Preliminary Bat & Bird Assessment & Bat Survey Report

Version 2

Site:

Norrard, Tresco, Isles of Scilly

Grid Reference: SV 8931 1565

28th June 2019

Prepared for Tresco Estate by:

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Signed:	
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Plan for Ecology

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Summary

Bat evidence?	The property, Norrard, surveyed on the 3rd June 2019, is two-storey building of stone construction, with a pitched slate roof and a two-storey extension off the west elevation. No evidence of roosting bats was observed within the interior of the roof during the visual assessment, however the exterior of the building supports features (gaps beneath fascias, slipped tiles, gaps beneath hanging tiles) with the potential to support crevice dwelling bats. The bat emergence surveys, undertaken on the 3rd and 17th June 2019, have shown that Norrard supports a common pipistrelle bat *(Pipistrellus pipistrellus)* day roost (of at least 3 individuals), located beneath the fascia board on the western elevation and beneath hanging tiles on the gable end of the west projection.
Proposed works	Demolition of the existing rear two-storey extension and replacement with a larger extension over the existing footprint.
Bat mitigation recommendations?	Works will not commence until a CL21 or EPS licence has been obtained from Natural England. Prior to demolition of the extension, the roof will be 'soft striped' under an ecological watching brief at a time of year when bats are least likely to be negatively impacted. A licensed bat ecologist will oversee removal of the roof; any common pipistrelle bats uncovered will be relocated to a bat box installed within a nearby tree. Two 1FE Schwegler bat access panels with back plate will be installed on the south-west elevation of the proposed new extension. The position of the bat access panels has been chosen to replicate the identified bat access locations. In addition, a *c*. 30mm gap will be left beneath the wooden facias on the south-west elevation. No exterior lighting will be installed close to the 1FE Schwegler bat access panels. A licensed and suitably qualified bat ecologist will oversee works.
Bird evidence?	Bird liming was observed on the timbers of void 1.
Bird mitigation recommendations?	Works to the building should be undertaken between October and February, when birds will not be nesting. If this is not possible, and works are to be carried out during the bird breeding season (March to September inclusive), an ecologist must search for nesting birds immediately prior to commencement of works. If nesting birds are present, works within 5m of the active nest must not commence until nesting activity has ceased and/or the dependant young have fledged. No further surveys for birds are recommended.

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1.0 Introduction

1.1 Background

In April 2019, Tresco Estate commissioned Plan for Ecology to undertake a Preliminary Bat and Bird Assessment (sometimes referred to as a Bat and Barn Owl Assessment) and bat emergence surveys of the property 'Norrard', Tresco, Isles of Scilly (OS Grid Ref: SV 8931 1565). The client proposes to demolish the existing rear two-storey extension and replace with a larger extension over the existing footprint.

The property was assessed as being of moderate suitability for roosting bats. Two bat emergence or re-entry surveys were recommended to inform works. Bat emergence surveys of the property were undertaken on 3rd and 17th June 2019.

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1.2 Project Administration

Property Address:	Norrard, Tresco, Isles of Scilly
OS Grid Reference:	SV 8931 1565
Client:	Tresco Estate
Planning Authority:	Council of the Isles of Scilly
Planning Reference Number:	-
Report Reference Number:	P4E908; P4E972
Proposed work:	Demolition of existing rear two-storey extension and replace with a larger extension over the existing footprint.
Visual Assessment Survey Date:	3rd June 2019
Bat Emergence Survey Dates:	3rd June 2019 and 17th June 2019
Ecologist & Licence Number:	Dr Kim Jelbert BSc (Hons) MSc PhD MCIEEM: Bat licence No. 2015-10444-CLS-CLS Naomi Scala BSc (Hons) GradCIEEM: Bat licence No. 2018-34120-CLS-CLS Dr Lucy Wright BSc (Hons) MSc PhD

1.3 Legislation & Planning Policy

Planning: The local planning authority has a statutory obligation to consider impacts upon protected species resulting from development. Planning permission will not be granted with outstanding ecological surveys, and if applicable an appropriate mitigation plan.

Bats: In the UK all bat species are listed on Annex IV(a) of the European Communities Habitats Directive and as such are European Protected Species (EPS). In Britain protection of bats is achieved through their inclusion on Schedule 2 of the Conservation and Habitats Regulations 2010, Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 12 of the Countryside and Rights of Way Act 2000 (HM Government, 1981, 2000 & 2010).

