

7, BRIARS RYN
PILLATON
SALTASH
PL12 6RA

TECHNICAL REPORT:
BAT EMERGENCE
SURVEYS

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QUALITY ASSURANCE

This survey work and report has been undertaken with reference to; The publication 'Bat Surveys for Professional Ecologists' Collins, J. (ed) 2016, 3rd edition, Bat Conservation Trust, London.

Description	Bat Emergence Surveys
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DISCLAIMER

This report provides a broad overview of the legal protection of wildlife and specifically relates to how the law is applied in England. The law applied to other countries of the United Kingdom may differ. This report does not offer formal legal advice and no liability is accepted. If legal advice is required related to wildlife issues this should be sought from appropriate professionals.

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BRIEF SUMMARY

This is a follow on report to the Preliminary Ecological Assessment at 7, Briars Ryn, Pillaton, Saltash, Cornwall, PL12 6RA undertaken by Brookside Ecology on the 7 Aug 2023. The house was assessed as having 'high suitability for roosting bats' and evidence of bat droppings were found. As it was assessed that proposals had risk of impacting potential bat roost features, further survey effort was recommended.

Bat emergence surveys, undertaken in August and September 2023, identified two Common Pipistrelle bats in the September surveys emerging from under roof tiles adjacent to the chimney. Accordingly, the survey work has confirmed that active bat roosts were present.

In consideration of development proposals for the extension with replacement of roof, this action would result in the loss of the roost sites and potential harm to bat without compensatory roost provision and appropriate mitigation. Accordingly a mitigation proposal is provided in the Ecological Mitigation and Compensation Proposal with the aim of protecting bats and retaining roost sites post developer ensuring their favourable conservation status. Proposals are also made for ecological enhancement to provide a net gain for biodiversity in accordance with the National Planning Policy Framework document.

As the development would impact on bat roost sites, it is recommended a European Protected Species derogation licence is secured through Natural England to ensure the development can be completed lawfully.

No other protected or notable species or habitats issues were identified that would be impacted under proposals.

INTRODUCTION

1. This is a follow on report to the Preliminary Ecological Assessment at 7, Briars Ry undertaken by Brookside Ecology on the 7 Aug 2023. This should be read in conjunction with that assessment report. The house was assessed as having 'high suitability for roosting bats' and evidence of bat droppings was found within the attic. As it was assessed that proposals had risk of impacting potential bat roost features, further survey effort was recommended.
2. Further survey work comprised of three night time emergence surveys undertaken over August and September 2023 by Brookside Ecology.

PROPOSALS

3. It is proposed the dwelling is extended to provide further living accommodation. Impacting on existing rooves.

OBJECTIVES

4. The objectives of the further survey work is to identify presence or absence of bat roosts in the building. If presence is confirmed, the survey work will seek to identify the bat species present, their numbers, points of entry and exit as well as the character of the roost(s).

METHODS

EMERGENCE SURVEYS

5. Three bat emergence surveys were undertaken in August and September 2023 by C Carter and M Pearmain, Natural England registered bat workers . This was undertaken in suitable weather conditions and using methods as detailed in the publication 'Bat Surveys for Professional Ecologists.'¹. Emergence surveys typically commence approximately a quarter of an hour before sunset and can continue up to 2 hours afterwards.

EQUIPMENT

6. Wildlife Acoustics 'EMT2 Pro' full spectrum and Elekon Batscanner ultrasonic, handheld bat detectors/recorders for emergence surveys.
7. SiOnyx Aurora & Nightfox Whisker night vision cameras supported by 940nm infrared flashlights were used to aid the identification of bat emergences from the building.
8. RETCVIS 'Walkie-talkies' were used for communication between surveyors.
9. Other equipment available for use included; Skywatch Meteos instrument to record temperature and wind speed, close-focussing binoculars - Vistron 10 x Endoscope - Scopacam, 3.8 metre extendable ladders and Clulite high power torches.

RECORDED DATA ANALYSIS

10. Recorded data is analysed using Wildlife Acoustics 'Kaleidoscope Viewer' v5.6.C

¹ Collins, J. (ed) 2016, Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd edition, Bat Conservation Trust, London.

RESULTS

EMERGENCE SURVEYS - SEE FIGURES 1 & 2

Survey date 13/08/23

11. No bat emergence.
12. First detection 21:00 hrs Common Pipistrelle passing to the north of the building. Limited detections of Common Pipistrelle bats during survey.

Survey date 31/08/23

13. No bat emergence.
14. First detection 20:20 hrs of Common Pipistrelle passing to the east of the building. Detections of Common and Soprano Pipistrelle species detected occasionally during survey.

Survey date 15/09/23

15. 2 x emergence at 19.51 hrs and 19.55 hrs from under roof tile adjacent to chimney.
16. First detection 19.45 hrs Common Pipistrelle passing over rear garden. Detections of Noctule and Common Pipistrelle species detected occasionally during survey.

