ECOLOGICAL ASSESSMENT

COOTAMUNDRA, MCFARLANDS DOWN, ST MARY'S, ISLES OF SCILLY



Client: Island Construction Our reference: 23-4-2 Planning reference: Produced in advance of submission Report date: 23rd April 2023 Author: James Faulconbridge BSc (Hons), MRes, MCIEEM Contact: ios.ecology@gmail.com

Executive Summary

Overview

The property known as Cootamundra in McFarland's Down, St Mary's was subject to a Preliminary Ecological Assessment (PEA) on 3rd February 2023. This report outlines the results of the PEA.

Proposals

The proposed works were identified by the client and should accord with the documentation submitted in support of the application. These involve:

- 1) The demolition of the existing buildings on site including the main dwelling house; a single-storey garage; a derelict glasshouse; and a makeshift canopy covering the oil tank.
- 2) The construction of a new dwelling within the approximate footprint of the existing dwelling.

Ecological Assessment

The habitats include areas of non-native ornamental species within boundary hedges and the perimeter shrubbery, with amenity grassland and ephemeral vegetation closer to the property itself. These habitats are typical of residential gardens and will provide habitat for a range of common species including small mammals, birds and invertebrates.

The surveys conclude a Likely Absence of bats from the existing buildings – however the site is likely to support foraging and commuting bats as part of a wider habitat resource.

The onsite buildings, as well as the woody and shrubby vegetation associated with the site, support nesting birds as well as providing foraging habitat for a variety of species.

No other evidence of, or suitable habitat for, other protected species is noted.

The site itself is not subject to any statutory or non-statutory nature designations and no impacts to external designated sites are identified as a result of the proposals.

Recommendations

Recommendations provided would allow impacts to protected species to be avoided and enhance the existing garden habitats. These outline recommendations include:

- Measures to avoid impacts to nesting birds including timing of works; pre-emptive exclusion during the non-breeding season; and pre-commencement inspections;
- Planting recommendations to include native or ecologically valuable herbaceous species and species-rich grassland within the new landscaping;
- Erection of bird and bat boxes to provide additional habitat resource for these species.

Report Status

This report provides an appropriate baseline to inform Planning – no further ecological surveys are recommended.

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1. Introduction

1.1. Project Overview

The site is a residential plot centred around a two-storey dwelling known as Cootamundra. The property is set within an ornamental garden which has been out of active management for a period of several years. There is an associated garage, along with a glasshouse and an oil tank shelter set within the plot.

The proposed works involve the demolition of the existing buildings and the construction of a new dwelling within the approximate footprint of the existing dwelling.



Map 01 – Site location indicated by the red circle. Reproduced in accordance with Google's Fair Use Policy.

2. Site Location and Description

2.1. Site Location

Cootamundra is situated at the northern extremity of the residential area of McFarland's Down to the north-west of St Mary's in the Isles of Scilly. The central grid reference is SV 91319 12423.

2.2. Local Landscape Setting

The land to the north and west is largely open with a mix of agricultural and pasture land with areas of heathland and coastal grassland on the approach to the shoreline. To the east, directly bounding the garden of the property, is an area of mature coniferous tree cover which extends north towards the shore and south inland. The property is bounded on the southern aspect by a residential property with associated amenity garden.



Map 02 – Showing the landscape and habitats immediately surrounding the site (indicated in red). Reproduced in accordance with Google's Fair Use Policy.

2.3. Relevant Designations

The Site itself is not subject to any statutory or non-statutory designations of relevance to the consideration of ecological value or impacts.

There are three statutory designated sites of conservation importance situated within a 1km radius of the site. Details of these designations are provided below:

- Isles of Scilly SAC Complex Situated 340m to the north of the Site and continuing along the coastline to the east and west, the SAC is designated for its nationally important numbers of Grey Seal and the nationally rare Shore Dock. Annex 1 habitats that are the primary reason for site selection include mudflats; inter-tidal sandflats; reefs and sub-tidal sandbanks.
- Isles of Scilly SPA Complex Situated 280m to the north of the Site and continuing along the coastline to the east and west, the SPA is designated for its internationally important seabird assemblage of 13 species including internationally important numbers of Lesser Black-backed Gull and nationally important numbers of European Storm Petrel and European Shag.
- **Porthloo SSSI** Situated 950m south-west of the proposed development lies Porthloo SSSI, which is designated for its geological interest rather than ecological interest.