As a result of this statutory legislation it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat/s in its roost;
- Intentionally or recklessly damage, destroy or obstruct access to a bat roost (even if bats are not occupying the roost at the time);
- Possess or sell or exchange a bat (dead or alive) or part of a bat.

Works with potential to cause significant disturbance to roosting bats may require a European Protected Species (EPSL) licence or Bat Mitigation Class Licence (CL21) from Natural England

before works can legally commence. Works likely to result in less significant disturbance may be carried out under a Bat Mitigation Method Statement. The magnitude of disturbance and therefore the requirement for an EPSL, Bat Mitigation Class Licence or method statement is assessed on a case by case basis by the bat ecologist. The Bat Mitigation Method Statement or EPSL must be prepared and/or applied for by a suitably experienced and licenced bat ecologist. Only Registered Consultants can use the Bat Mitigation Class Licence. Where planning permission is required, the appropriate licence cannot be obtained until planning permission has been granted.

Birds: In Britain the nests (whilst in use or being built) and eggs of wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended) (HM Government, 1981). The barn owl (*Tyto alba*) is listed on Schedule 1 of the Wildlife and Countryside Act (HM Government, 1981); this legislation makes it an offence to:

- Intentionally capture, injure or kill a barn owl;
- Intentionally or recklessly disturb a barn owl whilst nesting;
- Intentionally or recklessly disturb a dependent young barn owl.

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2.0 Methodology

2.1 Visual Assessment

A visual assessment of the property 'Norrard' was undertaken on the 3rd June 2019. The ecologist assessed the suitability of the building, and the surrounding habitat to support bats and birds. A high-power torch was used to illuminate all accessible areas of the building with potential to support roosting bats and roosting/ nesting birds. The ecologist searched for signs of bats and birds including droppings, staining, feeding remains, bird nests, barn owl pellets and liming. Accessible crevices with potential to conceal a roosting bat were inspected using an endoscope.

The assessment was carried out in accordance with the 'Bat Survey for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2016).

2.2 Emergence Survey

Emergence surveys of the property were undertaken on the 3rd and 17th June 2019. Two ecologists were required to cover all elevations of the building. During the first emergence survey, surveyor 1 (Kim Jelbert) and surveyor 2 (Naomi Scala) used an Echo Metre Touch 2 Pro and an Echo Meter Touch detector respectively. During the second emergence survey, surveyor 1 (Naomi Scala) used an Echo Meter Touch detector, and surveyor 2 (Lucy Wright) used a BatBox Duet and an Anabat Express. Each detector type uses a different method of detecting; the Bat Box Duet uses heterodyne and frequency division, the Anabat Express uses the frequency division method of detecting, and the Echo Metre Touch records in real-time expansion. These methods of detection are described below:

- Frequency division: this method automatically and continuously records bat calls at all frequencies, and makes them audible to the human ear by dividing the call frequency by 10. Calls are played in real time and can be readily identified with sound analysis.
- Heterodyne: this method identifies bat calls echolocating at the frequency set by the operator but will fail to/ or only partially record bat calls outside this frequency.
- A real-time expansion bat detector digitally records ultrasonic bat calls and then plays them back at a slower rate and frequency to give an audible output.

2.3 Ecological Evaluation

Potential bat roosts identified during the visual inspection of the buildings were categorised as to their suitability in accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins, 2016) as described below:

- Negligible: negligible features with potential to support roosting bats.
- Low: one or more features with potential to support individual bats on an occasional basis. Unlikely to support large numbers of bats.
- Moderate: one or more features with potential to support roosting bats but unlikely to be of high conservation status.
- High: one or more features with potential to support large numbers of bats on a regular basis.

2.4 Weather Conditions

The weather during the initial visual assessment was in line with seasonal norms. The emergence surveys were undertaken during suitable weather conditions; these are described below:

- 3rd June 2019: dry with full cloud, and a temperature of 10°C at the beginning of the survey, and 7°C at the end of the survey; in accordance with the Beaufort Scale, wind was no greater than light breeze.

- 17th June 2019: dry with full cloud, and a temperature of 16°C at the beginning of the survey, and 15°C at the end of the survey; in accordance with the Beaufort Scale, wind was no greater than light air.

