

PRELIMINARY ECOLOGICAL APPRAISAL & PRELIMINARY BAT ROOST ASSESSMENT OF:

TREVEAN,
HIGHER TOWN,
ST MARTIN'S,
ISLES OF SCILLY,
TR25 0QL

Client: Mr Mark Travers

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Non-Technical Summary

- On 4th June 2020, a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) was carried out on Trevean in Higher Town, St Martin's, Isles of Scilly, TR25 0QL in order to establish baseline conditions, determine the importance of any ecological features within and around the survey area and to establish the actual or potential use of the building by bats to help inform the determination of Planning Application P/20/026.
- This report outlines the findings of the PEA and PRA assessment and provides advice based on the surveys' conclusions. As the proposals contained within the Planning Application relate only to works within the existing footprint and structure of the existing building, this assessment is primarily focused on the PRA of the building.
- During the PRA an external/internal inspection of the building was undertaken (where accessible).
- Nesting birds including sparrow and starling were confirmed utilising nesting habitat associated with the wall plate on the eaves of the buildings.
- The immediate habitat surrounding the proposed development presents optimal habitat for foraging bats including mature gardens, a network of small bounded agricultural fields and abundant semi-natural habitat with direct and proximate access to the shore and strandline.
- The building offers features which could be used by crevice-roosting species such as common pipistrelle, primarily externally but with more recently created/revealed features internally arising because of recent building works. The features are most likely to provide suitable conditions for non-breeding summer or transitional roosts.
- Taken in combination, the characteristics of the building and the surrounding habitat suggest **moderate roost potential** for bats.
- The recommendations of this PEA and PRA are that two activity surveys are carried out, consisting of one dusk emergence and one dawn re-entry survey carried out within the bat active season between May and September.
- Aside from bats and nesting birds, no other ecological receptors are identified which require consideration to inform the determination of this Planning Application.
- **It must be noted that this report is not enough to support a Planning Application.**

1.0 Introduction

1.1 Survey and reporting

This report details the results of a preliminary ecological appraisal (PEA) and a preliminary bat roost assessment (PRA) of the two-storey buildings which constitute the core component of the residential dwelling at Trevean, Higher Town, St Martin's, Isles of Scilly, TR25 0QL. The survey was carried out on the 4th June 2020.

1.2 The application site

Trevean is located centrally along the southern periphery of the settlement of Higher Town in St Martin's (National Grid Reference SV 93023 15534). The Application Site is comprised of a detached house adjacent to a workshop/glasshouse set within a plot of mature garden which stretches to the south and west. This is illustrated in **Figure 01** below.



Figure 01 – Aerial map showing the location of the Application Site – reproduced from Google Earth imagery in accordance with their Fair Use Policy.

The main detached house can be considered to comprise four distinct components for the purpose of this report and these are indicated in **Figure 02** below. The main residential property comprises:

- a two-storey component with a higher ridge line (shown in blue in **Figure 02** below);
- a two-storey component with a lower ridge line (shown in purple);
- a single-storey kitchen (shown in yellow) and;
- a single-storey linking porch and second kitchen (shown in orange) attaching the main kitchen to the main two-storey components.

In addition to the main residential dwelling formed of the four contiguous components, there is a separate detached workshop/glasshouse is shown in green.

