GROUND-LEVEL TREE ASSESSMENT (GLTA)

SCILLY SELF CATERING, PORTHMELLON INDUSTRIAL ESTATE, ST MARY'S, ISLES OF SCILLY



Client: Scilly Self-Catering Our reference: 23-10-2 Planning reference: Produced in advance of submission Report date: 19th November 2023 Author: James Faulconbridge BSc (Hons), MRes, MCIEEM Contact: ios.ecology@gmail.com

Executive Summary

Bats – Results and Findings

The GLTA survey did not identify any suitable roosting features for bats associated with the trees under consideration. However visibility was limited by the dense ivy cover and therefore a precautionary approach to removal should be taken.

This judgement was reached in accordance with the survey methodologies and evaluation criteria outlined in the Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition.¹

Bats – Further Survey Requirements

No further surveys are recommended – the GLTA conclusion does not require further survey information with regards to bats in order to inform a planning application.

Bats – Recommendations

Standard good practice and vigilance should be observed by the contractors undertaking the works in acknowledgement that, in the unlikely event of their presence, there is the potential for bats to make use of concealed roosting features. A specific methodology is provided.

The installation of bat boxes on retained trees or adjacent buildings is recommended to enhance the availability of roosting habitat in the local area.

Nesting Birds – Results and Findings

The trees provide suitable nesting habitat for breeding birds.

Nesting Birds - Recommendations

Recommended measures to ensure legislative compliance and Good Practice with regards to nesting birds is outlined in the report. This includes timing of works to avoid impacts; or a pre-commencement nesting bird survey.

In order to mitigate the loss of nesting habitat as a result of the demolition works, nest boxes should be erected either on retained trees or existing building. Guidance on suitable specifications is provided.

¹ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

1. Introduction

1.1. Scope

The trees under consideration were assessed for their potential to support bat roosts at ground level using binoculars and a video endoscope, during daylight hours on 3rd November 2023.

The trees are predominantly a line of elm (*Ulmus sp.*) trees along with individual self-set karo (*Pittosporum crassifolium*) and tree bedstraw (*Coprosma repens*). The canopy is indicated in the red wash in Map 01 below. The central grid reference for the tree line is SV 90844 10666.



Map 01 – Illustrating the location of the tree canopies within the local environs (red wash). Reproduced in accordance with Google's Fair Use Policy.

1.2. Local Landscape

The trees are situated along the boundary of the Scilly Self Catering building on Porthmellon Industrial Estate in St Mary's, Isles of Scilly. The land use immediately surrounding the trees is densely developed on all sides, with a range of light-industrial and commercial properties with associated hardstanding and access features. Some green features run through the estate, including the hedge/tree line to the north-west of the building. More residential use dominates to the west.

Beyond the confines of the small industrial estate, there is abundant suitable habitat to the south-east. Approximately 150m to the south-east is Lower Moors SSSI – a topogenous mire with areas of elm woodland and scrub as well as a series of pools and marshy grassland. Records from the Local Bat Group indicate that this is an important foraging resource for bats on the island. The shoreline of

Porthmellon Beach lies approximately 45m to the northwest of the site and the strandline here may provide a valuable foraging resource for bats.

1.3. Historic Records (Bats)

There are three records of bat roosts within 500m of the trees – all relate to common pipistrelle roosts utilising features such as hanging slates around dormer windows in Hugh Town to the west and south-west of the site.

2. Survey Methodology

2.1. Survey Methodology (Bats)

The survey technique with regards to bats followed the guidelines set out in the Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (Collins, 2023) and the Bat Tree Habitat Key (Andrews et al. 2016).

Table 01, below, was used to categorise the bat roosting potential of each tree with regards to potential roosting features (PRF's) present, such as cavities, woodpecker holes and cracks. A confirmed roost is considered present where evidence of roosting bats is found such as droppings, staining or actual bats.

Table 01. Categories of Bat Roosting Potential (BRP) for trees in respect of their PotentialRoosting Features (PRF) (Adapted from Collins 2023 & Andrews *et al.* 2016).

Suitability	Description
Negligible	Negligible PRFs likely to be used by roosting bats.
Low	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only limited roosting potential.
Moderate	A tree with one or more PRF's that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).
High	A tree with one or more PRF's that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Confirmed	Direct evidence of bat presence such as droppings, bats in situ, or emergence/re-entry from activity surveys.

2.2. Survey Methodology (Birds)

The suitability of the trees and adjacent habitat for use by nesting birds was assessed with regards to the quality and structure of the trees, as well as the location and position within the landscape.

Evidence of current or historical nests was recorded where present.

