

Stables at Evergreen, Bowbridge Lane, Prestbury, Cheltenham, GL52 3BJ

Preliminary Ecological Appraisal



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Notice to Readers:

The results of the survey and assessment work undertaken by All Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

All Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

All Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

Summary

In June 2023, All Ecology was commissioned to undertake a Preliminary Ecological Appraisal of a site known as Stables at Evergreen, Bowbridge Lane, Prestbury, Cheltenham, GL52 3BJ.

The site is the subject of a planning application to convert the building into a new dwelling including formal hard standing around the building, a bin and bike store and areas of wildflower grassland and fruit trees in the remainder of the site. The existing access would be used.

The effect of the development has been considered and key constraints identified. The habitats present on site to be affected are of low to negligible ecological value in terms of their vegetation and the proposed landscape plan will increase the ecological value of the site.

The habitats on site have limited potential to support protected or notable species. The following species/groups are either present, potentially present, or could be encouraged onto the site and the recommended actions are as follows:

- Bats The buildings are of negligible suitability for roosting bats and foraging activity is expected
 to be limited. No further surveys are required and details for consideration in terms of future use
 by bats are given e.g. lighting.
- Birds Nesting and foraging opportunities are present but limited. The building conversion should commence outside the bird nesting season unless a pre-works survey confirms absence.

Suggestions for enhancement for bats, birds and invertebrates are given.

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1.0 Introduction

Background

- 1.1 In June 2023, All Ecology was commissioned to undertake a Preliminary Ecological Appraisal of a site known as Stables at Evergreen, Bowbridge Lane, Prestbury, Cheltenham, GL52 3BJ. The site comprises a modern barn with a fenced yard of concrete hard standing to the east of the building, short grass and bare ground to the south and west, and longer grass to the north. The site is enclosed by a hedge, and post and rail fence, on the west boundary, and post and rail fence on the south and east boundaries; the north boundary is open.
- 1.2 The site is the subject of a planning application to convert the building into a new dwelling including formal hard standing around the building, a bin and bike store and areas of wildflower grassland and fruit trees in the remainder of the site. The existing access would be used.

Objectives and Aim

1.3 The main objectives and aim of the survey were to identify features of ecological interest, undertake a basic search of habitats present for evidence of use, or potential use, by protected species, and to identify any other possible ecological constraints to the proposed redevelopment.

Site Location



Figure 1: Site location plan.

Aerial Photograph



Figure 2: Aerial view.

2.0 Methodology

Personnel

2.1 The survey was carried out by James Godbeer BSc Hons MCIEEM, an ecologist with over 16 years' experience working as a consultant. James has extensive experience of managing environmental contracts, and particular experience in surveying, assessment and mitigation for rare and protected species. He has considerable knowledge of the development and planning process including Ecological Impact Assessments, sustainable ecological design and he has completed ecology chapters of Environmental Statements. James holds a number of protected species licences including bats (all species, all counties, Class Licence Registration No. 2015-12313-CLS-CLS), and Great Crested Newts (Class Licence Registration No. 2019-44282-CLS-CLS). He has successfully obtained European Protected Species mitigation licences for a number of bat species including Lesser Horseshoe, Greater Horseshoe, Serotine, Brown Long-eared, Common Pipistrelle and Natterer's bats, for a number of roost types including maternity and hibernation sites.

Desk Survey

- 2.2 In order to compile background information on the site and immediate surroundings Gloucestershire Centre for Environmental Records (GCER)was contacted.
- 2.3 Information requested was as follows:
 - Statutory site designations on or within 1 km of the site.
 - Non-statutory site designations on or within 1 km of the site.
 - Records of protected species within the 1 km of the site.
 - Records of rare or notable species within the 1 km of the site.
- 2.4 Online OS maps and aerial photographs were inspected for the presence of ponds in the surrounding area. Additionally, MAGIC (Multi-Agency Geographic Information for the Countryside, 2023) was used to establish the distance and direction of statutory and nonstatutory designated sites and species records within the search area

Field Survey

Habitats

2.5 The site was visited on the 15th May 2023 and surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2010). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.