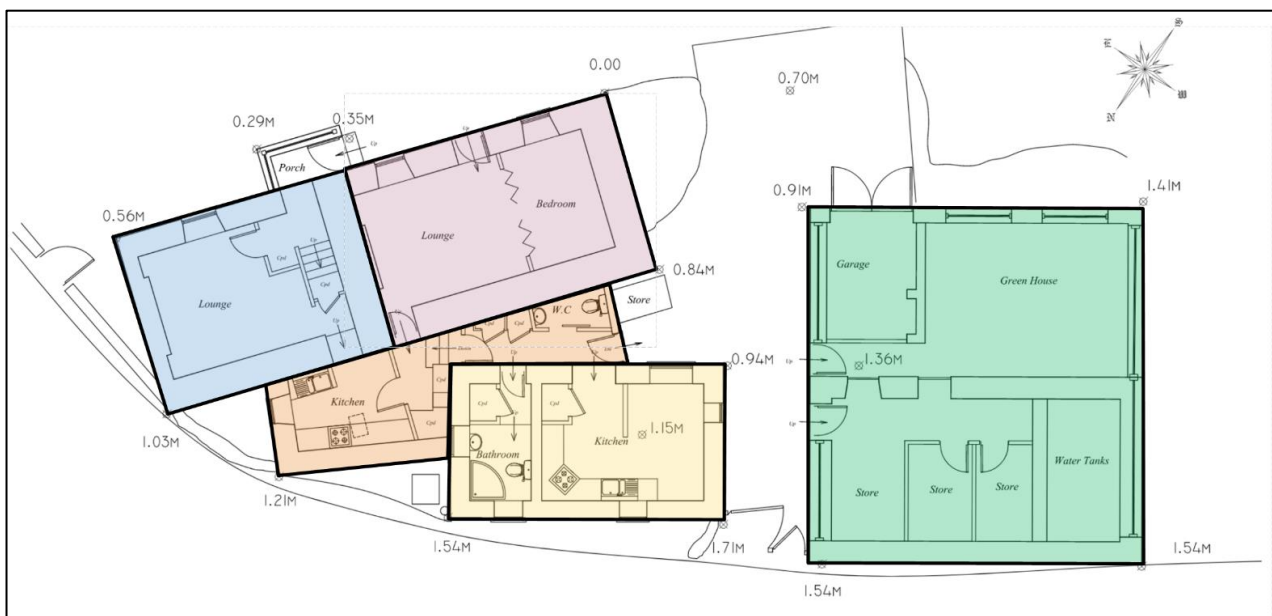


Figure 02 – showing the structurally or physically distinct components of the property – reproduced from the Existing Plans submitted by the Applicant in support of Planning Application P/20/026.

1.3 Details of proposed works

Two separate planning applications associated with this property are being submitted by the Applicant in June 2020 – this report relates to work associated with Application P/20/026 and the focus of descriptions and results is concentrated on the elements of the property to be affected by the proposals.

Application P/20/026 concerns works to the fabric and structure of the existing two-storey residential components only (those indicated in blue and purple in Figure 02 above). The Application is to raise the existing roof of the westerly two-storey component and recover with

natural slate as well as make alterations to fenestration including new window, re-sizing of windows and replacement of uPVC windows with grey painted timber windows on both two-storey elements.

2.0 Methodology

2.1 Preliminary Ecological Appraisal - Desk Study

A desk study data search was undertaken. This involved carrying out a review of the Local Records Centres (LRC) available records for bat species and publicly available datasets and citations of statutory designated sites of importance for nature conservation for sites within the zone of influence (ZOI) of the survey area (considered to be a maximum of 2km in this case). The desk study was also undertaken to identify habitats and features that are likely to be important for bats and assess their connectivity using aerial photographs.

2.2 Preliminary Bat Roost Assessment

The Preliminary Bat Roost Assessment comprised a survey of the building for bats, signs of bats and features potentially suitable for use by roosting bats, and an assessment of the surrounding habitat in terms of its suitability for commuting and foraging bats.

The survey consisted of a ground based inspection and a detailed search of the interior and exterior of the building (from ground level), looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, a ladder, and a high-powered torch were used as required.

2.3 Classification of building

The building was classified according to its suitability for use by roosting bats. The classification was dependent on several factors including (but not limited to):

- Bats and/or signs of bats;
- External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards);
- Setting;
- Night time light levels;
- Disturbance levels;

- Proximity of suitable foraging habitat and commuting routes (e.g. ponds, streams, woodland, large gardens, hedgerows).