2.3. Limitations

The survey was conducted in November 2023 when the majority of the leaves had fallen from the trees. This allowed a comprehensive inspection of those parts of the trees not clad in ivy – this included the majority of the canopies. Dense ivy covering of the trunks and lower portions of the canopy restricted visibility of any PRF which may be concealed beneath the leaves; however the density of the

coverage makes it highly likely that the ivy cladding would also occlude any PRF they conceal.

This limitation is taken into account in the assessment of the trees and the recommendations provided.

2.4. Surveyor Competence

The site visit and report were undertaken by James Faulconbridge MRes MCIEEM.

James is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and has over 15 years' experience undertaking a range of ecological surveys including GLTA and bat activity surveys.

James also holds a Natural England survey licence for bats (Class Licence WML-CL18 Level 2) as well as a CS38 qualification for Tree Climbing and Aerial Rescue and has undertaken aerial inspections of over a thousand trees using aerial ascent and endoscope inspection techniques.

3. Results

3.1. Assessment of Ecological Value - Bats

3.1.1. Roosting Features

The trees did not provide any suitable features for use by bats which were visible at the time of survey.

The ivy covering, which is present on the majority of the trees, does not appear to be sufficiently well-developed to create PRF in its own right. It would serve to conceal any hidden PRF, but the density means that it is also likely to occlude any cavities it conceals.

3.1.2. Foraging Resource

The trees are unlikely to represent a significant foraging resource for local bat populations – the tree line is relatively isolated and only partially connected to other vegetation.

At best, the trees are likely to form a small component of a much wider foraging resource for individual bats.

3.1.3. Commuting Habitat

The trees are unlikely to represent a commuting feature for roosting bats as they do not connect to further vegetation or other suitable habitat. In addition, there is a streetlight adjacent to the tree line which may reduce suitability as a commuting route.

There is a continuous tree line which runs through the Industrial Estate to the south-west – this is more likely to be used as a commuting route by local bat populations.

3.2. Assessment of Ecological Value - Birds

3.2.1. Nesting Habitat

The survey did not identify any historic or current nests in the trees under consideration in this assessment. However the dense ivy would have the potential to support nests, as well as conceal their presence during a GLTA.

The position of the trees within the industrial estate is likely to restrict their suitability to common bird species which are accustomed or acclimated to regular presence of humans and traffic.

For the purposes of this assessment, it should be considered that all trees have the potential to support nesting birds.

3.2.2. Foraging Habitat

The trees are unlikely to represent a significant foraging resource for local bird populations – at best, the trees are likely to form a small component of a much wider foraging resource for individual pairs of nesting birds within the trees themselves of within the near vicinity.

3.3. Assessment of Ecological Value - Trees

The trees represent an established vegetated feature within the Industrial Estate. They have been pollarded in the past with well-healed stubs and other pruning cuts indicating historical management. More recent management has cut the trees in the manner of a hedge on the roadside, with passing vehicles likely to contribute to maintaining the shape. The trees are less managed on the eastern sides and the canopies extend significantly in this direction.

Individual self-set karo (*Pittosporum crassifolium*) and tree bedstraw (*Coprosma repens*) occur within the treeline.

The trees are affected by the wind resulting in an increasing height from north to south. The ivy cover is very dense, covering the majority of boles and preventing comprehensive assessment of the trees. There is dieback in the crown of some trees, and there are standing deadwood stems within the line.

From an ecological perspective, they are likely to represent a habitat and ecological resource for a range of species; however this should be considered within the context of the extensive natural habitat immediately adjacent to the industrial estate. As discussed with regards to bat commuting routes, the trees do not represent a connective feature, nor are they contiguous with other trees or habitats. For this reason, their ecological value is considered to be limited.

An assessment of the landscape and amenity value of the trees is outside of the scope of this assessment.

4. Recommendations

4.1. Bats

4.1.1. Felling Methodology

Trees should be removed with due care and attention to the potential, if highly unlikely event, of bats roosting within concealed features behind the ivy.

The risk does not reach the level which would stipulate a soft-fell or similar approach, however contractors should be made aware of the risk and be vigilant to the potential.

Contractors should be aware of **their own legal responsibility with respect to bats**:

Relevant Legislation regarding Bats

The Conservation of Habitats and Species Regulations 2017, or the 'Habitat Regulations 2017', transposes European Directives into English and Welsh legislation. Under these regulations, bats are classed as a European Protected Species and it is, therefore, an offence to:

- Deliberately kill, injure or capture bats;
- Deliberately damage or destroy bat roosts.

A bat roost is commonly defined as being any structure or place that is used as a breeding site or resting place, and since it may be in use only occasionally or at specific times of year, a roost retains such a designation even if bats are not present.

