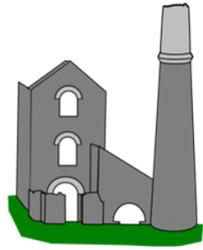


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Wheal Grey  
Ecology Ltd



## RESULTS OF FURTHER BAT SURVEY WORK

on

ASHVALE, LOWER TOWN, ST MARTINS,  
ISLES OF SCILLY

June and August 2021



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**RESULTS OF FURTHER BAT SURVEY WORK ON ASHVALE,  
LOWER TOWN, ST MARTINS, ISLES OF SCILLY**

**O.S. Grid Ref:** SV 9160 1615

**Survey date:** Emergence surveys – 25<sup>th</sup> June and 10<sup>th</sup> August 2021

**Lead Surveyor:** 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 (2 x 1 ½ hours) – Emergence surveys

**Taxonomic groups covered:** Bats

**Report author:** Simon Barnard BSc (Hons) MSc CEcol MCIEEM

**Filename & issue number:** FB\_Ashvale, St Martins, IofS\_Final 1

**Report for:** Mr Nathan Dean, Duchy of Cornwall

**Report No:** 20-248/DofC/Ashvale, St Martins, IofS\_FB

**Report completed:** 25<sup>th</sup> September 2021

**Report Sign off**

**Document checked and approved for issue by:**

Debra Barnard MBBCh Director

**Signature:**



**Date:**

27<sup>th</sup> September 2021



## 1. SUMMARY

Wheal Grey Ecology Ltd were instructed by Mr Nathan Dean, of Duchy of Cornwall, to carry out further bat survey work on a property known as Ashvale, Lower Town, St Martins, Isles of Scilly. The proposal is to renew the roof covering on the house.

A visual survey was carried out by Simon Barnard, in September 2020, during which two Common Pipistrelles were observed roosting in the cavity behind the fascia board on the east facing side of the house at separate locations. In addition, small accumulations of Common Pipistrelle bat droppings were found on the 1<sup>st</sup> floor window ledges on the eastern side of the house with a larger accumulation on the ground below the location where one of the Common Pipistrelles was seen roosting on the eastern side of the house. The evidence found was believed to indicate that the building is used by a small to moderate number of Common Pipistrelle bats. As a result, as these bats would be impacted by the works, further survey work was recommended. The further survey work recommended was a pair of emergence surveys, using two surveyors.

The results of the emergence surveys and visual inspections have found that the house is used for regular day roosting by up to 9 Common Pipistrelles, potentially given the location as a maternity roost. The proposal is to renew the roof covering on the house.

The proposal will result in temporary damage to the roost, in the disturbance of any bats present when the works are undertaken and could potentially result in individual bats being killed or injured.

**As the proposed works will result in temporary damage to the roost and in the disturbance of any bats present when the works are undertaken, a Bat Mitigation Licence from Natural England will need to be obtained prior to works commencing. Due to the number of individuals present and its potential to be a maternity roost a Full European Protected Species License will need to be obtained.**

In terms of mitigation, in this instance all the existing access points (the gaps between the fascia boards and walls) will be unaffected by the works and all the existing roosting sites will be recreated. As a result, the only impact should be temporary damage and disturbance. The stripping of the roof coverings, in particular along the eaves, will need to be carried out under the direct supervision of the ecologist named on the licence and only Bitumen type 1F roofing felt can be used in areas which will be accessible to bats.

For the duration of the works alternative roosting provisions will need to be provided in the form of the erection of bat boxes onsite. This will need to be in place before the works commence, until at least they have been completed, ideally being retained onsite into the long term as an enhancement.

As the building has the potential to be used as a maternity roost the works should be timed to avoid the maternity period (May to Mid-September) and as bats on the Isles of Scilly tend to occupy the same roosts all year around the works should avoid the coldest parts of the year when bats would usually be hibernating, late November to Mid-March.

## 2. INTRODUCTION AND BACKGROUND

Wheal Grey Ecology Ltd were instructed by Mr Nathan Dean, of Duchy of Cornwall, to carry out further bat survey work on a property known as Ashvale, Lower Town, St Martins, Isles of Scilly. The proposal is to renew the roof covering on the house.

A visual survey was carried out by Simon Barnard whilst working for Spalding Associates (Environmental) Ltd., in September 2020, during which two Common Pipistrelles were observed roosting in the cavity behind the fascia board on the east facing side of the house, at separate locations. In addition, small accumulations of Common Pipistrelle bat droppings were found on the 1<sup>st</sup> floor window ledges on the eastern side of the house with a larger accumulation on the ground below the location where one of the Common Pipistrelles was seen roosting on the eastern side of the house. The evidence found was believed to indicate that the building is used by a small to moderate number of Common Pipistrelle bats. As a result, as these bats would be impacted by the works, further survey work was recommended.

