

**RESULTS OF A VISUAL ASSESSMENT
AND FURTHER BAT SURVEY WORK ON
GREEN LANE COTTAGE, PELISTRY,
ST MARYS, ISLES OF SCILLY**

September 2020



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**RESULTS OF A VISUAL ASSESSMENT AND FURTHER BAT SURVEY
WORK ON GREEN LANE FARMCOTTAGE, PELISTRY, ST MARYS,
ISLES OF SCILLY**

O.S. Grid Ref: SV 9229 1198

Survey dates: Visual survey - 27th September 2020
Emergence surveys: 27th and 28th September 2020

Main 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)

Time spent on site: 1 x ¾ hour – Visual survey
2 x 1 ½ hours – Emergence survey
2 x 2 hours – Dawn re-entry surveys

Taxonomic groups: Bats

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

Report compiled by: Simon Barnard BSc (Hons) MSc CEcol MCIEEM


Report completed: 30th October 2020

Filename & issue number: Further Bats_Green Lane Cottage, St Marys, I of S_Final 1

Report for: Mr Nathan Dean, Duchy of Cornwall

Report No: 19-267/DofC/Green Lane Cottage, St Marys, I of S_FB

Document approved by: Catriona Neil BSc (Hons) CEnv CIEEM Mem.MBA Director

Signature: 

Date: 12th November 2020

1. SUMMARY

Spalding Associates (Environmental) Ltd were instructed by Mr Nathan Dean, of the Duchy of Cornwall, to carry out a visual survey and a pair of emergence surveys on a property known as Green Lane Cottage, Pelistry, St Marys, Isles of Scilly. The proposal is to extensively renovate the property.

This survey work follows on from a Preliminary Bat Roost Assessment carried out in late April 2020 by Darren Mason. We were asked to re-assess the building and undertake further survey work as required. A visual assessment was undertaken, including an internal inspection, followed by a pair of emergence surveys using two surveyors covering the house and outbuilding.

Usually the further survey work would involve undertaking two dusk emergence surveys or dawn re-entry surveys between two and four weeks apart with one survey being undertaken before the end of August (the end of the peak activity season). However, we were only asked to undertake this survey work at the end of September, so the two surveys were undertaken closer together but not within one 24-hour period. This is not considered to be a significant limitation as the survey guidelines apply to the whole of the UK and this site is in the far west of the country, where the conditions stay warm, settled and dry much later in the year, extending the active season. Also, on the Isles of Scilly bats are known to stay in the same roosts all year around.

No bats were seen to emerge from Green Lane Cottage or the outbuildings during the survey work undertaken and the buildings were felt to have limited potential to support roosting bats during the visual survey. As a result, it can be confidently concluded that there is no evidence these buildings are used by roosting bats. As no evidence of the use of this building by roosting bats was found, no further work is necessary and the proposed works can proceed with a 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 an individual bat was to be found unexpectedly whilst the works are being carried out, work should stop immediately and Natural England or Spalding Associates be informed. Any bats found should be protected from the elements and predators (particularly cats) and work activity should be removed to another area until Natural England or Spalding Associates can deal with the situation.

As no evidence of the use of this building by roosting bats was found, no mitigation is required. However, features allowing bats to gain access to the roof void or eaves could be incorporated if there was a desire to improve the biodiversity value of the site with regards to bats. If this were to be done only Bitumen Type 1F roofing felt should be used in areas bats could gain access to as modern breathable roosting membranes have been found to cause bat fatalities.

2. INTRODUCTION AND BACKGROUND

Spalding Associates (Environmental) Ltd were instructed by Mr Nathan Dean, of the Duchy of Cornwall, to carry out a visual survey and a pair of emergence surveys on a property known as Green Lane Cottage, Pelistry, St Marys, Isles of Scilly. The proposal is to extensively renovate the property.

This survey work follows on from a Preliminary Bat Roost Assessment carried out in late April 2020 by Darren Mason. The report assessed the building as having high roost potential for bats and recommended that three presence and absence surveys be undertaken, consisting of one dusk emergence survey and a separate dawn re-entry survey and with the third being either a dusk emergence survey or dawn re-entry survey to be carried out within the bat active season between May and September.

We were asked to re-assess the building and undertake further survey work as required. We do not agree with the assessment that the building had high roost potential, as for it to qualify as high potential it would need to have “one or more potential roosting sites that are obviously suitable for use by larger numbers of bats on a regular basis and potentially for longer period of time due to their size, shelter protection, conditions and surrounding habitat” (Bat Conservation Trusts - Bat survey for professional ecologists, Good practice guidelines). This would almost certainly manifest itself as there being some evidence of occupation. While there are a small number of features with some potential to support single or small numbers of bats there is no associated evidence that they are used by bats, in the form of staining or droppings, and most could be inspected from the ground using binoculars or from ladders. Therefore, we would assess the building as having low potential but as a precaution a pair of emergence surveys were undertaken (this is the standard for a site with moderate potential).

