

Preliminary Ecological Assessment

Pumping Station
Chazey Road
Caversham
Reading
RG4 7DS



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20-003-IBA
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Signed:



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EXECUTIVE SUMMARY

This report gives details of the results of a protected species walkover survey carried out at the Pumping Station, Chazey Road, Caversham, Reading, RG4 7DS. The central point of the site is located a grid reference SU 70094 75450.

- The site was surveyed on the 15th June 2020 by a qualified ecologist Dr. Stacey Waring, to assess the site for the potential presence of any protected species and identify habitats of conservation importance. This included an initial bat assessment of the building located within the site boundary.
- The initial bat assessment of the building located on the site of the pumping station showed no signs of bat usage. The condition and constant use of the building suggest the building has very low potential for bats and therefore no further surveys are recommended.
- There are several small trees around the site limits, these did not show any signs for potential use by bats.
- No evidence of Badgers, such as setts or evidence of foraging, was found within the site boundaries. Given this further surveys will not be required.
- The site is surrounded by a small area of woodland which may provide good habitat for breeding birds, however, the site itself consists mainly of hard-standing and the small pumping station. Therefore no further bird surveys are required.
- There is no continuous habitat that is necessary for dormice, within the site boundary. No further surveys are considered necessary.
- There are no water-bodies within the site boundaries that could potentially be used by Great Crested Newt for breeding. There is also no suitable terrestrial habitat for this species throughout the site. Additionally, a review of the OS 1:25000 map shows that within the accepted dispersal distance of 500 m there are no known ponds. As such no further surveys are recommended.
- The West European Hedgehog is a UK BAP priority species. As this species is in the wider countryside and there is the possibility that it could occur on site, certain precautions (outlined in this report) would be necessary during site clearance and construction in order to ensure that no individuals were harmed.

- The site is in an urban area and consists solely of hard-standing. There are very limited areas suitable for reptile foraging, basking and hibernating within the site. The woodland to the north of the site is more suitable and it is recommended before works commence a low level barrier is installed to prevent animals from the adjoining site making use of any rubble and hardcore that may be deposited.
- The site does not form part of any statutory or non-statutory designated nature conservation sites.

1 INTRODUCTION

1.1 INSTRUCTION

Dr. Stacey Waring was instructed by Mr Shaun Rosier to conduct an initial bat assessment and protected species walkover at the site of the Pumping Station, Chazey Road, Caversham, Reading, RG4 7DS, to support a planning application. This survey comprised of an ecological walkover survey for all protected wildlife and species of conservation importance, including habitats, and was carried out on the 15th June 2020.

1.2 AIMS AND OBJECTIVES

The objective of the protected species walkover survey was to identify the potential presence of any protected species under the Wildlife and Countryside Act (1981) and European Protected Species and Habitats of Conservation Importance.

The initial bat assessment is designed to provide information on the status of bats using the building (currently or previously) and to establish whether further surveys, mitigation or an EPS licence is required. The survey and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2016).

1.3 PROPOSED WORKS

The survey was commissioned in advance of a planning application to Reading Borough Council. Proposed plans include development of the site which would include, demolition of the pumping house building, clearing of the site and erection of a three bedroom detached house with gardens. The proposed works could provide ecological enhancement compared to the site as it currently stands.

1.4 SURVEYOR BACKGROUND AND EXPERIENCE

The preliminary ecological assessment and report were completed by Dr Stacey Dawn Waring who holds a Class II Bat Licence (No. 2015-6768-CLS-CLS), Class I Great Crested Newt Licence (No. 2016-20292-CLS-CLS) and is an associate member of CIEEM. She has 10 years' experience of carrying out research for the University of Reading and Bat Conservation Trust (4 years) and has worked with several ecological consultancies conducting bat surveys for 12 years, prior to establishing Eaves Ecology.

2 BACKGROUND

2.1 SITE DESCRIPTION

The site to be surveyed is a small parcel on land within the suburban area of Caversham. Although in a suburban area, is adjacent to areas of woodland (Chazey Wood) and parkland (Figure 1). It is also close to the River Thames and Caversham Court Gardens. Caversham is an area is known to have populations of several species of bats.