2.5 Limitations

There are a small number of visible features on the exterior of the building with potential to support roosting bats, which could not be fully inspected for evidence of bats. Access to the roof was limited due to a water tank in void 2 and dense insulation in void 1. These limitations were addressed by undertaking two bat re-entry/ emergence surveys. There are no limitations associated with weather conditions.

2.6 Declaration

"The information, evidence and advice, which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology & Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions."

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3.0 Assessment Results

3.1 Site Description

The property 'Norrard' is located on the north-eastern end of Tresco, Isles of Scilly. The location is rural and coastal in character: mixed farmland (pasture and arable fields with hedgerows) encloses the site to the west, coastal habitat encloses the site to the east, and residential development to the north and south. Buildings in the wider area comprise a mixture of period properties, outbuildings and barns. In combination these features provide potentially important foraging and roosting habitat for bats, and suitable nest sites, roosts and foraging habitat for birds.

3.2 Visual Assessment: Bats

The assessment was undertaken on the 3rd June 2019. The two-storey property is of stone construction with a pitched slate roof, concrete ridge tiles and a single chimney (Figs 1-4). It has a two storey, perpendicular extension to rear, constructed from block work with a pebble-dashed render finish. There are gaps beneath the wood fascias on the west elevation (Fig 6), gaps beneath slipped tiles on the east elevation (Fig 5) and gaps beneath clipped hanging tiles at the gable end of the western projection (Fig 7). These features provide potential features for roosting bats. There are two small single-storey projections off the east elevation with a pitched slate roof (Fig 3) and a lean-to off the north elevation (Fig 4).

Internally, the property has two voids and is vaulted elsewhere.

Void 1 is at the centre of the property above the first floor. Void 1 is bitumen lined with dense rolled insulation between the joists. The void is shallow (*c.* 1m to the apex). There was no evidence of bats within void 1.

Void 2 is adjacent to void 1. Void 2 is bitumen lined and shallow (*c.* 1m to the apex). There is a large water tank and rolled insulation is absent. There was no evidence of bats within void 2.

A lean-to shed with a slate roof is situated off the south elevation. Internally, the shed is lined with bitumen, densely cobwebbed and open to the roof timbers. The shed is separated internally with a stone wall to head height. The void continues above and there appears to be a room beyond which is inaccessible (Fig 8). There was no evidence of bats within the shed.

Due to external features providing potential features for roosting bats, the property 'Norrard' was assessed as being of **moderate suitability** for roosting bats.

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Figure 1: West elevation of Norrard. Red arrow shows emergence point of common pipistrelle bat (1) from beneath fascia.

Figure 2: North elevation of Norrard.

Figure 3: East elevation of Norrard.

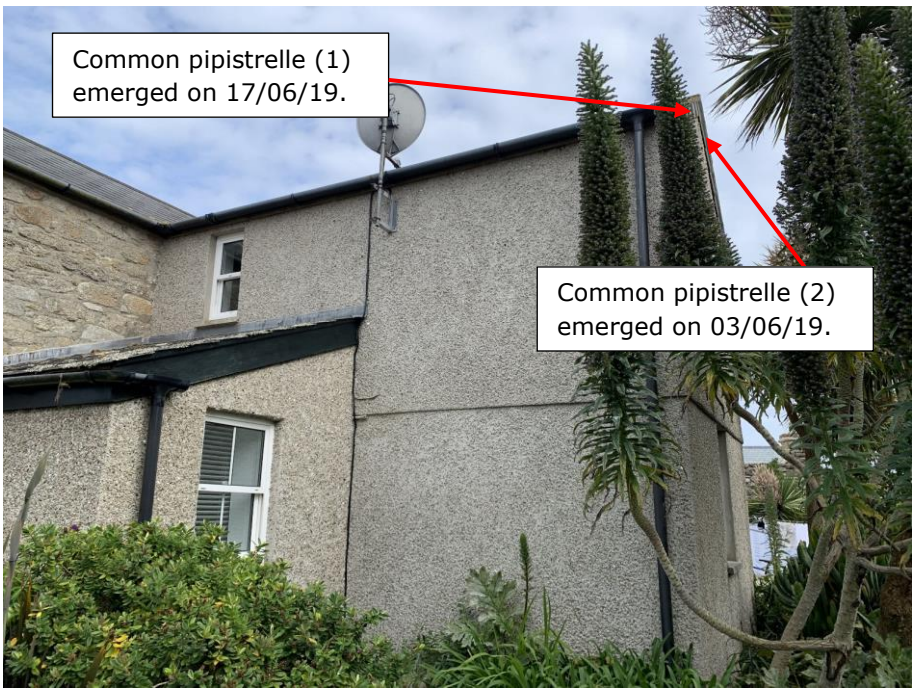

Figure 4: North and west elevations of western projection. Red arrows show emergence points of common pipistrelle bats from beneath hanging tiles.