7, Briars Ryn

Surveyor and night vision camera views

 Building surveyed
 ~~~~~ No bat roosting potential    
 Two surveyors (locations changed between surveys)    
 1 Night vision camera views



### Bat Emergence Results



#### Under Tile Roost Feature

13 August 2023

No bat emergence

31 August 2023

No bat emergence

15 September 2023

2 x Common Pipistrelle  
19.51 hrs & 19.55 hrs from  
lifted tile adjacent to chimney

Figure 2. Surveyor and night vision camera locations & bat emergence sites



## CONCLUSIONS AND RECOMMENDATIONS

17. Three bat emergence surveys were undertaken over August and September 2023. These identified two Common Pipistrelle bats to emerge from under a lifted roof tile adjacent to the chimney during the September survey only. Accordingly, the survey work has confirmed a bat roost of Common Pipistrelle using the building occasionally during the survey period. Although these bats were recorded only in the last survey, the building provides opportunity for this species, and others, to be present during other periods of the year, including winter. The small number of older bat droppings found within the attic that were characteristic of a different species of bat which would confirm this possibility.
18. In consideration of development proposals that require removal of the roof, this action would result in the loss of the identified bat roost site and potential harm to bats without compensatory roost provision and appropriate mitigation. Accordingly, an Ecological Mitigation and Compensation Proposal is provided with the aim of protecting bats and retaining roost sites post development ensuring their favourable conservation status. Proposals are also made for ecological enhancement to provide a net gain for biodiversity in accordance with the National Planning Policy Framework document.
19. As the development would impact on bat roost sites, it is recommended a European Protected Species derogation licence is secured through Natural England to ensure the development can be completed lawfully.
20. No other protected or notable species or habitats issues were identified that would be impacted under proposals.

## SURVEY LIMITATIONS

21. Survey work undertaken over periods of a few months will not discover how bats and other wildlife might use it over the course of several seasons or years. Ecological compensation and mitigation should take account of this.

## LEGISLATION AND PLANNING POLICY

22. A brief outline of relevant wildlife legislation is detailed below with a focus on that relevant to the site in question. It is not meant to be an in depth treatise on wildlife regulations as this is not possible within the scope of this report. It is advised that individuals should seek professional legal advice if necessary.

### BATS

23. All British bats are protected under both UK and EU law; The Habitats Directive, which is transposed into law in England and Wales by The Conservation of Habitats and Species Regulations 2017 ('Habitats Regulations'), as amended.

24. Regulation 41 (1) of the Regulations makes it an offence to:

- Deliberately capture, injure or kill bat(s);
- Deliberately disturb bat(s) affecting their ability to survive, breed, rear young or significantly affect local distribution or abundance;
- Damage or destroy a breeding site or resting place, whether present or not;
- Intentionally or recklessly disturb a bat roost;
- Intentionally or recklessly obstruct access to roost sites;
- Possess, control, transport, sell, exchange or offer for sale or exchange, live or dead bats, or parts thereof.

25. Some rare bat species, namely Greater Horseshoe *Rhinolophus ferrumequinum*, Lesser Horseshoe *Rhinolophus hipposideros*, Barbastelle *Barbastellus barbastellus* and Bechstein's *Myotis bechsteinii*, are afforded greater protection under European legislation, being listed under Annex II of the EC Habitats Directive which lists species whose conservation requires the designation of Special Areas of Conservation (SACs).

## BIRDS

26. All wild birds are protected under the Habitats Regulations. Under this legislation it is an offence to:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built; and
- Take or destroy the egg of any wild bird.

## NATIONAL PLANNING POLICY

27. The relevant adopted policy at the national level is set out in the National Planning Policy Framework (NPPF) as amended July 2021, which sets out the Government's planning policies for England and how these are expected to be applied. This emphasises the need for planning authorities to consider biological conservation and the need for maintaining and enhancing biodiversity within planning policies and decisions.