The categories used to classify buildings and the survey effort required to determine the presence or absence of bats (as per the Bat Conservation Trust's Bat Survey Guidelines¹, referred to by Natural England in their standing advice to planning officers) are described in Table 1 (see below).

2.4 Surveyor details

The survey was undertaken by James Faulconbridge MRes, MCIEEM on behalf of the Isles of Scilly Wildlife Trust. James has twelve years' experience undertaking bat surveys and holds a Natural England WML-A34-Level 2 (Class 2 License); registration number: 2015-12724-CLS-CLS which permits him to survey bats using artificial light and endoscopes and capture bats using hand and hand-held static nets.

Table 1 – Description of the categories used to classify a building’s bat roost potential and the survey effort required to determine the likely presence or absence of bats

Bat Roost Potential	Roost status	Description	Survey effort required to determine the likely presence or absence of bats
	High	Numerous features potentially suitable for use by roosting bats, optimal or good quality bat foraging habitat nearby and good habitat connectivity. Alternatively, a building with fewer features potentially suitable for use by roosting bats and optimal foraging habitat nearby.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey.
	Moderate	More than a few features potentially suitable for use by roosting bats, good foraging habitat nearby and limited habitat connectivity. Alternatively, a building with a few features potentially suitable for use by roosting bats but optimal foraging habitat nearby.	Two or three dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Low	Only a few features potentially suitable for use by roosting bats but good bat foraging habitat nearby. Alternatively, a building with more than a few features potentially suitable for use by roosting bats but sub-optimal foraging habitat nearby and limited habitat connectivity.	One or two dusk emergence and/or pre-dawn re-entry surveys between May and September (but only if features will be affected by the proposals).
	Negligible	Very few features potentially suitable for use by roosting bats and / or in an area (such as a densely populated urban area) which has limited habitat connectivity and poor foraging habitat.	No further surveys required.

Table 1. Categorising and classifying a building’s bat roost potential

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

3. Results

Preliminary Ecological Appraisal

3.1 Pre-existing information on bat species

The desk study showed that no species of bat have previously been recorded within the building and no known roosts have been recorded within 2km of the proposed development.

A data search of LRC records for bats revealed information on 2 species of bat recorded within the 2km ZOI of the site. The species conclusively identified were Common Pipistrelle (*Pipistrellus pipistrellus*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*) a UK Biodiversity Action Plan (BAP) priority species.

3.2 Statutory and non-statutory sites

The desk study confirmed the presence of the following statutory designated sites within the 2Km ZOI of the site:

- i) **Plains and Great Bay SSSI** – Lying approximately 250m north-west of Trelawney, Plains and Great Bay SSSI is designated for a variety of habitats, including a well-developed strandline and embryo dunes and associated species. The dune grassland further inland is particularly important for the nationally scarce Orange Bird's-foot (*Ornithopus pinnatus*) and the rare Ramping Fumitory (*Fumaria capreolata*). The heathland is dominated by Common Heather (*Calluna vulgaris*), Bell Heather (*Erica cinerea*) and Western Gorse (*Ulex gallii*) and associated lichen flora.
- ii) **Chapel Down SSSI** – Situated approximately 900m due-east of Trelawney is Chapel Down SSSI. An important site for its 'waved' maritime heath, dominated by Common and Bell Heather, with scarce records of Bird's-foot-trefoil (*Lotus corniculatus*), Heath Bedstraw (*Galium saxatile*) and the nationally scarce Orange Bird's-foot and rare Hairy Bird's-foot (*Lotus subuliflorus*). On the western edge of the SSSI there is a small population of the locally rare Pignut (*Conopodium majus*).
- iii) **White Island SSSI** – Located 1.3km from Trelawney to the north-west and just off the coast of St Martin's is White Island SSSI. Designated primarily for its geological deposits, maritime

heathland, maritime grassland and small colonies of breeding seabirds along its isolated cliffs.