Figure 5: View of gaps beneath tiles on east elevation.

Figure 6: View of gaps beneath fascia board on west elevation.

Figure 7: View of gaps beneath hanging tiles at gable end of western projection.

Figure 8: View of interior of shed, showing inaccessible space beyond.

3.1 Emergence Survey

During the emergence survey on 3rd June 2019, two common pipistrelle bats emerged from beneath a hanging tile on the gable end of the west projection (Fig 4), and one common pipistrelle

bat emerged from beneath the fascia board on the west elevation (Fig 1). During the second emergence survey on 17th June 2019, a single common pipistrelle bat emerged from beneath a hanging tile on the gable end of the west projection (Fig 4).

3.1 Bat Species Evaluation

The combined survey results indicate that at least three common pipistrelle bats currently use the building 'Norrard' (gap beneath fascia board on the western elevation (Fig 1) and gaps beneath hanging tiles on the gable end of the west projection (Fig 4)) as a day roost.

The common pipistrelle bat is a crevice dwelling bat species that typically roosts between slates/ tiles and the roofing felt, or beneath fascia boards/ soffits. The common pipistrelle bat is common and widespread throughout the UK, and evidence indicates that the UK population has increased in recent years (BCT, 2017). Common pipistrelle is also considered common and widespread in the Isles of Scilly. The roost within the property 'Norrard' is considered to be of **low conservation significance** for common pipistrelle bat.

3.2 Bird Assessment

Bird liming was observed on the timbers within void 1 and house sparrow (*Passer domesticus*) were observed within the garden and on the roof of the property. The building does not support suitable accesses for barn owl (*Tyto alba*).

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4.0 Impacts and Mitigation

4.1 Proposed Works and Impacts

The survey work has shown that the property 'Norrard' supports a day roost for at least 3 non-breeding common pipistrelle bats. The client proposes to demolish the existing rear two-storey extension and replace with a larger extension over the existing footprint.

In the absence of mitigation, the proposals have the potential to disturb, injure or kill bats and result in the loss of the day roost. In the long term, works will destroy and obstruct access to the following roost; the impact of this on the local bat populations is also given:

- Common pipistrelle bat day roost comprising at least 3 individuals - Low impact

4.2 Bat Mitigation

To avoid, mitigate and compensate for potential impacts as outlined above, it is recommended that provision for day roosting common pipistrelle bats is made within the fabric of the proposed extension, to be located on the approximate footprint of the existing extension. The client has agreed to make alternative provision for roosting bats in the new dwelling in the form of two Schwegler Bat Access Panels with back plates, and by leaving a *c.* 30mm gap beneath the length of the timber fascia board.

To proceed legally, these activities require a CL21 mitigation licence or a European Protected Species Licence (EPSL), to protect bats during the construction process. The appropriate licence will set out the mitigation required to maintain the favourable conservation status (FCS) of the bat species using the property 'Norrard'.

An outline of the recommended mitigation is detailed below:

- Works will not commence until a CL21 or EPS licence has been obtained from Natural England.
- Prior to demolition of the extension, the roof will be 'soft striped' under an ecological watching brief at a time of year when bats are least likely to be negatively impacted. A licensed bat ecologist will oversee removal of the roof; any common pipistrelle bats uncovered will be relocated to a bat box installed within a nearby tree. NB: the bat box (1 x Schwegler 2F) will be installed within an adjacent tree in advance of removal of the roof. See https://www.nhbs.com for product specification.
- Two 1FE Schwegler bat access panels with back plate will be installed on the south-west elevation of the proposed new extension (Appendix 1). The position of the bat access panels has been chosen to replicate the identified bat access locations. In addition, a *c.* 30mm gap will be left beneath the wooden facias on the south-west elevation. See https://www.nhbs.com for product specification.
- Lighting can have significant impacts on roosting bats; no exterior lighting will be installed close to the 1FE Schwegler bat access panels.
- A licensed and suitably qualified bat ecologist will oversee works. Building contractors will be briefed prior to commencement of site works. Contractors will be notified about the potential presence of bats and informed that if a bat/s is uncovered during works, work must stop immediately (as soon as it is safe to do so) and advice sought from a bat ecologist.