2.4. Planning Context

2.4.1. National Planning Context

The National Planning Policy Framework (NPPF)¹ sets out the government's requirements for the planning system in England. A number of sections of the NPPF are relevant when taking into account development proposals and the environment.

Paragraphs 7 to 10 of the NPPF identify that "the purpose of the planning system is to contribute to the achievement of sustainable development." The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that "Planning policies and decisions should contribute to and enhance the natural and local environment and minimise impacts on and providing net gains for biodiversity." A number of principles are set out, including the principle that where harm cannot be adequately avoided then it should be adequately mitigated, or, as a last resort, compensated for.

¹ Ministry of Housing, Communities & Local Government. (2019). National Planning Policy Framework. OGL

In addition to the NPPF, the Office of the Deputy Prime Minister (ODPM) circular 06/0511² provides guidance on the application of law relating to planning and nature conservation. Paragraph 98 states "the presence of a protected species is a material consideration when a planning authority is considering a development proposal, that if carried out, would be likely to result in harm to the species or its habitat." Whilst Paragraph 99 states "it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development, is established before planning permission is granted."

2.4.2. Local Planning Context

The following policies are most relevant to this assessment:

- **Core Policy 1** Environmental Protection;
- **Policy OE2** Biodiversity and Geodiversity.

The following planning guidance documents are also of relevance:

• The Isles of Scilly Local Development Framework Supplementary Planning Document Biodiversity and Geological Conservation³.

² Office of the Deputy Prime Minister. (2005). Biodiversity and Geological Conservation – Statutory

Obligations and their Impact within the Planning System. ODPM Circular 06/2005

 $^{^{3}\} https://www.scilly.gov.uk/sites/default/files/IslesofScillyBiodiversity&GeodiversitySPD.pdf$

3. Survey Methodology

3.1. Desktop Survey

A full desktop study was undertaken for the presence of bats based on the list of roosts and other records held by the Isles of Scilly Bat Group. A full records centre search was not undertaken for other ecological groups, as it was not considered necessary given the small scale of the site; and the current and historic land use.

The desk study also included accessing the Multi-Agency Geographic Information for the Countryside (MAGIC)⁴ database in order to establish the presence of statutory designated sites, including all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), RAMSAR sites and Sites of Special Scientific Interest (SSSIs) within 1km of the site.

Other resources used include aerial photography to identify the presence of habitats in close proximity to the Site, and historic OS maps revealing earlier land use. This assists in the assessment of the potential of the Site and its surrounding habitat to support protected species.

3.2. Vegetation and Habitat Assessment

An assessment was made of all areas of vegetation within the Site based on the standardised Phase 1 survey methodology⁵. This involved a walkover survey to identify broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate.

A list of characteristic plant species for each vegetation type was compiled and any invasive species encountered as an incidental result of the survey are noted.

3.3. Bats

3.3.1. Preliminary Bat Roost Assessment (PRA)

The PRA comprised a survey of the buildings for bats, signs of bats and features potentially suitable for use by roosting bats. An assessment was undertaken of the surrounding habitat with regards to 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 to identify bats and/or evidence of bats including droppings, 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. Locations which provide potential habitat for

⁴ http://defra.magic.gov.uk

⁵ JNCC (2010). Handbook for Phase 1 Habitat Survey: A technique for environmental audit – Field manual

bats, but which could not be adequately or comprehensively assessed, were also recorded. Binoculars, a ladder and a high-powered torch were used as required.

The buildings were classified according to its suitability for use by roosting bats in accordance with the classification system outlined in the relevant Best Practice methodology⁶.

3.4. Birds

The assessment of breeding birds on the Site was based on the suitability of habitat present, evidence of nesting such as old or currently active nests and the presence of bird species that may potentially nest within the available habitat.

3.5. Other Protected Species

An assessment of potential and suitability for other protected species was made based on the habitats present both on- and offsite; the local status of these species; and the background records.

No further protected species survey methodologies were required to support a comprehensive Ecological Assessment at this site.

3.6. Surveyor Competence

The surveys were undertaken by James Faulconbridge MRes MCIEEM trading as IOS Ecology. James is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM); he is a Licenced Bat Worker (Class Licence Level 2) and has over 15 years' experience undertaking a range of ecological surveys and assessing the factors that affect ecology in relation to construction and the built environment.