The further survey work recommended was a pair of emergence surveys, using two surveyors. This further survey work can only 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.

### 2.1. Description of buildings

The building subject to this survey is a large two-storey rectangular stone house which has a pitched natural slate covered roof, with gable ends on a north south alignment, see photos 1 to 4. There is an attached stone barn used as a jewellery workshop and shop which has a pitched roof covered with clay tiles, but this building was only indirectly and not comprehensively covered by the survey.



Photo 1. Showing the western elevation of Ashvale and attached barn



Photo 2. Showing the eastern elevation of Ashvale



Photo 3. Showing the southern gable end



Photo 4. Showing the northern gable end

Internally there is a single open roof void which stretches the length of the building. The roof is supported by timber trusses and is open with no crossing timbers but does contain a large water tank. The underside of the roof is lined with lime mortar as the roof is covered with wet-laid scantle slate, see photos 5 and 6.



Photo 5 and 6. Showing the roof void over the house

Externally the southern gable end is rendered with the other walls being stonework. There are deep cavities behind the fascia board on the two long walls, creating roosting habitat for bats, which extend up the wall tops above creating access to them for roosting bats. There are similar cavities behind the row of hanging slates lining the northern gable end giving access to the wall tops and behind the leadwork where the house joins the attached barn, see photo 7.



Photo 7. Showing the point where the house and barn join  
and an example of the gaps behind the fascia board

The southern gable end is reasonably well sealed with the exception of a gap behind the leadwork around the chimney. The ridges and slates themselves seem relatively well-sealed.

### 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 using two trained and experienced surveyors was carried out.

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.

##### 3.1.1. 1<sup>st</sup> Emergence survey, 25<sup>th</sup> June 2021

On 25<sup>th</sup> June 2021, Simon Barnard and Debra Barnard were positioned on opposite corners of the house so that all aspects could be watched.

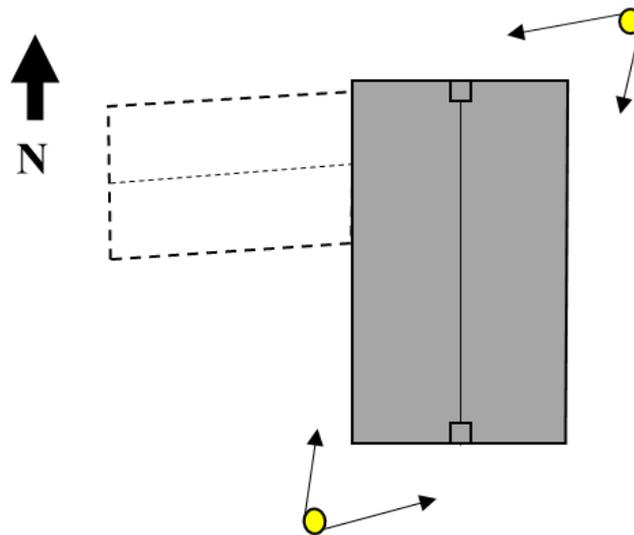


Figure 1. Locations of the surveyors and location of remote detector

The survey was carried out during suitable weather conditions for bat activity with the weather being still, clear and dry after a sunny day with 60% cloud cover and a starting temperature of 15°C dropping down to 14°C by the end of the survey. The survey started at 21.23 and continued until 22.38 with sunset being at 21.38.

Bat activity was monitored using an Elekon Batlogger M detector and an Elekon Batscanner stereo.

### 3.1.2. 2<sup>nd</sup> emergence survey, 10<sup>th</sup> August 2021

On 10<sup>th</sup> August 2021, Simon Barnard and Debra Barnard were positioned on opposite corners of the house so that all aspects could be watched, see Figure 1. The survey was carried out during suitable weather conditions for bat activity with the weather being still, calm and dry with 100% cloud cover and a starting temperature of 18°C dropping down to 16°C by the end of the survey. The survey started at 20.39 and continued until 21.54 with sunset being at 20.54.

Bat activity was monitored using an Elekon Batlogger M detector and an Elekon Batscanner stereo.

## 3.2. Surveyors

### 3.2.1. 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 10 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.

### 3.2.2. Debra Barnard

Debra Barnard is an experienced bat surveyor with nearly 10 years' experience with the use of bat detectors, undertaking activity surveys and emergence surveys.