- iv) **Tean SSSI** – Lying 1.5km due west of Trelawney Tean SSSI is an uninhabited island designated primarily for its dune and scrubby grassland species assemblage including the very rare Dwarf Pansy (*Viola kitaibeliana*), Four-leaved Allseed (*Polycarpon tetraphyllum*), the nationally scarce Balm-leaved Figwort (*Scrophularia scorodonia*) and Orange Bird's-foot.
- v) **Eastern Isles SSSI** – Situated off the south-east coast of St Martin's and 1.9km south-east of Trelawney lies this small group of isolated islands. Designated for their wildflower assemblage (111 species in total), archaeology and breeding seabirds including, Lesser Black-backed Gull (*Larus fuscus*), Great Black-backed Gull (*Larus marinus*), Puffin (*Fratercula arctica*), European Shag (*Phalacrocorax aristotelis*) and Fulmar (*Fulmaris glacialis*).

3.3 Habitats surrounding the application site

The Application Site is situated within Higher Town – this is the eastern-most and largest settlement on the island of St Martin's in the Isles of Scilly. The town comprises a small number of detached and terraced houses along with chalets, small-scale agricultural buildings and outbuildings. There is no external street lighting within the settlement with night-time lighting arising from residential light spill eg. through windows.

The town comprises three 'arms' linked in the centre by a triangular junction. The northern-western portion is the most built-up whilst the southern arm comprises a single terraced row of cottages and a farmhouse known as Signal Row. The Application Site is on the western arm of Higher Town which comprises scattered detached houses and some terraced components running along a ridge line with the land falling away to the south – the property lies on this southern boundary and opens directly onto gardens and agricultural land to the south.

Trevean is set within a mature garden which extends to the south; beyond which is a contiguous landscape of small, hedgerow-bound fields which vary in their level of current use and management. Significant encroachment of elm (*Ulmus sp.*) has occurred in some of these fields presenting a habitat mosaic of young secondary woodland, productive 'fallow' leys, disused flower

fields and unmanaged grassland with strong linear vegetated components in the form of evergreen hedges. Further south are the dunes, beach and associated stand-line of Par Beach and Higher Town Bay. To the south-east is the peninsula of Cruthers Hill which is dominated by gorse, bracken and heather whilst further agricultural land-use including a vineyard and permanent pasture dominates to the south-west.

To the north-west of the property, the landscape is dominated by small, bounded fields under active cultivation for bulbs and flowers; whilst permanent pasture demarked into small fields by stone walls dominate to the north-east. Beyond both of these land uses lies the northern portion of the island which is not subject to agricultural management and presents a mosaic of habitats dominated by heathland with grassland, dunes, beaches and the strandline as the coastline is reached.

This mosaic of habitats surrounding Trevean presents optimal quality foraging habitat for the common pipistrelle which is the primary species regularly recorded in flight on St Martin's and represents most of the background records. The habitats would also be suitable for use by soprano pipistrelle which has broadly similar habitat requirements.

3.4 Habitats within the application site

The residential dwelling and workshop/glasshouse of Trevean are situated on the northern periphery of the Application Site, abutting the road directly along the boundary.

The remainder of the property comprises a mature garden which was been under-managed but has recently been cleared and opened by the Applicant to restore the original character and design. The garden boundaries to the south, east and west are demarked by evergreen windbreaks whilst the northern boundary, where not lined by the buildings, is open with 3x hawthorn (*Crataegus sp.*) trees.

The garden includes a typical range of herbaceous and ornamental species including shrubs, bulbs and perennial species. Occasional arable wildflowers within the borders along with bramble (*Rubus fruticosus agg.*) and honeysuckle (*Lonicera sp.*) scrambling through vegetation and climbing stonework in places.

Several mature elm (*Ulmus* sp) trees occur within the garden along the eastern boundary of the site – these have undergone tree surgery to manage their shape and structure during the winter 2019/20 following clearance of competing trees/shrubs. A number of these trees have a knot-holes and rot holes which could present suitable nesting habitat for breeding birds, or roosting opportunities for bats.