Fauna

2.6 The building was inspected externally and internally following the methodology set out in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd Ed (Collins, 2016).

- 2.7 There were no trees to inspect for potential roosting features for bats.
- 2.8 The site and surroundings, for a minimum distance of 30 m where access was available, were searched for signs of Badgers. These include setts, latrines, dung pits, snuffle marks or hairs caught in hedges or on fencing.
- 2.9 Incidental observations of invertebrates and birds were recorded and a search made for any signs of previous nesting.
- 2.10 There were no refuges on site to be inspected for reptiles and amphibians. There were no ponds on site and the nearest indicated on OS maps is located 410 m to the southeast and isolated from the site but built-up areas. Great Crested Newt Habitat Suitability Index (HSI) Assessments were therefore not required.

Equipment

2.11 Equipment used to aid the survey included a high-powered torch, ladder, binoculars and a camera.

Valuation of Ecological Features

- 2.12 The valuation process used in this report follows the Guidelines for Ecological Impact Assessment in the UK and Ireland from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).
- 2.13 The presence of injurious and legally controlled weeds has also been taken into account.

Nomenclature

2.14 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2007) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

Limitations

2.15 The site was fully accessible with no limitations to undertaking the survey in accordance with the stated methodology.

3.0 Results

Desk Survey

- 3.1 There are no statutory designated sites within 1 km of the site.
- 3.2 There is onenon-statutory designated sites within 1 km of the site; these are Local Wildlife Sites (LWS):
 - Queenswood Farm LWS (873 m NE)
- 3.3 Queenswood Farm LWS is designated for its pasture woodland and mature timber habitat. The site has 10 or more over mature trees or is a site with an Alexander Index of saproxylic beetles of 10 or more.
- 3.4 This site is well separated and isolated from the proposed development site and no impacts are predicted; no further consideration is required.
- 3.5 GCER provided the following records for protected and notable species within 1 km of the site boundary:

Mammals – Hedgehog, Otter, Badger, Polecat, unidentified bat sp., Common Pipistrelle, Brown Long-eared Bat, pipistrelle species.

Birds – Black-headed Gull, Brambling, Bullfinch, Common Gull, Cuckoo, Dunnock, Fieldfare, Grey Wagtail, Hawfinch, Herring Gull, Hoopoe, House Martin, House Sparrow, Kestrel, Lapwing, Lesser Black-backed Gull, Lesser Redpoll, Lesser Spotted Woodpecker, Linnet, Mallard, Meadow Pipit, Mistle Thrush, Redstart, Redwing, Ring Ouzel, Skylark, Song Thrush, Spotted Flycatcher, Starling, Stock Dove, Swift, Tawny Owl, Willow Warbler, Yellow-legged Gull, Yellowhammer.

Reptiles - Grass Snake, Slow-worm, Common Lizard, Adder.

Amphibians – Great Crested Newt, Smooth Newt, Palmate Newt, Common Frog, Common Toad.

Invertebrates – Lepidoptera: Small Heath, August Thorn, Beaded Chestnut, Blood-vein, Brindled Beauty, Broom Moth, Brown-spot Pinion, Buff Ermine, Bulrush Veneer, Centre-barred Sallow, Cinnabar, Dark Spinach, Dark-barred Twin-spot Carpet, Deep-brown Dart, Dot Moth, Dotted Ermel, Dusky Brocade, Dusky Thorn, Feathered Gothic, Garden Dart, Garden Tiger, Ghost Moth, Green-brindled Crescent, Grey Dagger, Knot Grass, Lackey, Large Nutmeg, Large Wainscot, Mottled Rustic, Mouse Moth, Oak Hook-tip, Powdered Quaker, Rosy Minor, Rosy Rustic, Rustic, Sallow, Scotopteryx bipunctaria bipunctaria, September Thorn, Shaded Broadbar, Shoulder-striped Wainscot, Small Emerald, Small Phoenix, Small Square-spot, Spinach, Spindle Knot-horn, Sprawler, White Ermine.

