

Preliminary Bat & Bird Assessment

Site:

Blockhouse, Tresco, Isles of Scilly, TR24 0QQ

Grid Reference: SV 89619 15432

5th March 2021

Version 1



Plan for Ecology Ltd

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1

Document Control:

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Client:	Tresco Estate
Report Reference Number:	P4E2224
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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."

Katherine Biggs	Kellen
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Report Lifespan:

Ecological features can change over time, particularly if site management/ use changes. Typically, Preliminary Bat and Bird Assessments are valid for one year (until February 2022).

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CONTENTS

<u>SUM</u>	MARY	<u> 3</u>
<u>1.0</u>	INTRODUCTION	4
1.1	BACKGROUND	4
1.2	Project Administration	4
1.3	LEGISLATION & PLANNING POLICY	4
<u>2.0</u>	METHODOLOGY	. <u>. 6</u>
2.1	Ecological Evaluation	6
2.2	LIMITATIONS	6
<u>3.0</u>	ASSESSMENT RESULTS	<u> 7</u>
3.1	SITE DESCRIPTION	7
3.2	BAT ASSESSMENT	7
3.3	BIRD ASSESSMENT	16
<u>4.0</u>	MITIGATION RECOMMENDATIONS	<u>18</u>
4.1	BAT MITIGATION	18
4.2	BIRD MITIGATION	18
4.3	OPPORTUNITIES FOR BIODIVERSITY ENHANCEMENT	18
<u>5.0</u>	REFERENCES	<u>20</u>



Summary

Bat evidence?	Blockhouse, Tresco was visually inspected for evidence of roosting bats on 15 th February 2021. Evidence of roosting bats was noted in the form of a large number of mixed-age bat droppings observed within the roof voids of cottages 2 and 3. In addition, there are a number of external features within the cottages and outbuildings with potential to be used by roosting bats, and which could enable potential access for bats into the building interiors. Blockhouse and associated outbuildings were, therefore, assessed as being of 'moderate suitability' for roosting bats.
Bat mitigation recommendations?	A minimum of two bat emergence or re-entry surveys of Blockhouse are required plus installation of a static detector into each of the roof voids of cottages 2 and 3 for 5 consecutive nights between May and September to inform the planning application and subsequent building works. Bat emergence/ re-entry surveys can only be undertaken between May and September, and at least one of the emergence/ re-entry surveys should be undertaken between May and August. DNA analysis of droppings is required to confirm the species present (one sample per cottage 2 and 3). The results of these surveys will be required to inform the planning application, building works and associated Natural England licence.
Bird evidence?	Remnants of old bird's nests were found within void 1 in cottage 1 and within the shed. The cottages and outbuildings were assessed as being of negligible suitability to support nesting, breeding or resting barn owls.
Bird mitigation recommendations?	Demolition works should either be undertaken between October and February, when birds will not be nesting, or, alternatively, preceded with a thorough search for nesting birds (to be undertaken by a suitably experienced person). If, during works, an active bird nest is uncovered, works within 5m of the nest must stop immediately (as soon as it is safe to do so) and delayed until nesting activity has ceased. Works are most likely to be delayed between April and July. Provision for nesting birds, including nesting swallows, should be made within the replacement dwelling or associated outbuildings post-development, in the form of pre-fabricated nest boxes. Further surveys for birds are not recommended as part of this assessment.

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1.0 Introduction

1.1 Background

Diana Mompoloki, on behalf of the Tresco Estate, commissioned Plan for Ecology Ltd to undertake a Preliminary Bat and Bird Assessment (sometimes referred to as a Bat and Barn Owl Assessment) of Blockhouse, Tresco, Isles of Scilly (OS Grid Ref: SV 89619 15432) in February 2021. The client proposes to replace the existing Blockhouse Cottages with a single, self-contained unit with 5 bedrooms. The proposals also include a single bed gatehouse annexe, an independent studio building and associated landscape alterations.

1.2 Project Administration

Property Address:	Blockhouse, Tresco, Isles of Scilly, TR24 0QQ
OS Grid Reference:	SV 89619 15432
Client:	Tresco Estate
Planning Authority:	Council of the Isles of Scilly
Planning Reference Number:	Unknown
Report Reference Number:	P4E2224
Proposed work:	Demolish and replace with a single self-contained unit with 5 bedrooms, plus a single bed gatehouse annexe, independent studio building and associated landscape alterations.
Survey Date:	15 th February 2021
Ecologists & Licence Number:	Katherine Biggs BSc (Hons) MSc ACIEEM; Bat licence No. 2016-22188-CLS-CLS; Barn owl licence no. CL29/00552
	Chloe Balmer MSci (Hons) Qualifying CIEEM; Bat licence No. 2020-47040-CLS-CLS

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. 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.