3.7. Survey Dates

The PRA and PEA surveys were both undertaken on 3rd February 2023.

3.8. Zone of Influence

The Zone of Influence (ZOI) is the area within which the ecological impacts arising from a proposed development are likely to be significant. Due to the nature of the proposed development the ZOI is identified as the Site and the habitats which immediately bound it.

The sensitivity and value of offsite statutory and non-statutory sites mean that the potential for impacts arising from the proposed development should be considered within a wider ZOI. Therefore, scoping for direct and indirect impacts to designated sites is conducted within a ZOI of 1km of the Survey Site.

⁶ Collins, J. (ed.) 2016 Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

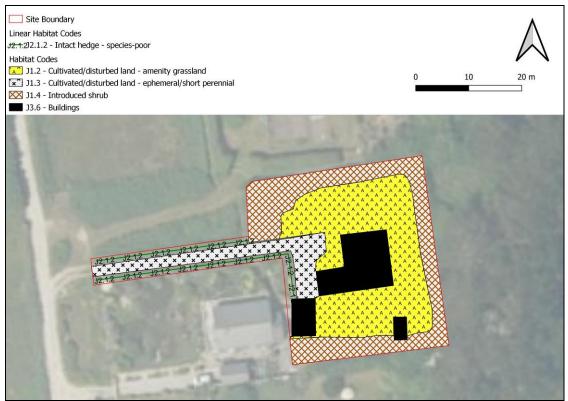
3.9. Assessment of Ecological Value

The ecological values provided within this report are based around both the professional judgement of the author and current published relevant guidance, including "Guidelines for Ecological Impact Assessment in the United Kingdom."⁷

⁷ CIEEM (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester.

4. Results

4.1. Onsite Habitats



Map 03 – Showing the broad Phase 1 Habitat designations associated with the Site. Base map reproduced in accordance with Google's Fair Use Policy.

4.1.1. Buildings

The central focus of the Site is the house known as Cootamundra and the associated buildings. A description of these buildings is provided in Section 4.2 regarding bats, as the primary focus of ecological consideration refers to its potential to support roosting bats.

4.1.2. Amenity Grassland

The amenity grassland has been encroached by scrub and bramble due to a period without management – at the time of survey this had recently been cut back to clear the area and allow inspection. This represents a constraint to assessment due to the removal of vegetation and the presence of arisings on the ground, but the prior land use and likely reversion is inferred based upon the species now present.

The amenity sward has shifted to more ruderal, perennial species because of the recent management, though its original character is likely to be more ornamental. Species recorded included perennial rye (*Lolium perenne*), cock's foot (*Dactylis glomerata*) and Yorkshire fog (*Holcus lanatus*) with daisy (*Bellis*)

perennis), ribwort plantain (Plantago lanceolata) and sheep's sorrel (Rumex acetosella).

4.1.3. Ephemeral Vegetation

The entrance track and parking area immediately in front of the property is compacted gravel which has been unmanaged for a period of time resulting in colonisation by typical ephemeral species.

Alongside the species listed for Amenity Grassland in 4.1.2 above, this area also supported broadleaf plantain (*Plantago major*), cat's ear (*Hypochaeris radicata*), buck's-horn plantain (*Plantago coronopus*), white clover (*Trifolium repens*), bird's foot trefoil (*Lotus corniculatus*), wild carrot (*Daucus carota*) and heather (*Calluna vulgaris*).

Occasional invasive species including alexanders (*Smyrnium olusatrum*), threecornered leek (*Allium triquetrum*) and agapanthus (*Agapanthus africanus*) were also noted. Three-cornered leek is listed under Part 2, Schedule 9 of the Wildlife and Countryside Act⁸.

4.1.4. Introduced Shrubs

The peripheries of the garden were dominated by a range of ornamental shrub species including camellia (*Camellia sp.*), rhododendron (*Rhododendron sp.*), coprosma (*Corposma sp.*), holly (*Ilex aquifolium*) and apple (*Malus sp*). Behind these are overgrown escallonia (*Escallonia rubra*) and karo (*Pittosporum crassifolium*) hedges. Self-set gorse (*Ulex europaeus*) and bramble (*Rubus fruticosus*) are also present.

4.1.5. Non-Native Hedgerow

The entrance to the site is lined by two Karo hedgerows which are well-maintained.



Photo 01 – Showing the access track with Karo hedges on either side.