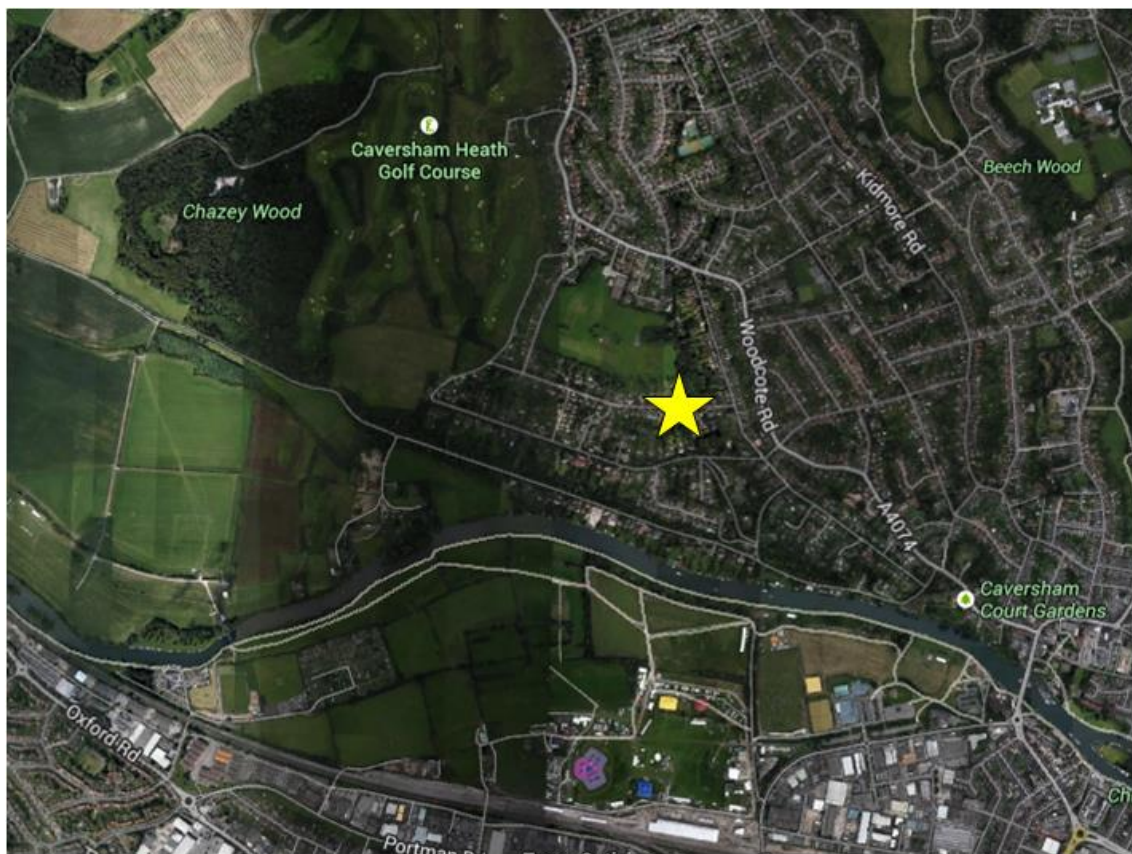


FIGURE 1 - OVERVIEW OF THE LOCATION OF THE PROPERTY

The site boundaries are shown in Figure 2. The site is surrounded by residential land to the south and west and has scrub and woodland to the north and east. The scrub and woodland does not enter within the site boundaries.



FIGURE 2 – SITE PLAN

3 LEGISLATION

This section briefly describes the legal protection afforded to protected species. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation, but summarises the salient points.

3.1 DORMOUSE, BATS AND GREAT CRESTED NEWT

Dormouse (*Muscardnius avellanarius*), Great Crested Newt (*Triturus cristatus*), and all species of British bat (*Vespertilionidae* and *Rhinolophidae*) are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. These species are also all listed as European Protected Species on *Schedule 2* of the *Conservation (Natural Habitats, etc.) Regulations 1994* which gives them full protection under *Regulation 39*. Protection was extended by the *Countryside and Rights of Way Act 2000*. Under the above legislation it is an offence to:

- kill, injure or take an individual;

- possess any part of an individual either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by these species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb these species whilst using any place of shelter or protection; or
- sell or attempt to sell any individual.

It is also an offence to set and use articles capable of catching, injuring or killing bats (for example a trap or poison), or knowingly cause or permit such an action.

In the case of Dormouse and all species of British bat there is also protection under *Schedule 6 of The Wildlife and Countryside Act 1981* (as amended) relating specifically to trapping and direct pursuit of these species.

Dormouse, Great Crested Newt and all species of British bat are included as priority species in the *UK Biodiversity Action Plan* and as species of principal importance for the conservation of biological diversity in England under *Section 74 of the Countryside and Rights of Way Act 2000*.

3.2 NESTING BIRDS

All species of bird are protected under *Section 1 of the Wildlife and Countryside Act 1981* (as amended). Protection was extended by the *Countryside and Rights of Way Act 2000*. Under the above legislation it is an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Certain species are listed on *Schedule 1 of the Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4) and 1(5)*. The protection was extended by the *Countryside and Rights of Way Act 2000*. There are special penalties where the offences listed above are committed for any *Schedule 1* species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or
- disturb the dependant young of any such bird.