2.0 Methodology

The ecologists (Katherine Biggs and Chloe Balmer) assessed the suitability of the buildings and the surrounding habitat to support bats and birds. A high-power torch was used to illuminate all accessible areas of the buildings 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.

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).

2.1 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:

<u>Negligible</u>: negligible features with potential to support roosting bats.

<u>Low</u>: one or more features with potential to support individual bats on an occasional basis. Unlikely to support large numbers of bats.

<u>Moderate</u>: one or more features with potential to support roosting bats but unlikely to be of high conservation status.

<u>High</u>: one or more features with potential to support large numbers of bats on a regular basis.

2.2 Limitations

All areas of the buildings were fully accessible with the exception of Cottage 4, which did not have access to the roof void. Weather during the survey was in line with seasonal norms i.e., dry with light air, part cloud and a temperature of 11°C. There are no limitations associated with weather conditions. The buildings support exterior features that could not be fully inspected and provide potential roosting locations for bats.



3.0 Assessment Results

3.1 Site Description

The site consists of a large building containing four cottages with associated outbuildings known as 'Blockhouse'. The property is located on the eastern coast of the island of Tresco, Isles of Scilly, *c*. 0.5 km south-east of Old Grimsby, *c*. 0.85 km north-east of New Grimsby and *c*. 5 km north-west of Hugh Town on St Marys, Isles of Scilly.

The location is rural and coastal in character, with pasture, woodland and open heathland and dunes surrounding the property. An area of Coastal Sand Dunes and Maritime Cliffs and Slopes are present directly north of the site (*c*. 0.1 km), both habitats are Section 41 NERC Act (2006) / UK BAP Priority Habitats. Great Pool (Tresco) Site of Special Scientific Interest (SSSI) is present *c*. 0.7 km to the south of the site, and Pentle Bay, Merrick and Round Islands SSSI is present *c*. 0.08 km to the east of the site. Buildings in the wider area comprise a mixture of period and modern properties, outbuildings and barns. In combination these features provide potential high-quality foraging and roosting habitat for bats, and suitable nest sites, roosts and foraging habitat for birds.

3.2 Bat Assessment

The assessment was undertaken on 15th February 2021.

The buildings surveyed comprise a terrace of four two-storey cottages of stone and concrete block construction (Figs. 1-4), with four attached single-storey outbuildings of similar construction on the southern elevation (Figs. 5 & 6). On the northern elevation of the cottages are four single-storey concrete block lean-to's, one per cottage (Figs. 3 & 4). There is an adjacent detached single-storey outbuilding (outbuilding 1) to the south of the property (Figs. 11 & 12), also of stone and concrete block construction, and a detached timber shed to the north of Cottage 3 (Fig. 13). The cottages are currently in use as staff accommodation and the outbuildings are used for storage.





Figure 1: Southern elevation of 1 and 2 Blockhouse cottages



Figure 2: Southern elevation of 3 and 4 Blockhouse cottages

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Figure 3: Northern and eastern elevations of Blockhouse cottages



Figure 4: Northern elevation of 1 and 2 Blockhouse cottages

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Figure 5: View of one of the outbuildings on the northern elevation of the terraced cottages.



Figure 6: Southern and western elevation of outbuilding 1, also showing hole in roof from missing hanging slate on cottage 1 lean-to (yellow arrow)



Cottages and attached outbuildings:

The cottages feature a pitched scantle slate roof with gable ends and the external walls are rendered with cement. There are five chimneys on the roof, each of which is rendered with cement that appears tight, although there are occasional gaps underneath the lead flashing with potential to support crevice-dwelling bats. At the eastern and western ends of the cottages are lean-to projections with mono-pitched traditional slate roofs. A dilapidated glass greenhouse is also present adjacent to the eastern lean-to (cottage 4).

The cottages exhibit timber fascias on the northern and southern elevations, hanging slates, plastic guttering and downpipes, timber doors and timber and uPVC-framed glazed windows. The northern lean-to projections feature mono-pitched roofs covered with either composite slate or corrugated cement fibre. On the cottages there are notable gaps behind the fascias and hanging slates, under lifted roof slates, and underneath ridge tiles, all of which provide potential roosting opportunities for crevice dwelling bats and potential bat access into the roof voids.