Photo 02 – Showing the ornamental shrubs around the periphery of the garden with the recently cleared area in the foreground.

⁸ HMSO (1981). Wildlife and Countryside Act 1981 (as amended). HMSO, London.



Photo 03 – Showing the area of compacted gravel which has been colonised by opportunistic ephemeral vegetation at the front of the property.



Photo 04 – Showing the ephemeral vegetation along the track which runs to the property.

4.2. Bats

4.2.1. Background Data

The desk study did not return any records of bets recorded roosting on the Site or associated with properties bounding the Site.

A data search revealed information on five species of bat recorded on St Mary's. The species conclusively identified were common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and brown long-eared bat (*Plecotus auritus*). Leisler's bat (*Nyctalus leisleri*) and Nathusius pipistrelle (*Pipistrellus nathusii*) records were also returned though these species are not known to be resident on the island.

A common pipistrelle roost was recorded within McFarland's Down in 2014 in a garage approximately 180m to the south of Cootamundra, with further transient/day roosts recorded associated with properties over 500m away to the east.

4.2.2. Building Descriptions

There are four distinct structures associated with the property – these are all proposed for demolition as part of the current proposals. For clarity, these buildings will be described and assessed individually. The individual components are identified in Map 04.



Map 04 – Showing the main house (green wash) within the blueline site boundary. The singlestorey garage is shown in red; the oil tank shelter is shown in magenta; and the glasshouse is shown in yellow

Dwelling House

The main dwelling house is a dormer bungalow which is rendered externally in good condition. Occasional cracks are present, but these, are superficial only. The doors and windows comprise a combination of wooden and uPVC units which – whilst they are deteriorating in places – are well-fitted offering no gaps around the frames. There is a bay window and porch at the front of the property, both with flat roofs – no structural features offering roosting opportunities were noted associated with these.

The roof is covered with slate-effect tiles which are thin but well fitted – no gaps were noted which could potentially provide a roosting opportunity for bats. There are rounded ridge tiles present – these too were well fitted with no gaps. The roof verge at the two gables were inspected and found to provide no gaps or access features; similarly the structure of the eaves permits no potential access. The valley between two roof pitches was well-sealed with no lifted flashing. The chimney is rendered and in good condition with no gaps in the flashing which joins the main roof. There are boxed soffits throughout the gables and eaves – these were all tightly fitted with the exception of a single location at the northwestern corner. This would not provide access to the gable soffit due to the construction, but does support an old nest which was found during a video endoscope inspection. This entirely fills the gap along the eaves, indicating no current or recent occupation by bats. Video endoscope inspection confirms this.

Internally, the property is in significantly poorer condition, arising from a long period without occupation and water damage caused by a leak during this time. There are occasional open or damaged windows which have permitted access for birds – a nest was located in the kitchen and another in the porch.

In principle, it is possible that the open windows could permit access for bats, though a thorough search of the property did not identify any current presence or evidence of historic roosting in the form of droppings or other signs.

Loft spaces are present above the tie-beam of the A-frame roof timbers and also built into the eaves. The void at the apex was small and could not be accessed fully – however inspection from the loft hatch reveals well-fitted underfelting and insulation. Those voids built into the eaves were used for regular storage and were boarded out internally with insulation above. Occasional evidence of mice was noted, but a comprehensive inspection did not identify any evidence of bats.

Single-storey Garage

The garage unit is built using the same construction style and materials as the house – the pitched roof uses the same roof covering; the boxed soffits are equivalent; and the exterior is rendered in the same material as the house.

The roof is well-fitted with no gaps noted. Window and door frames are wellfitted with no gaps noted; however the windows were open in places. The internal A-frame roof timbers were well-fitted and in good condition – the terminal structures adjacent to the breeze-block walls were tightly adjoined to the wall with no gaps behind. A ridge board is present with underfelting in good condition above the timbers. A damaged soffit in the south-western corner would potentially provide access into the garage, but does not offer a roosting opportunity in its own right due to the lack of a suitable enclosed or terminal apex cavity. An inspection using a video endoscope did however identify the presence of a nest in this location. The remaining boxed soffits were in good condition with no gaps noted. There was evidence of mice in this building, but no evidence of access or occupation by bats was identified. The only potential features would be free-hanging from timbers, or use of idiosyncratic roosting features associated with stored garage items and equipment.

