

**THE BUNGALOW SITE, NEW YEARS GREEN LANE,
HAREFIELD, SOUTH BUCKINGHAMSHIRE, UB9 6LX**

Report for – LONDON BOROUGH OF HILLINGDON

Reptile Surveys

May 2024

Version	Date	Author	Reviewed and Approved by
1.0	17/05/2024	Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Consultant	Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Consultant

Report for: LONDON BOROUGH OF HILLINGDON

Contents

CONTENTS	3
1.0 EXECUTIVE SUMMARY	4
1.1 SUMMARY.....	4
2.0 INTRODUCTION AND CONTEXT.	5
2.1 BACKGROUND.....	5
2.2 SITE CONTEXT	5
2.3 SCOPE OF THE REPORT.....	5
2.4 PROJECT DESCRIPTION.....	6
3.0 METHODOLOGY	7
3.1 DESK STUDY METHODOLOGY	7
3.2 SITE SURVEY METHODOLOGY.....	7
3.3 RESULTS AND EVALUATION.....	8
3.4 LIMITATIONS – EVALUATION OF THE METHODOLOGY	9
4.0 RESULTS AND EVALUATION.....	10
4.1 FIELD SURVEY RESULTS	10
5.0 CONCLUSIONS, IMPACTS AND RECOMMENDATIONS	11
5.1 INFORMATIVE GUIDELINES	11
6.0 BIBLIOGRAPHY	12
APPENDIX I – SURVEY PLAN.....	13
APPENDIX 2 – INDICATIVE PROPOSED PLAN	14
APPENDIX 3 – LEGISLATION	15

1.0 Executive Summary

1.1 Summary

- 1.1.1 Plowman Craven undertook reptile surveys at The Bungalow Site, New Years Green Lane, Harefield, South Buckinghamshire, UB9 6LX, between 2nd April and 13th May 2024.
- 1.1.2 The site is located at National Grid Reference TQ 06228 88175 and has an area of approximately 0.59ha comprising dense scrub, tree lined boundaries, scattered trees and developed land which has been colonised by ruderals and grass species. The habitats recorded on site are assessed to provide optimal foraging, commuting, and basking opportunities for reptiles in the form of grassland, scrub, and tall ruderal vegetation. These habitats will provide suitable foraging opportunities adjacent to open areas for basking and dense vegetation for refuge. There is good connectivity between the site and habitats in the wider landscape.
- 1.1.3 No reptiles were found during the survey effort. As such it is considered that reptiles are likely absent from site.

2.0 Introduction and Context.

2.1 Background

- 2.1.1 Plowman Craven was commissioned by London Borough of Hillingdon to undertake reptile surveys at The Bungalow Site, New Years Green Lane, Harefield, South Buckinghamshire, UB9 6LX. The aim of the surveys and assessment is to confirm presence or likely-absence of reptiles within the proposed development footprint, gain an understanding of the distribution across the site, and identify the species, if present.
- 2.1.2 A Preliminary Ecological Appraisal (PEA) including Preliminary Roost Assessment (PRA) was carried out by Plowman Craven in September 2023. The PEA/PRA concluded that the habitats recorded on site were assessed to provide optimal foraging, commuting, and basking opportunities for reptiles in the form of grassland, scrub, and tall ruderal vegetation.

2.2 Site Context

- 2.2.1 The site is located at National Grid Reference TQ 06228 88175 and has an area of approximately 0.59ha comprising dense scrub, tree lined boundaries, scattered trees and developed land which has been colonised by ruderals and grass species. Additionally, there are six buildings, designated as B1-B6 within the site boundary, all of which were surveyed as they will be affected by the proposed development. It is surrounded immediately to the west by the Harefield Household re-use and recycling centre, arable fields to the north, a recycling centre to the east and grassland within the Dog's Trust to the south. Further afield the site is surrounded by woodland to the north and west, a mosaic of arable and scrub to the north-west and the town of Ruislip to the east.