Flora – Wild Daffodil, Bluebell.

Field Survey

3.6 The following table presents a description of the habitats present.

Table 3: Details of habitats present on and bordering the site.

Habitats	Description	
Buildings	One main building, which is a modern stable/barn. Further details are presented below. Shrubs of Elder and Firethorn were present against the north elevation.	
Hard standing	ard standing Area of concrete hard standing on the east side of the building.	
Improved grassland/bare ground	An area of bare ground and short grassland to the south of the building, which extends around the west side. Dominated by Perennial Rye-grass with frequent Daisy, Dandelion, Dove's-foot Crane's-bill, Annual Meadow-grass, Greater Plantain Ribwort Plantain and with rare occurrences of Common Ragwort, Groundsel and Scentless Mayweed. Common Nettle, Broad-leaved Dock and Barren Brome were also noted against the building. The grassland to the north of the building was a taller sward and was dominated by Annual Meadow-grass with abundant Creeping Buttercup, frequent Broad-leaved Dock, Cleavers and Field Poppy, and occasional Red-Dead-nettle, Cut-leaved Crane's-bill, Perennial Ryegrass, Daisy and rare occurrences of Meadow Buttercup.	
Tall ruderal	In the northwest corner of the site was a stand of Common Nettle with frequent Broad- leaved Dock and occasional Creeping Thistle.	
Defunct species-poor hedge	Present along the west boundary of the site. Dominated by Hawthorn with occasional Elder and Prunus sp., the latter hosting Mistletoe. Bramble and Ivy were also present through the hedge.	
Fence	Timber post and rail fence is present around the yard.	



1: Building, bare ground and improved grassland.



2: Building and hard standing.



3: Improved grassland and hedge to the west of the building.



4: Taller grassland to the rear (north) of the building.



5: Small stand of tall ruderal in the northwest corner of the site.



6: West boundary hedge..

Fauna

3.7 The follow table presents the nature of the habitats surrounding the building and connectivity into the wider area in relation to their potential importance to bats.

Table 4: Details of habitats in relation to foraging and commuting bats.

Habitats	Description	
Immediate surroundings	Hard standing and grass surround the building, which are poor habitats although a mature hedge is situated 5 m to the west.	
Connectivity	Adjacent hedge has good connectivity into the surrounding area via further hedges.	
Wider Landscape	Open countryside surrounds the site extends into the wider area to the north around built- up areas.	
Potential for presence on site and site value	The building and hard standing and grassland are poor habitats and not extensive in area. The adjacent hedge is where invertebrates will be present and at least small numbers of bats are likely to forage. However, the site is small and any significant value of the site for bats is associated with any potential for roosting.	

3.8 The following table presents a description of the buildings in terms of their general characteristics, and their potential for roosting bats.

Table 5: Building description and details in relation to its potential for roosting bats.

Building 1	Description		
External	General: Modern stable/barn.		
	Roof: Sheet cement fibre shallow pitch gable roof. Skylight panels present.		
	Walls: Concrete block and brick lower with timber slat upper.		
	Cladding: None.		
	Verges: Pre-formed cement fibre detailing.		
	Eaves: Open with guttering.		
Internal	General: Open throughout but with stable stalls along the east side.		
	Enclosed/Separate Roof Voids: None.		
	Walls: Bare concrete block lower and timber slats upper.		
	Roof Structure: Steel and timber		
	Roof Lining: None.		
	Insulation: None.		
	Other e.g. Water Tanks, Boilers, AC Units: None.		
Potential access	Gaps in the timber slats around the building provide direct access to the building interior.		
points	Gaps under the roof corrugations at the eaves allow direct access to the interior.		
	Open stable doors.		
Potential roosting features	The main interior is unsuitable for bats being well lit and there are no suitable crevices with all being either exposed to the elements or formed by metal or timber. The suitability of this building for bats is negligible.		
Evaluation	It can be concluded that roosting bats are absent from the building on account of its lack of suitability for roosting bats.		