Usually the further survey work would involve undertaking two dusk emergence surveys or dawn re-entry surveys between two and four weeks apart with one survey being undertaken before the end of August (the end of the peak activity season). However, we were only asked to undertake this survey work at the end of September, so the two surveys were undertaken closer together but not within one 24-hour period. This is not considered to be a significant limitation as the survey guidelines apply to the whole of the UK and this site is in the far west of the country, where the conditions stay warm, settled and dry much later in the year, extending the active season. Also, on the Isles of Scilly bats are known to stay in the same roosts all year around.

A visual assessment was undertaken, including an internal inspection, followed by a pair of emergence surveys using two surveyors covering the house and outbuilding.

3. METHODS

3.1. Visual survey

With the aid of a high-power torch and ladders the house and outbuildings were carefully searched, both internally and externally where access allowed, for bats or any signs of bat presence either in the past or present. This included searching for individual bats, droppings, feeding remains as well as searching for potential entry points, polishing or scratching of woodwork (indicating heavy use by bats) and for cavities capable of providing roosting space for bats.

All surfaces were examined for bat droppings and feeding evidence, both internally and externally where access allowed, as well as ledges, hanging tiles and other protruding features. Any cavities and open areas were searched with a torch for roosting bats, as were any cavities present along the wall tops, between the roof timbers and walls and around any openings.

As bats can leave little evidence of their occupation, this survey also included an assessment of the potential for the buildings and features on the buildings to support roosting bats.

This survey was carried out shortly before the first emergence survey in the late afternoon of 27th September 2020.

3.2. Emergence survey

Emergence surveys aim to establish if the building being surveyed is used by day roosting 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 surveyors was carried out 24 hours apart.

An emergence/ survey involves positioning surveyors (who are all experienced with the use of bat detectors) around the outside of a building previously identified as having the potential to support roosting bats. These surveyors observe the roof line, openings or any features identified as having the potential to support roosting bats. Observations for emerging bats begin a quarter of an hour before sunset and end at least one hour afterwards. The surveys were carried out under favourable weather conditions (no precipitation and not during strong winds) and in temperatures above 9°C.

1st Emergence survey

On 27th September 2020, Simon Barnard and Matthew Thurlow were positioned on opposite corners of the house so that all aspects could be watched with the surveyor to the rear also having a good view of the outbuildings. The survey was carried out during suitable weather conditions for bat activity, i.e. still, calm and dry after a hot sunny day, 40% light cloud cover and a starting temperature of 15°C dropping down to 13°C by the end of the survey. The survey started at 18.56 and continued until 20.11 with sunset being at 19.11.

Bat activity was monitored using an Elekon Batlogger M detector and an AnabatTM Scout.

2nd Emergence survey

On 28th September 2020, Simon Barnard and Matthew Thurlow were positioned on opposite corners of the house so that all aspects could be watched with the surveyor to the rear also having a good view of the outbuildings. The survey was carried out during suitable weather conditions for bat activity; i.e. overcast but dry with a light breeze, 100% light cloud cover and a starting temperature of 15°C dropping down to 13°C by the end of the survey. The survey started at 18.49 and continued until 20.09 with sunset being at 19.09.

Bat activity was monitored using an Elekon Batlogger M detector and an Anabat™ Scout.

3.3. Surveyors

3.3.1. Simon Barnard

Simon Barnard is an 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 the full range of species of bats found in Cornwall and is a registered consultant on Natural England's Bat Mitigation Class licence.

3.3.2. Matthew Thurlow

Matthew Thurlow is a trained and experienced bat surveyor experienced with the use of bat detectors and undertaking activity surveys and emergence surveys and is training towards his survey licences.

4. RESULTS

4.1. Building description

Green Lane Cottage is a detached two-storey, painted, stone-built cottage with pitched natural slate covered roof, gable ends and a lean-to extension to the rear containing a kitchen and a porch with a pitched roof to the front, see photos 1 and 2. To the south of the cottage is a detached single storey blockwork and stone outbuilding with a pitched corrugated cement fibre sheeting covered roof, see photos 3 and 4.