Bats are also protected from disturbance under Regulation 43. Disturbance of bats includes in particular any disturbance which is likely:

- (a) To impair their ability -
 - to survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) To affect significantly the local distribution or abundance of the species to which they belong.

Bats also have limited protection under the Wildlife and Countryside Act 1981 (as amended) and the Countryside Rights of Way Act 2000 (as amended). It is, therefore, an offence to:

- Intentionally or recklessly destroy, damage or obstruct any structure or place which a bat uses for shelter or protection.
- Intentionally or recklessly disturb bats whilst occupying any structure or place used for shelter or protection.

Contractors should be aware of **the process to follow in the highly unlikely event of finding bats** or evidence indicating that bats are likely to be present:

If bats are identified, works should cease and the licenced bat worker be contacted immediately for advice.

If the bat is in a safe situation, or a situation which can be made safe, they should remain undisturbed.

Only if the bat is in immediate risk of harm can the bat be moved with care and using a gloved hand. This is a last resort and should only be undertaken for humane reasons if the bat is at immediate risk of harm **and** if the ecologist cannot be contacted for advice.

4.1.2. Enhancement

In order to provide biodiversity enhancement, bat boxes could be installed on retained trees or the building.

The box should be positioned to face away from traffic and sources of artificial light, and at a height of at least 3m from the ground to minimise the risk of predation. An open-based box design would ensure that it would not require cleaning. The location would be appropriate for bats such as common pipistrelle which is the dominant species present on the island and the most likely species to use the environs for foraging and roosting.

A suitable box could be purchased or constructed following freely available plans. Kent Bat Box style boxes are slim and easy to construct from appropriate timber using the plans provided at:

http://www.kentbatgroup.org.uk/kent-bat-box.pdf

4.2. Birds

There are two approaches which can be taken to ensure that the proposed tree works do not impact on nesting birds. These are:

- avoidance of impacts through timing of works; and
- pre-commencement inspection.

This methodology should apply all of the trees and shrubs within the site.

4.2.1. Timing of Works

Works affecting the trees and shrubs can be undertaken without constraint if completed outside of the breeding season which runs from March – September inclusive.

4.2.2. Pre-commencement Inspection

If the recommended timing of works is not practicable then a nesting bird survey would need to be carried out by a suitably qualified person prior to the commencement of works.

Careful observation would be required to ensure that the parent birds are not constructing a nest or provisioning the young. Nests are only protected if they are active (i.e. being used to rear young) or in the process of being built.

- Where active nests are identified, works affecting these must be delayed until the chicks have fledged the nest.
- Once it is confirmed that nests are absent or no longer active, the tree works can proceed.

4.2.3. Enhancement Measures

It is recommended that enhancement measures are designed to provide replacement nesting habitat for breeding birds. This could be achieved through the erection of bird boxes on retained trees or on the building.

Nest boxes could include those suitable for hole-dwelling species such as blue tits, or open-fronted boxes for species such as blackbird and robin.

Boxes should be mounted on a wall or tree 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/fun-and-learning/for-families/family-wild-challenge/activities/build-a-birdbox/

4.3. Trees

Recommendations are provided below for strategies to ensure that there is no net loss of vegetated habitat in the long term. The approach taken will depend on the specific site requirements and may include partial adoption of two or more strategies outlined below. For example, partial retention of key individual trees (4.3.1) combined with additional shrub planting within the alternative area on site (4.3.3).

4.3.1. Retention

It is recommended that, where practicable, those trees which are healthy and in good condition are managed in such a way as to allow their retention. This might include measures such as pruning, pollarding or coppicing to allow them to be

retained in an appropriate form within the landscaping of the site. Thinning out dead, dying or poorly formed trees would assist this.

It is however acknowledged that the tree line is very dense, contains a number of dead or deteriorating trees, and is not well-suited to their position within an active industrial estate. Retention of individual trees may be practicable but removal and re-planting with more appropriate species may be more advisable for others.

4.3.2. Re-planting

The location where trees have been removed, shown in red in Map 02, could be re-planted with species suitable for the location which would grow into a manageable hedge or boundary feature.

The shrub species indicated in Table 02 would be suitable for this purpose.

4.3.3. Additional Planting

There is an area in the southern corner of the site which is currently overgrown with bramble and has individual Cornish palms (*Cordyline australis*). This is indicated in green on Map 02. The area of this is equivalent to the area within which the trees are planted and could therefore be used for replanting.

The density of trees should not aim to replicate the density of the existing tree line as these are tightly packed – the density of replanting should reflect an appropriate spacing for the species selected.

