing the species, regularity of use of the structure at night and time of the call to be logged.

In this instance an Anabat express detector was deployed into the roof void over the main part of the house between the 25th September and the 2nd October 2023. The weather conditions during the survey were mixed with some dry still nights and other wetter nights with strong winds and temperatures between 17°C and 14°C.

3.3. Surveyors

3.3.1. Simon Barnard

Simon Barnard is a very experienced bat surveyor with 15 years' experience of carrying out all aspects of professional bat survey work including activity surveys, call analysis and emergence surveys. He has held a Natural England survey licence for more than 12 years, currently being registered on the Level 3 (CL19) and level 4 (CL20) Class Survey Licence. He has been involved in designing numerous mitigation schemes and obtaining European Protected Species development licences for a large range of the species of bat found in the UK and is a registered consultant on Annex's B, C and D on Natural England's Bat Mitigation Class licence. He has a Bachelors and Master's degree in ecology related subjects.

3.3.2. Matthew Thurlow

Matthew Thurlow is an experienced bat surveyor with more than 4 years' experience with the use of bat detectors, undertaking activity surveys and emergence surveys and assisting with trapping surveys and is training towards his bat class licences. He has a Bachelors and Master's degrees in ecology related subjects.

3.3.3. James Walker

James Walker is a trained bat surveyor, trained in the use of bat detectors and undertaking emergence surveys. He has a Bachelor's and Master's degrees in ecology related subjects.

3.3.4. Rebecca Haines

Rebecca Haines is an experienced bat surveyor with two years of experience in the use of bat detectors and undertaking emergence surveys. She has a Bachelor's degree in ecology related subjects.

4. RESULTS

4.1. Emergence surveys

4.1.1 1st Emergence survey, 25th August 2023

The first bat activity recorded was from a single Common Pipistrelle which flew into the site from the south at 20:30. Very regular further activity from Common Pipistrelles, including feeding and commuting activity, was noted for the remainder of the survey with single pass from a Lesser Horseshoes at 21.05 recorded during this survey.

No bats were seen to emerge from this building during this survey.

4.1.2 2nd Emergence survey, 27th September 2023

The first bat activity recorded was from a Common Pipistrelle which flew into the site from the west at 20:28. Regular further activity from Common Pipistrelles was noted for the remainder of the survey.

No bats were seen to emerge from this building during this survey.

4.2. Remote detector survey

No bat calls were recorded during the remote detector deployment.

4.3. Summary of survey results

No bats were seen to emerge from this building during either of the emergence survey and no bat activity was recorded within the roof void during the remote detector deployment.

4.3 Limitations

There were no significant limitations on this survey.

5. PROPOSAL, POTENTIAL IMPACTS ON BATS AND REQUIRED MITIGATION

5.1. Proposal

The proposal is to extend the property.

5.2. Potential impacts

No bats were seen to emerge from this building during either of the emergence surveys and no bat activity was recorded within the roof void during the remote detector deployment so the proposed works can proceed with a very low to negligible risk of disturbing/harming roosting bats or damaging or destroying a bat roost.

It should be noted that in any building individual bats could occasionally roost. If a bat was to be found unexpectedly whilst the works are being carried out, work should stop immediately and Wheal Grey Ecology Ltd contacted and further advice sort. If a bat were to be found it should be protected from the elements and predators and work activity in the immediate vicinity should stop until further advice is received.

5.3. Mitigation

As no evidence of the use of the building by roosting bats was found no mitigation is required.

However, new roosting opportunities for bats could be incorporated into the building should the owner wish to do so. This could be done fairly simply by installing/building in purpose-built bat boxes onto the exterior of the building or creating access into the interior at the eaves or into the roof void. This would help to potentially enhance the biodiversity value of the site.

Please contact us at Wheal Grey Ecology for further information if this is something you would like to consider.

6. CONCLUSIONS AND RECOMMENDATIONS

No bats were seen to emerge from this building during either emergence survey and no bat activity was recorded during the remote detector deployment therefore the proposed works can proceed with a very low to negligible risk of disturbing/harming roosting bats or damaging or destroying a bat roost and no mitigation is required.

As the site appears to be well used by foraging bats, new roosting opportunities for bats could be incorporated into the building as part of these works should the owners wish to do so.

7. LEGISLATION

Bats in England have been protected under a number of regulations and amendments but the most up-to-date and relevant are:

The Conservation of Habitats and Species Regulations 2017
Wildlife and Countryside Act 1981 (Section 9)

The result of Regulations and Acts is that all species of bat and their breeding sites or resting places (roosts) are protected under law. It is an offence to:

- Deliberately capture, injure or kill a bat
- Deliberately disturb a bat in a way that would affect its ability to survive, breed or rear young or significantly affect the local distribution or abundance of the species
- Intentionally or recklessly disturb a bat at a roost
- Intentionally or recklessly obstruct access to a roost whether bats are present or not
- Damage or destroy a roost whether bats are present or not
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat

Through the Conservation (Natural Habitats &c.) Regulations 1994 (this has been updated and consolidated with subsequent amendments by the Conservation of Habitats and Species Regulations 2017 mentioned above) bats were designated a European protected species as part of Europe wide effort to conserve certain plant and animal species.

Any development which is likely to result in the disturbance of a European protected species, or damage to its habitat usually requires a European protected species licence from Natural England. 'Development' is interpreted broadly to include projects involving demolition of buildings, rebuilding, structural alterations and additions to buildings.

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