3.3 REPTILES

Common Lizard (*Lacerta vivipara*), Grass Snake (*Natrix natrix*), Slow-worm (*Anguis fragilis*), and Adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *Countryside and Rights of Way Act 2000*. Under the legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of these species; or
- sell or attempt to sell any part of these species either alive or dead.

4 METHODS

An ecological walkover assessment was carried out on 15th June 2020 to evaluate the site for its potential to support protected species in addition to other species of conservation importance that could be relevant in respect of planning policies.

Taking into consideration the geographical region and habitat type, species that could be encountered are:

- Badger;
- Bats;
- Biodiversity Action Plan Species (e.g. Hedgehog);
- Breeding Birds;
- Dormouse;
- Great Crested Newt
- Reptiles

In addition, observations of any important plant communities, plant species of note or other valuable ecological features will have been recorded and detailed. Details of the initial survey method for each species are given below.

4.1 BADGER

An initial assessment was carried out to identify areas that might be used by Badgers (*Meles meles*). Signs of Badgers including setts, incidental foraging signs, runs and latrines, are recorded if encountered during the survey.

4.2 BATS

During the daylight survey an Internal and External inspection of the Pumping Station building was carried out to identify any bat roost potential. Features investigated included:

- Construction of the Building – Soffits, loft space, tiles/slates, lead flashings etc
- Building Condition – structure of roof and walls
- Internal conditions – Microclimate stability, drafts etc
- Access points – potential entry and exit points for bats
- Roosting points – cracks and crevices, between underlay and roofing tiles/slates

Field signs that would indicate the presence of bats were searched for. These included:

- Bat droppings on the floor and walls of the building
- Feeding remains (particularly butterfly and moth wings)
- Evidence of urine and/or oily staining around possible roost entrances
- Presence of areas cleared of cobwebs
- Where a breathable roofing membrane has been fitted staining on the membrane may suggest use by bats.
- Odour can sometimes suggest the present of bats
- Squeaking and chattering can reveal bats roosting between the tiles and roofing underlay

Any trees within the site and around the boundary edge were observed (from the ground) looking for potential roosting features suitable for bats.

4.3 BIODIVERSITY ACTION PLAN SPECIES

The habitats present on site were assessed for the likelihood of presence for species of regional and national importance, including hedgehogs and common toads.

4.4 BREEDING BIRDS

Habitats were assessed for their suitability for nesting birds. This could include ground nesting species, such as Skylark (*Alauda arvensis*), birds that favour scrub and birds that nest in buildings such as House Sparrow (*Passer domesticus*).

4.5 DORMOUSE

Any woodland and scrub were assessed for the potential to support Dormouse (*Muscardinus avellanarius*). Connectivity to other areas of woodland and habitat quality (such as the likely availability of flowers and fruit to provide food) is taken into account in order to consider whether further surveys are deemed necessary.

4.6 GREAT CRESTED NEWT

Initial surveys centre on identifying suitable habitat. If there are ponds on site then Great Crested Newt (*Triturus cristatus*) could be using these for breeding. Additionally, if breeding ponds are within 500 metres of the site (that are not isolated by unsuitable habitat or physical barriers), the species could potentially be using terrestrial habitat on the site.

4.7 REPTILES

The site was assessed for reptiles, with particular attention paid to those features that provide suitable basking areas (*e.g.* south-facing slopes), hibernation sites (*e.g.* banks, walls, piles of rotting vegetation) and opportunities for foraging (rough grassland and scrub).

5 CONSTRAINTS/LIMITATIONS

An initial site assessment such as this is only able to act like a 'snapshot' to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey, but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

6 RESULTS

6.1 BADGERS

No evidence of Badger sett building activity was found or evidence of Badger foraging within the proposed development site boundary. The site has been fenced off for approximately 6 years which would also have precluded use by Badgers.

6.2 BATS

Bats are known to use the area due to reported sightings during surveys on neighboring properties. At least three species of bat are known to forage within the local vicinity.

During the daylight assessment the building within the site was inspected for signs or potential for bat usage. The building is a single storey, brick building with a pitched roof (Figure 3a & 3b). The roof has a slate covering with no underlay. The interior of the roof is visible from within the building due to a lack of ceiling (Figure 4). This means there is no roof has very few crevices that could be utilised by crevice-dwelling bats and no roof void which may be used by other building reliant species. The building is also in use for storage and artificial lighting is used.