Glasshouse

A derelict glasshouse is present in the corner of the garden – this is a timberframed structure built onto a breeze block lower wall. The door was open and there are frequent broken panes allowing ease of internal access for birds. An old grape vine is present along the apex, with dense brambles in the base. No suitable roosting opportunities for bats were noted associated with this structure.

Makeshift Oil Tank Shelter

A shelter has been built around the oil tank adjacent to the glasshouse – this is a combination of ply and corrugated sheet materials around a wooden frame. An aviary is present at the eastern end of this structure. The shelter was fully inspected – no evidence of occupation by bats was noted and the structure did

not appear to have suitable roosting features for the bat species present on the island.



Photograph 5: Showing the main existing dwelling on the site.



Photograph 6: Showing an example of the well-fitted window frames with no gaps or crevices. Cracks and damage in the render, as illustrated, are superficial and not suitable to support bats.



Photograph 7: Showing the good condition of the boxed soffits throughout the majority of the property.



Photograph 8: Showing an example of the eaves where the guttering is displaced, demonstrating the lack of access for bats.



Photograph 9: Showing the tight fit of the roof tiles, with no gaps noted throughout.



Photograph 10: Showing an example of one of the birds nests within the property, resulting from lack of occupation.



Photograph 11: Showing the interior of one of the boarded out loft components within the property – this example is at the apex but those at the eaves are of equivalent construction.



Photograph 12: Showing the main loft above the tie-beam in the main dwelling.



Photograph 13: Showing the single-storey garage.



Photograph 14: Showing the interior of the single-storey garage with A-frame timbers and well-fitted underfelting.



Photograph 15: Showing the roof of the canopy sheltering the oil tank.



Photograph 16: Showing the aviary located at the end of the oil tank shelter.



Photograph 17: Showing the glasshouse.



Photograph 18: Showing the interior of the glasshouse with overgrown grape vine and brambles.

4.2.3. Foraging and Commuting

The Site is likely to provide suitable foraging habitat for common pipistrelle bats as part of a much wider foraging resource within the local environs.

The Site may represent a component of the local commuting routes used by common pipistrelle bats, especially given its proximity to the pine line which runs north-south along the eastern boundary of the site providing a strong connective landscape element.

4.2.4. Survey Limitations

It was not possible to fully inspect the apex loft space in the main dwelling; however the roof structure is remarkably tightly fitted and well-sealed given the overall condition of the property. No suitable access points for bats were identified anywhere within the roof structure making it highly unlikely that a bat would be able to access this void.

There were no other significant limitations to access or survey inspection which might affect the evidence base for subsequent conclusions of this survey.

4.2.5. Assessment of Roosting Potential

No evidence of current or historic use by bats was identified during the survey and an overall **negligible potential** was determined with regards to the dwelling house and single-storey garage.

No potential for bats was identified associated with the glasshouse and the makeshift oil tank shelter.

4.3. Birds

4.3.1. Evidence and Potential for Nesting Birds

All of the building structures identified in the report offer nesting habitat for birds. These opportunities predominantly arise as a result of the deterioration of the structures and their lack of occupation; therefore they are recently developed habitats rather than long-standing nesting sites.

Nests were confirmed in the kitchen and porch of the dwelling house; and in the individual damaged sections of soffit on the dwelling house and the garage. No active nests were noted in the oil tank shelter or the glasshouse, but they are considered suitable locations.

The more mature shrubs and small trees within the garden, especially at the boundary, would also provide suitable nesting habitat for birds although it is not clear that further removal of woody vegetation would be required to facilitate the development of the site.

The Site is also likely to be used as a foraging resource by local bird populations as part of a much wider habitat resource.

4.4. Other Protected Species

The PEA survey did not identify suitable habitat for other protected or notable species.

5. Evaluation

5.1. Proposals

The proposed works involve the demolition of the existing buildings on site and the construction of a new dwelling within the approximate footprint of the existing dwelling. The garden would be restored to a managed, ornamental space following its recent history without management.

5.2. Assessment of Ecological Impacts

5.2.1. Statutory and non-statutory Sites

The proposed development would not impact directly or indirectly upon any offsite statutory sites.

5.2.2. Habitats

The habitats associated with the Site are of relatively low ecological value comprising non-native species along with areas of amenity grassland and ephemeral vegetation which are relatively ubiquitous in similar habitats in the local environs.