In summary, within Trevean's immediate footprint there is a mature garden with a range of native and ornamental species of shrub and plant that may attract a variety of invertebrates which bats may prey upon, making the immediate habitat optimal for bats leaving and entering a roost. Several small mature trees provide structural variety and further potential foraging opportunities.

Preliminary Roost Assessment

This assessment will focus only on those elements of the property which are to be directly affected by the proposals contained within Planning Application P/20/026, for clarity and brevity. This is restricted to the two 2-storey elements of Trevean only – see Figure 02 for illustration. Proposals affecting the studio/glasshouse, the kitchen and the single storey linking component will be subject to a separate Planning Application and a PEA/PRA of these proposals will be contained in a separate report.

3.5 External

The two-storey elements of Trevean comprise most of the living space – the two components are broadly of the same construction with the more westerly component having a lower roofline than the more easterly component.

The building is constructed of granite block which are rendered externally in places and otherwise well-pointed and finished externally. The windows are uPVC and the frames are well-fitted offering no cavities suitable for use by roosting bats.



Photo 01 – showing the well-pointed granite exterior and well-sealed uPVC window characteristic of the building.

Both components of the building have single-pitched slate-tiles roofs with ridge tiles. There is a Velux window in the more westerly component. The slate tiles are well-fitted throughout with only very slightly lifted tiles in places – these are unlikely to present suitable access features for roosting bats.

Barge/fascia boards run along the eaves of the roof with gaps created by the junction between the linear board and the irregular texture of the stonework to which it is attached. These present potential roosting opportunities behind the boards themselves as well as allowing access to the wall plate and to potential gaps between the felting and the slate tiles associated with the roof structure (**Photo 02**).

The lower-pitched western component of the building is tied in with the gable of the eastern component, around 1m below the roofline of the latter. The western gable of the eastern component of the building has render which appears slightly lifted which may offer minor niches for use by roosting bats (**Photo 03**). The verges of both gables on the eastern component of the building are lined with hanging slate tiles which appear to have gaps beneath them providing access to potential roosting opportunities (**Photo 04**). The western gable of the western component of the building is rendered to the verge and well-sealed throughout offering no potential roosting

opportunities. Three brick-built chimneys are present – one at the apex of both gable ends as well as one at the junction where the two building components join.

A small porch is attached on the southern aspect of the building – this has a sealed void above a well-sealed, single-pitched slate-covered roof. The only potential access to this feature would be around lifted lead flashing where the roof meets the wall of the main building (**Photo 05**).

A number of nesting birds are confirmed in the building, all utilising access features associated with the barge/fascia boards and nesting around the eaves, presumably above the wall plate as nests are not visible from the interior of the building. Species confirmed include house sparrow and starling.



Photo 02 – showing the lifted fascia/barge board providing potential access behind – this is an example of a feature which is ubiquitous along eaves of the building.



Photo 03 – showing the western portion of the building with the single-storey link in the foreground.



Photo 04 – showing the eastern gable of the building with hanging tiles along the verge and a well-pointed granite external wall. The brick-built chimney is also visible.



Photo 05 – showing the lifted flashing where the roof of the porch meets the wall – the gaps beneath the fascia/barge boards illustrated in Photo 02 are visible above.

3.6 Internal

Internally, the building has been stripped out to just the walls and roof – all internal fixtures and fittings including first- and second-storey floors have been removed.

The roof is open to the rafters with no ceiling or loft void present. The roof is built around a wooden A-frame structure with wooden purlins and rafters, and a square wooden ridge beam. The joins between the timbers do not appear to offer roosting opportunities but could potentially be used for roosting by free-hanging bats. The roof is under-felted throughout and is generally in good condition with occasional tears.

The interior walls throughout are open and largely un-finished with abundant gaps between the granite blockwork where pointing is absent. Internally, there are lintels above window and door frames which have gaps around them providing potential access to roosting opportunities associated with the walls.