3: South elevation.



4: East elevation



5: North elevation.



6: West elevation.



7: Interior.

3.9 The following table assesses the potential for other protected species to be present.

Table 7: Protected Species Assessment

Fauna	Description
Badgers	Habitats: Grassland provides foraging habitats but the potential for the construction of setts is low.
	Presence/absence: Badgers will be generally absent from the site. Badgers will be generally absent with potential currently limited to passing individual Badgers.
Dormice	Habitats: Hedges provides potentially suitable habitat but limited connectivity into the wider landscape where optimal habitats are scarce.
	Presence/absence: Likely absent from the site.
Otters and	Habitats: None present.
Water Voles	Presence/absence: Absent.
Other Mammals	Habitats: The site is poor habitat for mammals being almost entirely building, hard standing, bare ground and short grassland.
	Presence/absence: No evidence of presence. Rodents/vermin may be present but notable species e.g. Hedgehogs, are likely generally absent but may pass through.
Birds	Foraging Habitats: The hedge provides the main resource with grassland providing limited potential.
	Nesting Habitats: The building interior provides a number ledges on rolled steel joists and open stables provide direct access for birds including larger species. The hedge also provides nesting habitat.
	Presence/absence: No birds were recorded on site and no evidence of previous nesting was noted. Birds may nest in the building in future depending on use at the time.
Reptiles	Habitats: The small areas of taller grass, tall ruderal and hedge provide the only cover and these are associated with mostly short grass, bare ground or hard standing.
	Presence/absence: It is considered that reptiles are likely to be absent from the site.
Amphibian	Terrestrial Habitats: The small areas of taller grass, tall ruderal and hedge provide suitable terrestrial habitats.
	Aquatic Habitats: None present on site.
	Presence/absence: The nearest pond indicated on OS maps is located 410 m to the southeast and isolated from the site but built-up areas. This well beyond the 100 m and 250m radii typically considered for small developments. Given that terrestrial habitat is limited and nearest pond isolated from the site, the potential for these species to be present is negligible.
Invertebrates	Habitats: Buildings and hard standing are poor habitats and vegetative habitats are limited with the hedge providing the main area of interest.

Presence/absence: Common assemblages of invertebrates are expected to be present in
limited numbers. The potential for notable species to be present is negligible.

4.0 Development Constraints and Recommendations

Development Proposals

4.1 The site is the subject of a planning application to convert the building into a new dwelling including formal hard standing around the building, a bin and bike store and areas of wildflower grassland and fruit trees in the remainder of the site. The existing access would be used.

Habitats

4.2 The site is composed of common habitats that have little to no ecological value with the exception of the hedge, which will be retained. Any impacts as a result of loss/changes to the remaining habitats are considered to be negligible and the proposed areas of wildflower grassland and fruit trees will increase the biodiversity value of the site.

Fauna

Bats

- 4.3 The building on site has negligible potential for roosting bats. No further surveys are required but during the demolition works the contractor should be advised to adhere to the following procedures in the highly unlikely event that bats are found during works:
 - If the roost is still in the structure and bats are not injured, stop work and contact a licensed ecologist. If help is not available, allow bats to fly out of harm's way.
 - If material containing a roost has been removed, the roost is not exposed and the bats are not injured, temporarily seal and isolate the roost, stop work and seek advice from a licensed ecologist. If advice is not readily available, re-open it and allow bats to relocate of their own accord.
 - If the roost has been exposed, and especially if bats have been injured, stop work, collect bats in a secure box or bag (using a glove) and contact a licensed ecologist.
- 4.4 The site is poor foraging and commuting habitat but it is likely that low numbers of common species will forage over and around parts of the site at times, mainly the hedge. The proposed works are not expected to have any significant impact on bats and no further surveys for activity are required.
- 4.5 In order to maximise the value of the site for foraging bats the proposed development should include a suitable lighting design strategy. In general, measures should include the use of lighting only where absolutely necessary utilising highly directional warm white LED lighting, an example being down spots at 2.5 m high using warm white (2700 K) 8W LED lamps, 550 lumens, 35 degree beam angle. These could be individually activated by PIR sensors on a 5 minute cut off to further reduce their impacts. These will assist in lighting only the areas where lighting is required and minimising light spill either directly or through reflected light.
- 4.6 The new development provides an opportunity to significantly enhance the site for roosting bats by incorporating roosts into the converted building. There are many ways that the building could be enhanced for crevice-dwelling bat species (virtually all UK bat species) without