On the southern elevation there are four single-storey, stone/concrete block attached outbuildings with either mono-pitched or pitched roofs covered with either composite/traditional slate or corrugated cement fibre with composite ridge tiles (Figs. 5 & 6). The outbuildings feature lead flashing, occasional small, glazed windows and wooden doors. The external walls are part cement rendered and part exposed/painted stonework. Gaps were observed within all of the outbuildings, notably beneath lifted roof slates, above doors, under lead flashing, under the eaves, within the stonework and behind hanging slates. All of these features could provide potential roost sites for crevice-dwelling bats or bat access to the underside of the roofs and/or interior rooms (Fig 6).

Internally, the outbuildings are connected to each of the cottages and consist of between one and three small rooms, with some external doors present. The interior rooms have concrete floors and are either used as utility rooms or for storage. The underside of the roofs is either boarded out, or they are open to the rafters and unlined.

Internally the cottages feature four roof voids; a narrow roof void within the western lean-to, accessed from a loft hatch on the ground floor (Cottage 1; void 1; Fig. 7); and separate narrow voids at the apex over cottages 1, 2 and 3, each accessed from separate loft hatches on the first floors (voids 2-4; Figs. 8-10). Cottage 4 was vaulted with no loft hatch/ access to any void spaces.

<u>Void 1</u> is dark and features thick mineral loft insulation on the floor, with a synthetic roof membrane lining the roof. The walls are either plastered or wallpapered and the wall tops are open to the interior of the void. No evidence of roosting bats was found within this void, although it was not possible to fully inspect this area due to the thick layers of insulation covering the ceiling joists.

<u>Void 2</u> is at the western end of the property, over cottage 1, east of void 1. It is dark internally with thick mineral loft insulation on the floor and the underside of the roof is lined with a bitumen roof membrane. The gable end and partition wall between this and the neighbouring cottage are bare stone. No evidence of roosting bats was found within this void, although it was not possible to fully inspect this void due to the thick layers of insulation covering the ceiling joists.

<u>Void 3</u> is in the centre of the property, over cottage 2, and is of the same composition as void 1. Within this void on top of the insulation a light scattering of bat droppings was noted throughout, with a large accumulation of several hundred mixed-age bat droppings noted underneath the ridge in the centre of the void (Fig. 8). The droppings were characteristic of a long-eared bat spp., likely

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to be brown long-eared bat (*Plecotus auritus*) as the site is outside the known range of grey longeared bat (*Plecotus austriacus*). NB: species present must be confirmed with DNA analysis of bat droppings.

<u>Void 4</u> spans the length of cottage 3, the composition is largely the same as the other cottages, but the roof tiles are unlined. There was rolled insulation and a metallic insulation sheet covering the joists. Scattered bat droppings were observed throughout the void with concentrations observed under the apex (*c.* 500, Fig 9), likely from the same bat species as those found within void 3. Gaps were seen at the wall tops (Fig 10) and gaps were seen within the chimney stonework, which provide potential bat access into the void.



Figure 7: Interior of void 1, cottage 1 (viewed towards the south)





Figure 8: Accumulation of bat droppings within void 3, cottage 2 (viewed towards the east).



Figure 9: View of one of the piles of bat droppings found within void 4, cottage 3.

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Figure 10: View of gaps at the wall tops of void 4 within cottage 3.

Detached outbuilding and shed:

The detached outbuilding lies to the south of the cottages. It has a mono-pitched scantle slate roof and the external walls are either bare stone or cement washed (Figs. 11-12). There is a low stone wall attached to the southern elevation of this building, which surrounds an electrical substation. There are notable crevices within this wall with some potential for roosting bats. There are notable gaps underneath lifted roof slates, which provide potential roost sites for crevice-dwelling bats and also potential bat access into the building interior. There are hanging slates on the eastern and western elevations, although these appear well-bedded with mortar, with few gaps. The building features plastic guttering and downpipes, timber doors and timber framed windows covered with plastic/timber boarding and slate sills. There is a hole in the eastern door and in the roof at the eastern end of the building, and gaps at the eaves on the western elevation, all of which enable potential bat access into the interior.

Internally, the outbuilding consists of two rooms, separated by an internal stone wall. The underside of the roof is mostly unlined, with some polystyrene insulation in places, and it is covered with thick cobwebs. The internal walls are whitewashed stone/concrete block and the floor is concrete. The rooms are both light and open and there are no significant crevices or enclosed spaces present with potential to be used by roosting bats.