4.3 Bird Mitigation

Evidence of nesting birds was found within the void 1. Bird liming was observed on the timbers.

Works to the building should be undertaken between October and February, when birds will not be nesting. If this is not possible, and works are to be carried out during the bird breeding season (March to September inclusive), an ecologist must search for nesting birds immediately prior to commencement of works. If nesting birds are present, works within 5m of the active nest must not commence until nesting activity has ceased and/or the dependant young have fledged.

Further surveys for birds are not recommended as part of this assessment.

4.4 Opportunities for Biodiversity Enhancement

There is opportunity to enhance the biodiversity value of the site post-development by making provision for nesting birds and bees within the new dwelling. This can be achieved by installing bird boxes (i.e. 1SP Schwegler sparrow terrace or traditional wooden nest boxes) and bee bricks on the exterior of the extension.

NB: suitable products are available from www.nhbs.com or www.wildcareshop.com

5.0 References

BCT (2017) National Bat Monitoring Programme Annual Report 2016. Bat Conservation Trust, London.

British Standard Institution (2013) BS42020: 2013 Biodiversity – A Code of Practice for Planning and Development. BSI Standards Limited 2013. ISBN 978 0 580 77917 6.

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

HM Government (2010) The Conservation of Habitats and Species Regulations 2010. HMSO, London.

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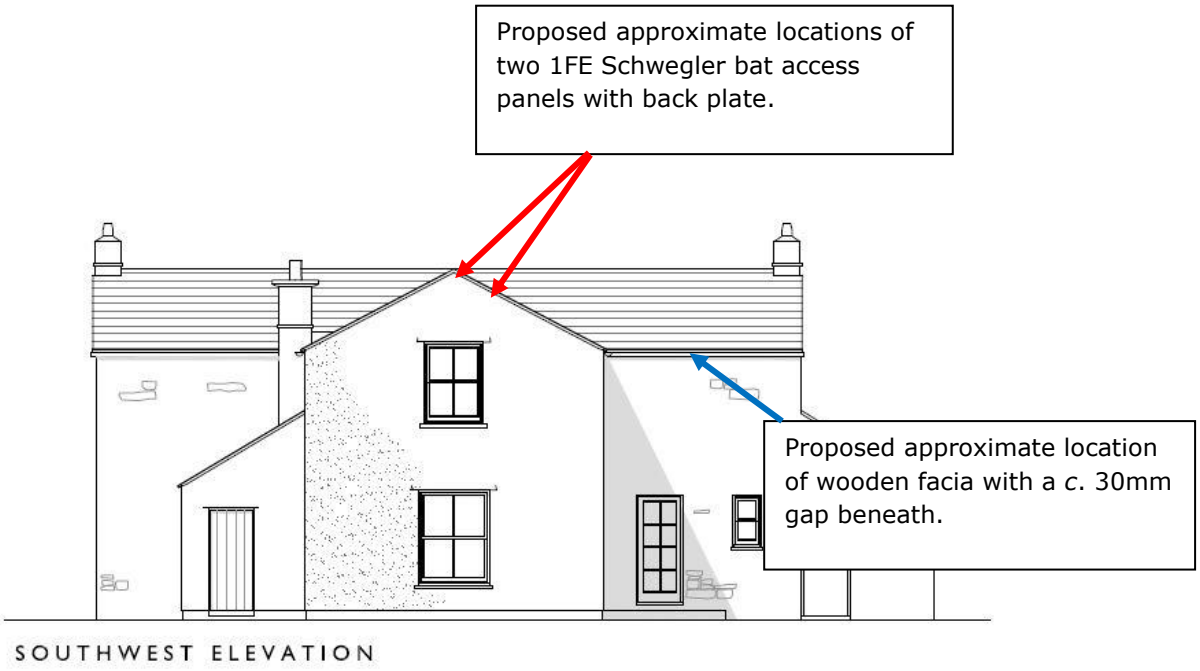
HM Government (2000) The Countryside and Rights of Way Act 2000. HMSO, London.

Appendix 1 – Site proposals showing bat mitigation



Proposed south-west elevation of the property post-development showing location of proposed bat mitigation.