The habitats do hold inherent value as green space and will support a range of typical species including birds, small mammals and pollinators. The proposals will not however significantly affect the ratio between built environment and green space.

Where practicable, biodiversity enhancement measures should target the increase in the ecological value of a restored garden within the new development.

5.2.3. Bats

The assessment concludes the 'Likely Absence' of roosting bats on the site. For the purposes of this assessment therefore, there would be no impact on bat roosting habitats. Precautionary methodologies would be required to control residual risk of impact in the unlikely event of bats making use of roosting features on a precautionary or opportunistic basis. The provision of bat boxes on the new buildings would represent an increase in the availability of suitable habitats for local bat populations.

The habitat impacts involved in the restoration of the garden are unlikely to have any significant effect on the local bat populations due to the small size of the garden and the dominance of low-value, ubiquitous habitats. However, the recommendations provided in this report to enhance the post-development garden habitats would also benefit bats through increased invertebrate diversity and thus foraging resources. The offsite tree belt on the eastern boundary is likely to provide commuting and potentially foraging habitat for bats. As this habitat is beyond the site boundary, it is unlikely that any direct impacts would occur, though indirect impacts through mechanisms such as external lighting could reduce the quality of this habitat for bats.

5.2.4. Birds

The Site provides various suitable habitats for use by common nesting bird species. This includes both the buildings, and the vegetation within the garden area. The removal of these elements could result in disturbance to nests if appropriate measures are not put in placed to avoid this.

Long term opportunities to increase the range of nesting habitats within the site can be secured through the installation of bird boxes.

5.2.5. Other Protected Species

The assessment did not identify the presence of, or suitable habitat for, other protected species. No further impact assessment is therefore provided.

6. Recommendations

6.1. Introduction and Scope

The following section provides an overview of recommendations which should be incorporated into the proposals to avoid impacts to protected species; mitigate loss of green space; and provide enhancements for key species where appropriate.

These recommendations are provided in outline only at this stage – full details and specifications should be developed to support the final scheme. This could be Conditioned following determination of planning if not provided as part of the initial submission.

6.2. Statutory and non-statutory Sites

No impacts to offsite statutory or non-statutory sites are identified; therefore no recommendations are provided.

6.3. Habitats and Landscaping

The landscaping scheme for the gardens should aim to retain shrubs and ornamental species around the boundaries in order to provide continued nesting and foraging habitat for breeding birds, and a foraging resource for bats. The incorporation of additional native or ecologically valuable herbaceous species within new flowerbeds would provide an additional resource, especially for native pollinators.

Retained grassland could be enhanced with over-seeding and plug planting of wildflowers. It is recommended that a Flowering Lawn mix be used in areas likely to be used actively by new residents – these mixes include a range of species which provide pollinator resource whilst also being tolerant of regular mowing and footfall.

6.4. Bats

6.4.1. Further Surveys

No further surveys are recommended – the conclusion of **negligible potential** related to the structures to be impacted does not require any further information with regards to bats in order to inform a planning application.

6.4.2. Precautionary Method of Working (PMW)

Standard good practice and vigilance should be observed by the contractors undertaking the works in acknowledgement that bats are transient in their use of roosting opportunities and may explore potential locations, especially if the condition of structural features were to change. A summary of standard Good Practice to be observed by contractors is provided in Appendix 1.

6.4.3. Enhancement Measures

In order to provide biodiversity enhancement, bat boxes could be installed on the new building. The location of the new property adjacent to the pine trees on the northern edge of McFarland's Down would offer an ideal location. The box should be positioned facing the tree line and at a height of at least 3m from the ground to minimise the risk of predation – ideally higher either below the gable apex or at the top of the eaves depending on the construction of the eastern aspect. An open-based box design would ensure that it would not require cleaning. The location and aspect would be optimal 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 easy to construct from appropriate timber using plans available online⁹.

6.4.4. Lighting

Exterior lighting should be avoided where possible. If this is required, it should be restricted to those locations necessary for security or safety purposes and should be designed according to its purpose in order to provide targeted illumination and avoid uplighting or unnecessary light spill.

This recommendation should apply throughout the new design, but is especially important with regards the onsite shrub and offsite tree-line habitats.

6.5. Nesting Birds

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

- pre-emptive exclusion outside of the breeding season;
- avoidance of impacts through timing of works; and
- pre-commencement inspection.

A combination of approaches can be applied on different structures depending on the schedule of works.