Photo 1. Showing the Cottage from the north



Photo 2. Showing the Cottage from the south



Photos 3 and 4. Showing the outbuilding to the south of the cottage

Over the cottage there is a single shallow roof void, as the rooms on the 1st floor are built into the roof void, with a chimney built into the gable ends. The roof is supported by timber trusses, making it fairly open. The underside of the roof is unlined with the floor of the roof void being lined with fibreglass insulation, see photo 5. There is also a small roof void over the lean-to built onto the north facing side of the cottage. The lean-to is roofed with composite roofing slates lined with bitumen felt, see photo 6.



Photo 5. Showing roof void over the lean-to



Photo 6. Showing roof void over the main part of the cottage

Externally there are a number of features on the cottage with some potential to be used by roosting bats these include small gaps between slates, small gaps between the fascias or hanging slates on the eaves and wall tops and cracks in the render on the chimney. Within the porch, which has a vaulted ceiling, there are gaps between the wall and the plasterboard lining the underside of the roof but these were heavily cobwebbed. The feature with the greatest potential to be used by roosting bats is a large gap between the fascia and wall plate over the right-hand window on the 1st floor on the southeast face of the building. However, all of these features, with the exception of the gaps between the slates and cracks in the render on the chimney were carefully inspected and showed no signs of use by bats i.e. no droppings on window ledges below or the walls around them and no staining or polishing of wood or stone work.

The outbuilding comprises a rectangular building to the north, which is divided into two rooms both of which are accessed from outside, with a more open section to the rear containing stored material. The section to the front is open from the floor to the underside of the roof, which is unlined, with a stone partition wall in the centre. The walls are bare and the eastern end is partially glazed making that section light, see photos 7 and 8. The underside of the ridge is open to the interior as are the wall tops. The section to the south of this has a mono-pitched roof and stone wall and has an opening in the eastern wall making it light and drafty internally. The outbuilding offer very limited roosting potential.



Photo 7. Showing the eastern room in the outbuilding



Photo 8. Showing the western room in the outbuilding

4.2. Surrounding landscape

Green Lane Cottage is located in the open countryside in the north western side of St Marys. There are a few dwellings nearby but it is surrounded by small rectangular fields bounded by dry stone hedges lined with vegetation. The sea is a short distance to the east and there are bands of woodland nearby. The surrounding landscape represents good potential bat foraging habitat and there are known to be roosts used by Common Pipistrelles nearby but not within this building.

4.3. Visual survey

4.3.1. Bats

During the visual survey no evidence of the use of occupation by this building by roosting bats was found. Externally, a small number of features with some limited potential to support single roosting bats were identified but these were mostly inspected from the ground or ladders and ruled out.

4.4. Emergence/dawn re-entry survey

1st Emergence survey, 27th September 2020

The first bat activity noted was a pass by a Common Pipistrelle at 19.47 which flew into the site from the east. From this point onwards regular feeding activity by single or small numbers of Common Pipistrelles around the building and along the adjacent lanes were noted.

No bats were seen to emerge from Green Lane Cottage or the outbuildings during this survey.

2nd Emergence survey, 28th September 2020

The first bat activity noted was a pass by a Common Pipistrelle at 19.44 which flew in from the south east up the lane. From this point onwards regular feeding activity by reasonable numbers of Common Pipistrelles, 4 to 5 individuals, around the building was noted with the highest levels of activity being in the lane to the north of the cottage.

No bats were seen to emerge from Green Lane Cottage or the outbuildings during this survey.

4.5. Summary

No bats were seen to emerge from Green Lane Cottage or the outbuildings during these surveys and the buildings were only felt to have limited potential to support roosting bats during the visual survey. As a result, it can be confidently concluded that there is no evidence these buildings are used by roosting bats.

5. CONCLUSIONS AND RECOMMENDATIONS

The proposal is to extensively renovate the property.

No bats were seen to emerge from Green Lane Cottage or the outbuildings during the survey work and the buildings were felt to have limited potential to support roosting bats during the visual survey. As a result, it can be confidently concluded that there is no evidence these buildings are used by roosting bats. As no evidence of the use of this building by roosting bats was found, no further work is necessary and the proposed works can proceed with a 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 an individual bat was to be found unexpectedly whilst the works are being carried out, work should stop immediately and Natural England or Spalding Associates informed. Any bats found should be protected from the elements and predators (particularly cats) and work activity should be removed to another area until Natural England or Spalding Associates can deal with the situation.

As no evidence of the use of this building by roosting bats was found, no mitigation is required. However, features allowing bats to gain access to the roof void or eaves could be incorporated if there was a desire to improve the biodiversity value of the site with regards to bats. If this were to be done only Bitumen Type 1F roofing felt should be used in areas bats could gain access to as modern breathable roosting membranes have been found to cause bat fatalities.

6. 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.