#### 4. RESULTS

Before each of the emergence surveys the floor below the eaves was inspected. Prior to the first emergence survey an accumulation of 50 to 60 Common Pipistrelle droppings were found on the floor below the location where one of the bats was seen roosting during the visual survey carried out in 2020. Prior to the second emergence survey 20 to 30 droppings were found in the same location.

##### 4.1. Emergence surveys

###### 4.1.1. 1<sup>st</sup> Emergence survey, 25<sup>th</sup> June 2021

The first bat activity noted was from a Common Pipistrelle which emerged from the junction of a gap between a hanging slates and fascia board on the north eastern corner of the house at 21.54. At 21.56 a single Common Pipistrelle was seen to emerge from the southern half of the eastern side of the house from behind the fascia board. Between 21.57 and 21.59 six Common Pipistrelles were seen to emerge from the gap behind the fascia board from the northern half of the eastern side of the house. A 22.02 a single Common Pipistrelle was seen to fly backward and forwards a number of times to the access point behind the fascia board from the northern half of the eastern side of the house with a final Common Pipistrelle seen to emerge from behind the hanging slates on the north western corner of the house at 22.04.

**9 Common Pipistrelles were seen to emerge the house during this survey with six individuals coming from a single location, see figure 2.**

###### 4.1.2. 2<sup>nd</sup> Emergence survey, 10<sup>th</sup> August 2021

The first bat activity noted was from a Common Pipistrelle which emerged from the gap between the row of hanging slates on the western side of the northern gable end at 21.13. At 21.19 a Common Pipistrelle was seen to emerged from the gap behind the row of hanging slates on the eastern side of the northern gable end. Between 21.20 and 21.25 three Common Pipistrelles were seen to emerge from the gap behind the fascia board from the northern half of the eastern side of the house. Single passes by Common Pipistrelles were noted during the remainder of the survey.

**5 Common Pipistrelles were seen to emerge the house during this survey, see figure 2.**

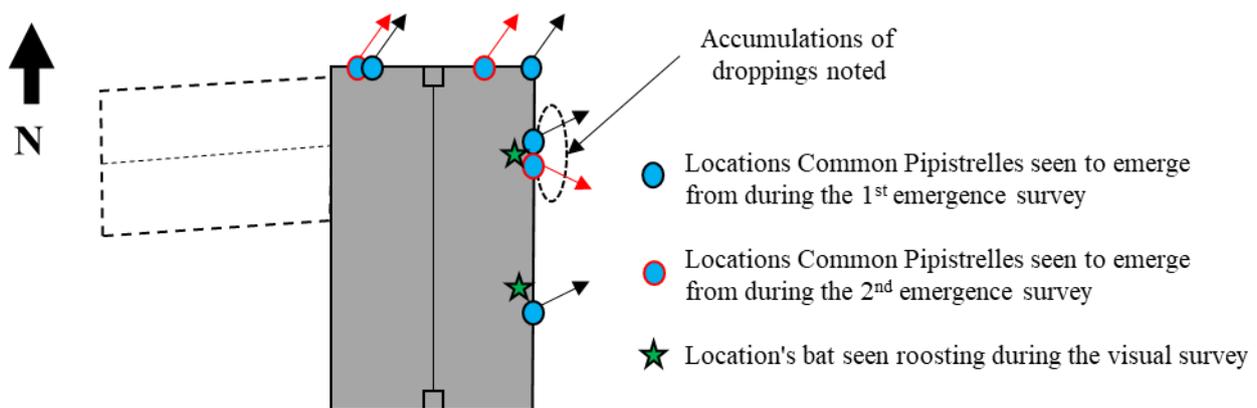


Figure 2. Summary of the location's bats were seen to emerge from during the emergence surveys

#### 4.2. Summary of survey results

The results of the emergence surveys and visual inspections have found that the house is used for regular day roosting by up to 9 Common Pipistrelles potentially, given the location as a maternity roost.

#### 4.3. Status of the roost

##### 4.3.1. Status at local, county and regional levels

Species	UK Conservation Status	UK distribution, population estimate and trends	County occurrence	Local occurrence
<b>Common Pipistrelle</b>  <i>Pipistrellus pipistrellus</i>	Common	Found throughout the UK  2,430,000 in UK, 1,870,000 in England.  Populations believed to be increasing.	Common and widespread	Main bat species found on the Isles of Scilly and known to occur on St Martins.

##### 4.3.2. Status at site level

##### Common Pipistrelles

Two individuals were seen roosting in the building during the initial visual survey carried out in September 2020 with up to 9 Common Pipistrelles being seen to emerge from the house during the emergence surveys with bats seen to emerge during each survey.