There are few tree species native to the Isles of Scilly which would be appropriate for the small space and the setting in a built-up area of the industrial estate. However the Lower Moors Extension situated close to the site has a number of trees planted which would be suitable and could be used in this site.

Whilst a number of small tree species are listed, it is recommended that only one tree is planted in this space, along with a number of shrub specimens which are more appropriate to the location and would provide berries or nuts which would enhance their ecological value.

Species	Growth Form	Notes
Silver birch	Small tree	Fastigiate variety
Crab apple	Small tree	Dwarfing rootstock
Rowan	Small tree	Fastigiate variety
Hawthorn	Shrub	-
Holly	Shrub	-
Hazel	Shrub	-
Wild privet	Shrub	-

Table 02. Recommended species for planting to replace those trees to be removed.

Tree Reference Number Crack	Puea Puea = Woodp ; H2S ;	sbecies Pecker Ho Subsiste	Alive? Y/N	HH = K Shear	(m) HBC Knot Ho ring or H	le Feature (PRF)	Lingth (B)ranch ST (B)ranch St (C):	ut, TO Height of feature (Ⅲ)	S builded to be a service of the ser	Ass of r pot (Cat 1) Out, trike,	S T High (Cat 2a) as 5 3	matria = Moderate (Cat 2b) bits mutual = matrix	Low (Cat 2b g aduo	= to be negligible (Cat 3)	AA Appendix Type - T(ransient), Appendix (aternity), S(mall colony)	G S Additional surveys required?	Dehoto Ref	<mark>ہوج</mark> Inds and Cankers, BR = Butt cation Feature, TS = Travers	Rot, HB = Hazard Beam, FC = Frost e Snap, LB = Lifting Bark, U = Union
T1	Main Line	Elm	~	6.5	0.3	N/A	N/A	N/A	N/A					~	N/A	×	/	Visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
T2	Main Line	Elm	~	6.5	0.3	N/A	N/A	N/A	N/A					~	N/A	×	/	Dieback in crown, visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling .
Т3	Main Line	Elm	~	7.5	0.3	N/A	N/A	N/A	N/A					~	N/A	×	/	Visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
T4	Main Line	Elm	×	5.5	0.25	N/A	N/A	N/A	N/A					~	N/A	×	/	Appears to be dead, visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling .
Т5	Main Line	Elm	~	7.5	0.3	N/A	N/A	N/A	N/A					~	N/A	×	/	Visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling .
Т6	Main Line	Elm	~	4	0.3 0.4	N/A	N/A	N/A	N/A					~	N/A	×	/	Three boles, visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.

Tree Reference Number	Area	Tree species	Alive? Y/N	Tree height (m)	DBH (m)	Description of Potential Roost Feature (PRF)	PRF on (S)tem/(B)ranch	Height of feature (m)	Orientation of feature (e.g. NW)	Confirmed (Cat 1) 0 9 5	High (Cat 2a) at 0 8	Moderate (Cat 2b) It s s	Low (Cat 2b G tu	Negligible (Cat 3)	Roost Type - T(ransient), M(aternity), S(mall colony)	Additional surveys required?	Photo Ref	Notes	Recommendations
Т7	Main Line	Elm	~	8	0.15	N/A	N/A	N/A	N/A					~	N/A	×	/	Visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling .
Т8	Main Line	Elm	<.	4	0.08	N/A	N/A	N/A	N/A					~	N/A	×	/	Visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
Т9	Main Line	Elm	~	4	0.08	N/A	N/A	N/A	N/A					~	N/A	×	/	Visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
T10	Main Line	Elm	~	4.5	0.35 + 2x 0.08	N/A	N/A	N/A	N/A					~	N/A	×	/	Three boles, visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
TG11	Main Line	Elm	<.	10	0.4 _ 0.5	N/A	N/A	N/A	N/A					~	N/A	×	/	Several smaller stems also; visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
TG12	Main Line	Elm	~	10	0.3	N/A	N/A	N/A	N/A					~	N/A	×	/	3x stems, possible from a single base, visibility restricted by ivy cover, no apparent features.	Incomplete inspection due to ivy cover – caution during felling.
TG13	Set back	Elm + Pitt.	~	2	0.05	N/A	N/A	N/A	N/A					~	N/A	×	1	Self-set pittosporum and elm saplings.	No further consideration required with regards to bats.



Map 02 – Annotated site diagram showing the tree numbers used in the Tree Schedule. The area indicated in the red wash identifies the main tree line where replanting with an appropriate hedge species could be considered. The area indicated in the green wash is the alternative area where replacement planting could be considered. These are detailed in Section 4.3 of the report.