6.5.1. Pre-emptive exclusion

Excluding access by birds can be undertaken on the dwelling house and the garage unit. It would not be appropriate to the glasshouse or the oil tank shelter as these structures cannot be easily sealed to confidently exclude access. It

⁹ http://www.kentbatgroup.org.uk/kent-bat-box.pdf

would also not be appropriate or practicable to exclude nesting birds from vegetation.

At the time of survey in early February, no active nests were recorded and no birds were identified in the property. There are a small number of discreet access features which could easily be sealed to exclude access out of season. These are:

- Open or broken windows;
- The letterbox which appears to provide access to the nest identified in the porch;
- The gap in the soffit on the north-western corner of the dwelling house;
- The gap in the soffit on the south-western corner of the garage unit.

If all access features are sealed before the end of February, this would ensure that breeding birds do not have opportunity to establish nests. Utmost care must be taken to ensure that no birds are present in the property at the time that the access features are sealed to prevent birds from being trapped. This would require a careful walkover of the property including all rooms and voids where birds may be present. Upon completion of this inspection, windows should be closed and sealed. In the case of soffits, the old nests should be carefully removed by hand and confirmed not to be in active use before these features are sealed. The presence of the dense nesting material and lack of access to further voids within the soffits would currently prevent use of these features by bats.

6.5.2. Timing of Works

Works affecting all structures on site can be undertaken without constraint if completed outside of the breeding season which runs from March – September inclusive. This is also the recommended approach to any minor clearance works related to shrubs and small trees within the grounds of the property.

6.5.3. Pre-commencement Inspection

If the recommended timing of works is not practicable, and if pre-emptive exclusion measures have not been undertaken, then a nesting bird survey would need to be carried out by a suitably qualified person prior to the commencement of works. This approach can be applied to all structures on site and to minor clearance works related to shrubs and small trees within the grounds of the property.

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 relevant features should be dismantled carefully and by hand as a precaution and works can continue.

6.5.4. Enhancement Measures

It is recommended that enhancement measures are designed into the project to provide replacement nesting habitat for breeding birds. This could be achieved through the erection of bird boxes on the new residential property or within the garden.

The mature garden boundary and the proximity to the tree line to the east of the property would offer a high chance of occupation by a range of birds including woodland edge species. 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 RSPB¹⁰:

6.6. Invasive Species

Under the Wildlife and Countryside Act, 1981¹¹, a number of alien plant species are listed in Schedule 9 Part II. These are species which have become naturalised in Britain, usually as garden escapees. Section 14 (2) of the Act states that an offence is committed "*if any person plants or otherwise causes to grow in the wild any plant*" in Schedule 9.

Three-cornered leek is ubiquitous across the islands and its low-level presence on the site is commonplace.

It is incumbent on a landowner to ensure that any actions of land management or development do not result in the plant being spread either within the existing site or elsewhere. Working practices during demolition and construction should be designed to ensure this.

6.7. Planning Conditions

The recommendations outlined in this Section 6 of the Ecological Assessment report could be secured through means of a Planning Condition attached to the permission should the LPA be minded to approve.

¹⁰ https://www.rspb.org.uk/fun-and-learning/for-families/family-wild-challenge/activities/build-a-birdbox/

¹¹ HMSO (1981). Wildlife and Countryside Act 1981 (as amended). HMSO, London.

6.8. Survey Validity and Update

The data supporting this ecological assessment are considered to provide an appropriate baseline for planning in 2023.

It is advised that if the project has not commenced by August 2024 (18 months after the survey was completed), then an updated PEA survey should be undertaken in order to identify any changes in the ecological assessment of the Site.

APPENDIX 1 - BEST PRACTICE WITH REGARDS TO BATS

The purpose of this Method Statement is to ensure that contractors undertaking demolition works are aware of their legal duties with regards to bats, and aware of the appropriate action to be taken in the highly unlikely event of bats being encountered.

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 **where bats are most likely to be found in respect to the structure:**

No features suitable for roosting bats were identified within the proposed works area – however contractors should be aware of the type of feature in which bats might be found in this type of structure.

These include:

- Gaps between roofing or ridge tiles;
- Crevices and gaps between structural elements, such as fascias and boxed soffits;
- Beneath lead flashing, if this becomes lifted to create a cavity;
- Within loft voids, often at the apex of roof timbers;

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 named ecologist 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.