Internally, the building is light and airy due to the windows from both storeys and the roof light providing light to the internal space. Most of these internal features will only have been revealed due to building renovation works which were undertaken in winter and spring 2019/20 and are

therefore highly unlikely to represent long-term roosting opportunities. Since these features being revealed, the ongoing building works within the structure are likely to represent a significant source of disturbance through human presence, noise, lighting and vibration presenting a significant deterrent to bats seeking roosting features. Therefore occupation of these novel internal roosting opportunities is considered unlikely at present.

No droppings or other evidence of bat occupation was noted; however the nature of the interior of the building with an un-finished floor and ongoing construction work would have made identification of such evidence highly unlikely.



Photo 06 – showing the interior of the building, open to the rafters and built around a wooden A-frame structure



Photo 07 – showing the unfinished interior walls with multiple gaps between stonework.



Photo 08 – showing gaps associated with lintels around a window frame



Photo 09 – showing gaps in the stonework internally.

3.7 Summary

Despite the apparent abundance of roosting opportunities internally, it is considered likely that their recent creation due to building work, and the ongoing high levels of disturbance arising from the same building work, would make their identification and utilisation by roosting bats unlikely.

There are however several features associated with the building which are considered suitable for transitional or non-breeding summer roosts, particularly for common pipistrelle. These include features behind barge/fascia boards along the eaves; beneath lifted lead flashing around the porch; beneath hanging tiles on gable ends; and in gaps between roofing felt and slate tiles.

4. Assessment and recommendations (excluding bats)

4.1 Protected sites

The proposed development falls just within the boundary of the SSSI Impact Risk Zones of Plains and Great Bay SSSI. Impact zones are used in the assessment of planning applications for likely impacts on SSSI's, Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar Sites (England). However, the likely attributable impact in these zones is for residential developments of 100, or 50 or more houses outside existing settlement/urban areas. The proposals under consideration are highly unlikely to impact on the SSSI.

4.2 Nesting birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of this Act makes it an offence to kill, injure or take any wild bird, or intentionally to take damage or destroy the nest of any wild bird while that nest is in use or being built.

During the survey, evidence of nesting birds was identified associated with the wall plate with access around the fascia/barge boards – these were also reported by the Applicant. Species confirmed included sparrows and starlings. The current nests are likely to have fledged at the time of determination of the current Application; however second broods may occur and if work was to commence between the months of March and August inclusive, then the site would need to be checked first for nesting birds. If any evidence of breeding activity was found, or nests are identified, then works that would disturb the adults, the nest or young must be postponed until all young have fledged the nest and it is no longer in use.

Following the proposed renovation works, it is unlikely that suitable nesting habitat for these species will remain associated with the wall plate. It is therefore recommended that mitigation measures to replace lost nesting features are incorporated into the design.

House sparrows nest communally, and nest boxes should accommodate this, either through the installation of a single purpose-built nest box comprising several individual chambers with separate entrances, or the installation of 3+ nest boxes in close proximity. These should be mounted on the

wall of the house if possible, at a height of at least 3m above the ground with an entrance clear of vegetation/other features which may put them at risk of predation from cats. Boxes can be sourced online, or can be constructed on site using methodology and specifications provided by the RSPB (<https://www.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/createasparrowstreet/>)

Starlings require larger nest boxes with entrances suited to their size – these could be mounted on the house or on retained trees in the garden if desired. Boxes can be sourced online or can be constructed on site using methodology and specifications provided by the RSPB (<https://www.rspb.org.uk/get-involved/activities/give-nature-a-home-in-your-garden/garden-activities/createacosystarlinghome/>).

5. Assessment and recommendations (bats)

5.1 Survey constraints

The survey was undertaken at an appropriate time of year, during the main summer active season.