A timber shed was also present to the rear of Cottage 3, this was of timber construction with a corrugated sheet flat roof (Fig 13). This was open and draughty internally, consisting of a single room with no significant crevices or enclosed spaces with potential for roosting bats noted.

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Figure 11: Southern and eastern elevations of detached outbuilding, showing attached stone wall



Figure 12: Northern elevation of detached outbuilding, showing holes in door and roof (yellow arrows)





Figure 13: Western elevation of timber shed

The results indicate that Blockhouse likely supports a brown long-eared bat roost within the roof voids. NB: species present must be confirmed with DNA analysis of bat droppings. In addition, there are a number of external features present on the cottages and outbuildings which provide potential roosting opportunities for crevice-dwelling bats and which also provide potential access for bats into the interior of the roof voids and outbuildings.

Blockhouse and the outbuilding were, therefore, assessed as being of **`moderate suitability'** for roosting bats.

The timber shed was assessed as being of **'negligible suitability'** for roosting bats.

3.3 Bird Assessment

Old bird nesting material, possibly from a starling (*Sturnus vulgaris*) nest, was noted on the wall top within void 1 over the western lean-to (Fig. 14). The external hole created by the missing hanging slate on the southern elevation here provides potential access for birds into this roof void. Within the shed to the north of Cottage 3, an old barn swallow (*Hirundo rustica*) nest was present with two old eggs observed inside (Fig 15).

No evidence of barn owls nesting within the buildings was found, with no suitable access points present. The buildings were assessed as being of **negligible suitability** to support nesting, breeding or resting barn owls.





Figure 14: Old bird nest material on wall top of roof void 1 (yellow circle) (viewed towards the south).



Figure 15: Old nest and eggs of a barn swallow within the shed in the garden of cottage 3.

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4.0 Mitigation Recommendations

4.1 Bat Mitigation

The results indicate that the roof voids over Blockhouse likely support a brown long-eared bat roost (to be confirmed with further survey and DNA analysis of bat droppings). In addition, the terrace of cottages and outbuildings have a number of external features with potential to be used for roosting by crevice-dwelling bats and which could enable potential access for bats into the building interiors.

Blockhouse and its outbuildings were, therefore, assessed as being of **`moderate suitability'** for roosting bats.

The timber shed was assessed as being of **'negligible suitability'** for roosting bats.

Building works must be informed with two bat emergence or re-entry surveys undertaken between May and September; one of which should be carried out between May and August. In addition, a static monitoring survey is recommended through the installation of a remote detector into the interior of each of the roof voids over Cottages 2 and 3 for 5 consecutive nights between May and September. The survey information will be required to inform the planning application and subsequent works. These surveys will determine the species, number of individuals, bat access points and timings of usage. DNA analysis of collected bat droppings (one sample per cottage 2 and 3) is required to confirm the species present.

Please note that planning permission is unlikely to be granted with outstanding ecological surveys. This report must be updated with the results of the recommended further surveys or superseded with a standalone bat survey report, following provision of the final site plan and prior to submission of the planning application.

4.2 Bird Mitigation

Remnants of old bird's nests were found within void 1 and within the shed. Demolition works should either be undertaken between October and February, when birds will not be nesting, or, alternatively, preceded with a thorough search for nesting birds (to be undertaken by a suitably experienced person). If, during works, an active bird nest is uncovered, works within 5m of the nest must stop immediately (as soon as it is safe to do so) and delayed until nesting activity has ceased. Works are most likely to be delayed between April and July.

Provision for nesting birds, including nesting swallows, should be made within the replacement dwelling or associated outbuildings post-development, in the form of pre-fabricated nest boxes. Suitable products for swallows include the No. 10 Schwegler Swallow Nest, or equivalent. Nest boxes should be located on a north or east facing elevation. Swallow nest boxes should be located within a partially enclosed area such as a porch or outbuilding.

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

4.3 **Opportunities for Biodiversity Enhancement**

Net gain is described as a measurable target(s) for development projects where impacts on biodiversity are outweighed by the mitigation hierarchy approach to first avoid, and then minimise, impact including through restoration and/ or compensation (Baker *et al.*, 2019).



The biodiversity value of the site for nesting birds post-development could be enhanced by installing bird boxes within the fabric of the building, on the building exterior or within the garden of the property. The value of the site for invertebrates could be enhanced by installing deadwood piles within garden habitat, or bee bricks within the new building. Plan for Ecology Ltd can provide detailed recommendations upon request.

NB: suitable products are available from <u>www.nhbs.com</u>, <u>www.wildcareshop.com</u> and <u>www.greenandblue.co.uk</u>



5.0 References

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