FIGURE 3 – EXTERNAL VIEW OF THE PUMPING STATION BUILDING



FIGURE 3A - INTERIOR VIEW SHOWING THE DISUSED BUILDING



FIGURE 3B - INTERIOR VIEW SHOWING UNDERSIDE OF ROOFING TILES AND ARTIFICIAL LIGHTING

No evidence of bats using the building was found during the visit and there were negligible opportunities for bats to utilise the building in its current state.

There were several young trees around the edge of the site boundary. None of these showed potential for supporting roosting bats.

6.3 BIODIVERSITY ACTION PLAN SPECIES

The West European Hedgehog (*Erinaceus europaeus*) could potentially occur in the scrub along the northern and eastern boundaries of the site (Figure 5). They may also be found in any leaf litter and tall areas of weed growth within the site.

The hard-standing across the site and limited suitable habitat areas make the site unsuitable for amphibians such as the Common Toad.



FIGURE 5 – IMAGE OF SCRUB AND WOODLAND BEYOND THE SITE BOUNDARY

6.4 BREEDING BIRDS

The habitat within the site provides very limited opportunity for breeding birds. The building is in sound condition with no access to the interior. There are also no trees on the site that could support a nest. The hard-standing and limited vegetation within the site greatly reduce the likelihood of ground nesting birds.

The woodland and scrub to the north and east of the site boundary (Figure 5) do have potential to support nesting birds.

6.5 DORMOUSE

The site has no habitat suitable for Dormice. Nor do the scrub and trees surrounding the site, provide a continuous habitat that is necessary for Dormice.

6.6 GREAT CRESTED NEWT

The proposed development site is unlikely to support Great Crested Newt as there are no ponds on site or within 500m of the site and limited terrestrial habitat within the site boundary.

6.7 REPTILES

The site consists mainly of hard-standing with a covering of tall weeds (Figure 6). This habitat provides very few areas suitable for use by reptiles.



FIGURE 6 – SHOWS HARD-STANDING WITHIN THE SITE

Whilst there is scrub and vegetation adjacent to the site (Figure 5), these areas are heavily shaded by trees, are fragmented and not connected to further suitable habitat.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 BADGERS, DORMICE, GREAT CRESTED NEWTS AND REPTILES

No evidence of badgers, dormice, great crested newts and reptiles were seen within the site. The habitat adjacent to the site is also not considered suitable for these species for the previously stated reasons. Therefore no further surveys are recommended for these species.

7.2 BATS

It is considered that the building within the site has negligible potential for bats and no further surveys are required. However, there is the opportunity to enhance the site for bats if a new structure is built. To do this it is recommended that some built-in bat boxes, such as the Habibat, be installed within the new structure.

7.3 BIRDS

The habitat within the site provides very little opportunity for breeding birds. However the adjacent scrub and woodland provide plenty of opportunities for birds to nest. If the site perimeter were to be extended then a breeding bird survey would be recommended.

N.B. Should any trees and scrub require removal between the beginning of March and the end of August, a survey to check for nesting birds would be required. No vegetation can be cleared whilst a nest is occupied. This also applies to the buildings if these are to be removed.

7.4 BIODIVERSITY ACTION PLAN SPECIES

There is very limited potential for the presence of amphibians within the site. No further surveys are required.

The West European Hedgehog is a UK BAP priority species. As this species is in the wider countryside and there is the possibility that it could occur on site, certain precautions would be necessary during site clearance and construction in order to ensure that no individuals were harmed.

Site clearance would involve a stepped clearance of surface vegetation to discourage Hedgehogs from the site. All external perimeter hoarding should be below ground level or back-filled against, in order to prevent access by hedgehogs. In a similar vein, all access points onto the site will need to be proofed against access by hedgehogs. Such measures will keep other small mammals from entering the construction zone.

7.5 CONTINGENCY PLAN

In the unlikely event that any of the species mentioned in this report are found during completion of the proposed works, all work must stop and advice sought from Stacey Dawn Waring (contact details can be found at the beginning of this report) or another suitably qualified ecologist.

8 REFERENCES

Bat Surveys Good practice Guidelines – Bat Conservation Trust 2016

Bat Workers Manual – Mitchell-Jones & McLeish 2004

Bat Mitigation Guidelines – Natural England 2006

The Conservation and Habitat Regulations 2017

Beebee, T. & Griffith, R. (2000) Amphibians and reptiles. HarperCollins, London.

IEEM (2012) Guidelines for Preliminary Ecological Appraisal (CIEEM <http://www.cieem.net/>)

Joint Nature Conservation Committee JNCC (2010). Handbook for Phase 1 Habitat survey: a technique for environmental audit (revised reprint). Joint Nature Conservation Committee, Peterborough.

Langton, T. Beckett, C. and Foster, J. (2001). Great Crested Newt Conservation Handbook. Froglife.