inconveniencing prospective occupants or requiring any significant design considerations. Bat tubes, panels, shelters or boxes can be installed in suitable locations around the site usually close to cover and at the apices of gable ends. A variety of aspects increases the likelihood of colonisation.

Badgers and other mammals

4.7 Badgers will be generally absent with potential currently limited to passing individual Badgers. As a precaution it is recommended that during the construction phase of the project any trenches and other excavations are back-filled before nightfall or a ramp left to allow animals to easily exit, and any open pipes larger than 150 mm should be capped off overnight.

Birds

- 4.8 The site provides minimal poor quality foraging habitat for the most part with the exception of the hedge which also provides nesting habitat; this will be retained.
- 4.9 There is limited potential for nesting in the building. No evidence of nesting was recorded but birds could nest in the future.
- 4.10 Nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments). No further surveys for birds are required at this time. Works to convert the building should be scheduled to take place outside the nesting season of March to August. Where this is not possible, the building would need to be surveyed for nesting birds by a suitably qualified ecologist prior to works commencing. If they are found, then the nest and surrounding habitat must remain intact until the young have fledged.
- 4.11 The proposed development should include enhancements for nesting and foraging birds to generally enhance the site. The new planting on site will enhance it for foraging birds.
- 4.12 The following options could be explored for inclusion on the north or east side of the building:
 - Nest boxes for Swifts could be incorporated into the eaves. These not only provide nesting sites for Swifts but can also be used by other species such as House Sparrows and Starlings.
 - House Martin nests could be provided under the eaves or on the north to east sides of the building.
 - Individual boxes, such as the Schwegler Bird Home 1MR, could also be installed at a height of at least 2 m.
 - Groups of multiple small bird boxes could also be installed at a height of least 2 m to provide nesting sites for birds such as House Sparrows.

Invertebrates

4.13 The habitats on site are mostly poor but will support a limited variety of common invertebrate species; however, potential for more notable species is negligible. Enhancement for invertebrates is advised by creating invertebrate homes for pollinators.

5.0 References

BSBI (2007). BSBI 2007 List. [Online]. Available at: http://www.bsbi.org.uk/taxonomy.html [accessed on 6th June 2023].

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

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the United Kingdom. [Online]. Available at: http://www.cieem.net/ecia-guidelines-terrestrial-freshwater-and-coastal- [accessed on 4th May 2023].

Joint Nature Conservation Committee (2010) Handbook for Phase I Habitat Survey – a Technique for Environmental Audit. JNCC: London.

Joint Nature Conservation Committee (2021). UK BAP Priority Habitats. [Online]. Available at: http://jncc.defra.gov.uk/page-5718 [accessed on 6th June 2023]

Joint Nature Conservation Committee (2021a). UK BAP Priority Species. [Online]. Available at: http://jncc.defra.gov.uk/page-5717 [accessed on 6th June 2023]

Mitchell-Jones, A.J. (2004). The Bat Mitigation Guidelines. English Nature: Peterborough.

Multi-Agency Geographical Information for the Countryside (2023). MAGIC. [Online]. Available at: www.magic.gov.uk/ [accessed on 6th June 2023].

Natural Environment and Rural Communities Act 2006, (c.16), London: HMSO.

The Protection of Badgers Act 1992, (c.51), London: HMSO.

Wildlife and Countryside Act 1981 (and amendments). (c.69), London: HMSO.

6.0 Plans