Internal inspection for evidence of dropping etc. was significantly constrained by the internal condition of the building due to ongoing construction work and lack of a floor which would quickly destroy or dissipate evidence of droppings.

Access to search for droppings or other evidence of bat occupation was restricted on the northern external aspect as there are single-storey elements of construction associated with this side of the building.

5.2 Further survey requirements

The two-storey residential components of Trevean are considered to provide 'moderate' potential to support roosting bats (see Table 1). This assessment is based on the occurrence of the following features within or immediately adjacent to the site:

- The building has multiple features which would provide suitable roosting habitat for small numbers of crevice dwelling bats – these are likely to be suitable for use as transitional or non-breeding summer roosts with lower likelihood of use for maternity or hibernation roosts.
- There are a number of potential roosting features where evidence of occupation would not be visible during a daytime building inspection – these include features between the roofing felt and the tiles; features associated with the wall plate; and gaps beneath barge/fascia boards and hanging tiles where access to inspect for the presence of droppings was not possible.
- The building is situated within optimal foraging habitat in dark environs with excellent connections to the wider landscape.

To confirm whether this building supports roosting bats, further surveys (see section 5.3) would need to be undertaken during the bat active season.

5.3 Presence or absence surveys

The Bat Conservation Trust's Bat Survey Guidelines (referred to by Natural England in their advice to planning officers) state that buildings with 'moderate' bat suitability require two survey visits comprising one dusk emergence survey and a separate dawn re-entry survey.

The surveys should take place between May – September in optimum weather conditions, to maximise the likelihood of recording bats, with dusk air temperatures exceeding 10°C and not rain or strong wind. Dusk emergence surveys should commence 15 minutes before sunset and continue for 1.5 – 2 hours after sunset. A pre-dawn re-entry survey should commence 1.5 – 2 hours before sunrise and continue until 15 minutes after sunrise.

Sufficient surveyors should be used on each survey so that all relevant aspects of the building can be viewed at one time. Surveyors should be positioned no more than 50m away from the buildings with an awareness of the likely exit/access points and potential roost locations. Each surveyor should be equipped with a bat detector and recording equipment and should count the number and species of bats and their activity in a defined area.

With due regard to the distribution of potential roosting features; the size and orientation of the buildings; and the scope of potential impacts associated with the proposals, it is identified that **two surveyors** would be required to provide comprehensive visual coverage of the two-storey building.

If no roosts are found during the presence or likely absence surveys, then no further surveys would be required.

5.4 Mitigation

To comply with planning policy and wildlife legislation (both domestic and European) it will be necessary to ensure that following the development the "favourable conservation status" of bats

will be maintained. This means that, where a roost will be lost, appropriate mitigation needs to be provided.

If roosts are confirmed then further detailed roost characterisation surveys may be required to establish how bats use the roost, the intensity of use and what features and characteristics of the roost and the surroundings are important. The information gained would allow an accurate assessment of the potential impacts of the development on bats and inform the requirement of a European Protected Species Mitigation Licence (EPSML), to be considered and issued by Natural England prior to the works commencing.

6. Summary

The two-storey residential components of Trevean were found to have **moderate potential** to support transitional or non-breeding summer roosts for cavity dwelling species such as common and/or soprano pipistrelle.

To assess whether bats roost in the building two further surveys are recommended; one dusk emergence survey and one dawn re-entry survey to be carried out between May and September. Each survey would require two surveyors to be strategically positioned to ensure all potential roosting features which may be affected by the proposals can be observed. If bats are found to be roosting in the dwelling, then further surveys may be required to fully characterise the roost and inform a mitigation strategy which would need to be implemented.

Breeding birds were confirmed nesting on the wall plate of the building at the time of survey, gaining access from the eaves. Recommendations are provided relating to timing of works and pre-commencement nesting bird checks, as well as mitigation measures to secure continuity of nesting habitat in the long term.

Aside from bats and nesting birds, no other ecological receptors are identified which require consideration to inform the determination of this Planning Application.

7. References

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