TABLE 1. SURVEY CONDITIONS

| Date of Emergence | Surveyors              | Weather                                                                                                  | Sunset | Start | End   |
|-------------------|------------------------|----------------------------------------------------------------------------------------------------------|--------|-------|-------|
| 13/08/23          | C Carter<br>M Pearmain | Cloud Cover 6<br>Oktas, Light<br>shower<br>Wind : Beaufort 1,<br>SW<br>Temp start:16°C<br>Temp end: 15°C | 20.41  | 20.20 | 22.15 |

| Date of Emergence | Surveyors              | Weather                                                                                                                    | Sunset | Start | End   |
|-------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------|--------|-------|-------|
| 31/08/23          | C Carter<br>M Pearmain | Cloud Cover 8<br>Oktas, Dry,<br>intermittent light<br>rain later<br>Wind : Beaufort 0<br>Temp start:17°C<br>Temp end: 16°C | 20.05  | 19.45 | 21.40 |

| Date of Emergence | Surveyors              | Weather                                                                                    | Sunset | Start | End   |
|-------------------|------------------------|--------------------------------------------------------------------------------------------|--------|-------|-------|
| 04/09/23          | C Carter<br>M Pearmain | Cloud Cover 2<br>Oktas, Dry<br>Wind : Beaufort 1<br>W<br>Temp start:17°C<br>Temp end: 15°C | 19.32  | 19:15 | 21.10 |

# ECOLOGICAL MITIGATION AND ENHANCEMENT PROPOSAL

## Mitigation

### Presence of Natural England bat worker

Under a European Protected Species Licence issued by Natural England, the building will be checked for roosting bats. The ecologist will be present when tiles are removed from the roof. If bats are present, the named ecologist will ensure the licence requirements are adhered to with any bats present carefully moved to the bat box pre-installed in an area not impacted by works. Once the roof and attic have been declared free of bats by the named ecologist, structures will be fully removed. If bats are found when the ecologist is not present, bats will not be handled. They will be carefully covered back over where safe to do so without crushing and works will cease until advice is sought from the named ecologist.

### Compensatory Bat Roost Features (See Figure 2)

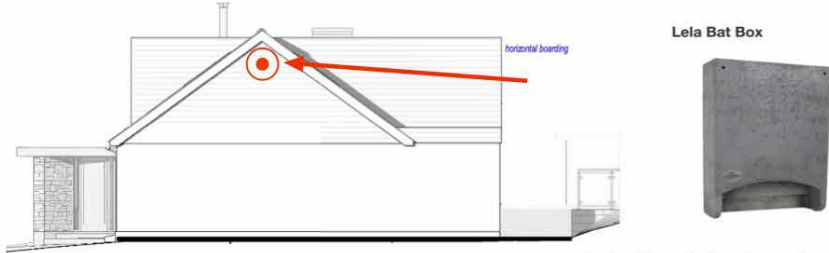
One bat box will be installed as shown in Figure 2 on the eastern gable end of the building. This is considered suitable and appropriate for the species and numbers of bats found.

### Ecological Enhancement (See Figure 2)

An additional bat box will be installed as shown on the western elevation of the building. The bat box installed on trees in the garden will be retained post development and act as further ecological enhancement for bats.

Bird boxes will be installed in the garden at least 2 metres high as shown in Figure 2 to provide additional nesting opportunity for the local bird population.

### Compensatory roost feature

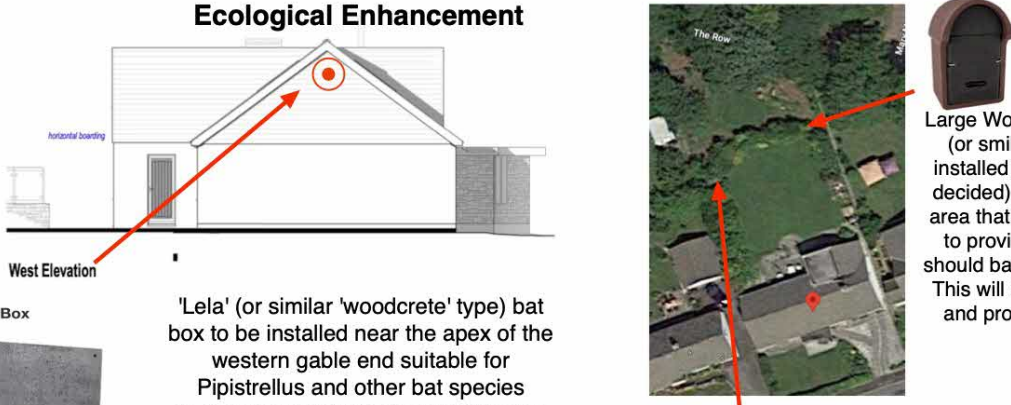


**East Elevation** 100.78 m

**Lela Bat Box**

'Lela' (or similar 'woodcrete' type) bat box to be installed near the apex of the eastern gable end suitable for Pipistrellus species to compensate for the loss of the roost site in the roof

### Ecological Enhancement



**West Elevation**

**Lela Bat Box**

'Lela' (or similar 'woodcrete' type) bat box to be installed near the apex of the western gable end suitable for Pipistrellus and other bat species increasing roosting opportunity for the local bat population

**Large Woodstone Multichamber bat box** (or similar 'woodcrete' type bat box) installed in the grounds (location to be decided) at least 2.5 metres high in an area that will not be disturbed by works to provide a safe place of release to should bats be discovered during works. This will be retained post development and provide an additional ecological

Two bird boxes to be fixed to trees in the garden at least 2.5 metres high to provide additional nest opportunity for the local bird population (actual trees to be decided)

Bat and bird boxes available from NHBS.com

Figure 2. Proposed compensatory bat roost features and ecological enhancement