This indicates that this building is used for regular day roosting by a moderate number of Common Pipistrelle potentially given the location as a maternity roost.

Estimated population in any given year: at least 9 Common Pipistrelles

## 5. PROPOSAL, POTENTIAL IMPACTS ON BATS AND REQUIRED MITIGATION

### 5.1. Proposal

The proposal is to renew the roof covering on the house.

### 5.2. Potential impacts

The results of the emergence surveys and visual inspections have found that the house is used for regular day roosting by up to 9 Common Pipistrelles potentially given the location as a maternity roost.

The proposal will result in temporary damage to the roost, in the disturbance of any bats present when the works are undertaken and could potentially result in individual bats being killed or injured.

**As the proposed works will result in temporary damage to the roost and in the disturbance of any bats present when the works are undertaken, a Bat Mitigation Licence from Natural England will need to be obtained prior to works commencing. Due to the number of individuals present and its potential to be a maternity roost a Full European Protected Species License will need to be obtained.**

### 5.3. Mitigation

The aim of the mitigation should be to minimise the potential impacts of the works, and any harm or significant disturbance, to bats and ensure that adequate and appropriate roosting provisions are maintained/recreated onsite to allow bats to continue to roost onsite in the same way following the completion of the works as before they commenced, preserving their conservation status.

In this instance, all the existing access points (the gaps between the fascia boards and walls) will be unaffected by the works and all the existing roosting sites will be recreated. As a result, the only impact should be temporary damage and disturbance. The stripping of the roof coverings, in particular along the eaves, will need to be carried out under the direct supervision of the ecologist named on the licence and only Bitumen type 1F roofing felt can be used in areas which will be accessible to bats.

For the duration of the works alternative roosting provisions will need to be provided in the form of the erection of bat boxes onsite. This will need to be in place before the works commence until at least they have been completed, ideally being retained onsite into the long term as an enhancement.

As the building has the potential to be used as a maternity roost works should be timed to avoid the maternity period (May to Mid-September) and as bats on the Isles of Scilly tend to occupy the same roosts all year around the works should avoid the coldest parts of the year when bats would usually be hibernating, Late November to Mid-March.

#### 5.3.1. Exclusions and on-site supervision

Immediately before the works commence onsite, the buildings will need to be carefully inspected for the presence of bats by the ecologist named on the Licence. Any bats that are found will be carefully caught and moved out of harm's way into the bat box erected onsite.

A short briefing will be given to the contractor undertaking the works at the start of the works on the status of the building with regards to bats, the mitigation measures to be followed and implemented and on what to do if a bat were to be found unexpectedly during the works.

Following this, the stripping of the roof coverings, in particular along the eaves, will need to be carried out under the direct supervision of the ecologist named on the licence, any bats found will be carefully caught and moved out of harm's way.

#### 5.3.2. Provision of temporary roosting sites

Suitable alternative roosting provisions will need to be provided for the duration of the works. This will need to be made available to bats from the time the works commence until the works are completed and the roosting sites within the new building are re-available.

This will involve the erection of a bat box onsite. The bat box should comprise one 2F Schwegler Bat Box, or an equivalent. The bat box will need to be erected onto nearby tree or buildings away from the works and at least 3 metres above the ground.

#### 5.3.3. Retention of the existing roosting sites.

All the existing access points (the gaps between the fascia boards and walls) will be unaffected by the works and all the existing roosting sites will be recreated. As a result, the only impact should be temporary damage and disturbance. Only Bitumen type 1F roofing felt can be used in areas which will be accessible to bats.

#### 5.3.4. Timing

As the building has the potential to be used as a maternity roost the works should be timed to avoid the maternity period (May to Mid-September) and as bats on the Isles of Scilly tend to occupy the same roosts all year around the works should avoid the coldest parts of the year when bats would usually be hibernating, Late November to Mid-March.

## 6. CONCLUSIONS AND RECOMMENDATIONS

The results of the emergence surveys and visual inspections have found that the house is used for regular day roosting by up to 9 Common Pipistrelles, potentially, given the location as a maternity roost. The proposal is to renew the roof covering on the house.

The proposal will result in temporary damage to the roost, in the disturbance of any bats present when the works are undertaken and could potentially result in individual bats being killed or injured.

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## 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.

## REFERENCES

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A. J. Mitchell-Jones (2004) *Bat Mitigation Guidelines version 1*. External Relations Team English Nature, Northminster House, Peterborough PE1 1UA.

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