2.3 Scope of the Report

- 2.3.1 This report summarises the methodology, results and conclusions of the reptile surveys and assessment undertaken at the site. To achieve the aims, the following steps were taken:
- The survey area (including the 'zone of influence' of the scheme) has been identified.
 - A desk study has been carried out - please refer to the Preliminary Ecological Appraisal Survey report (September 2023)
 - Field surveys have been undertaken in accordance with best practice survey methodology.
 - Potential constraints to the proposed development have been identified.
 - Any mitigation recommendations required have been provided based on current information.

- 2.3.2 A survey plan is presented in Appendix 1, the proposed Project Plan is included in Appendix 2 (where available) and a summary of relevant legislation can be found in Appendix 3.

2.4 Project Description

- 2.4.1 The proposed plans are for the demolition of the main building and outbuildings onsite and the erection of a new staff training/ welfare area with associated parking and landscaping.

3.0 Methodology

3.1 Desk Study Methodology

- 3.1.1 The desk study included a 2km radius review of statutory and non-statutory designated sites, Biodiversity Action Plan (BAP) Priority Habitats and granted EPSML records for reptiles held on Magic database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps. Please see the 2023 PEA/PRA for full details.
- 3.1.2 Existing reptile records relating to the site and a surrounding 2km radius are required to conform to national guidelines. The data search is confidential information that is not suitable for public release and was analysed and summarised in the Preliminary Ecological Assessment Survey report. Please see the 2023 PEA/PRA for full details.

3.2 Site Survey Methodology

- 3.2.1 The surveys were undertaken by Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Consultant (2023-11066-CL17-BAT and 2024-11998-CL08-GCN).
- 3.2.2 The survey methods were informed by the recommendations presented in the 2023 PEA/PRA.
- 3.2.3 The survey methodology is based on the *Froglife Advice Sheet 10: Reptile Survey, an introduction to planning, conducting and interpreting surveys for snake and lizard conservation* (Froglife, 1999) and the *Reptile Habitat Management Handbook* (Edgar, P., Foster, J. and Baker, J. 2010:
- Refugia will be placed around the site in suitable reptile habitat with each refuge numbered for monitoring and reporting.
 - Locations of refugia will be recorded using a GPS unit for monitoring and mapping.
 - The refugia will be left to 'bed in' for a minimum of two weeks.
 - Seven separate site visits, conducted in suitable weather conditions, will be completed to search for reptiles. The ideal time to search is when reptiles are basking. Reptiles bask between air temperatures of approximately 10-20°C, but there are complex variations due to species, season, age and habitat. For example, viviparous lizards and adders are commonly observed at lower temperatures than grass snakes, sometimes less than 10°C in early spring. The optimal period for conducting these is April, May and September. However, surveys are highly weather dependent and can be completed outside of the optimal survey period depending upon local weather conditions.

- 3.2.4 The reptile surveys comprised laying reptile ‘refugia’ in suitable habitat within the survey area (see Appendix 1 for indicative location of refugia).
- 3.2.5 For this site, there is assessed to be 0.59ha of potentially suitable reptile habitat on site comprising the southern area of the site.
- 3.2.6 40 reptile refugia were deployed (30 felt and 10 tins).
- 3.2.7 The refugia were placed around the site boundaries and across the centre of the site.
- 3.2.8 Of the 40, 30 were ‘felts’ (heavy duty bitumen roofing felt cut into approximately 50cm x 50cm squares) and 10 were steel ‘tins’ (corrugated steel sheets of approximately 50cm x 50cm square). The steel tins are regarded to have better habitat value for certain species (particularly snakes) due to their superior thermal retention.
- 3.2.9 These ‘refugia’ were left to ‘bed-in’ for a minimum of two weeks before the first survey was undertaken. The felts were then checked by an ecologist on seven separate occasions in suitable weather conditions. The refugia were laid on site on 19th March 2024. The checks were then undertaken between 2nd April and 13th May 2024.
- 3.2.10 Optimal weather conditions for surveying reptiles are temperatures between 10°C and 18°C with intermittent or hazy sunshine and little or no wind, before 11am and after 3pm (Froglife, 1999, Griffiths & Inns, 1998). However, optimal survey temperatures and times vary according to the time of year and prevailing weather conditions. No surveys were carried out in heavy rain or on extremely hot days. The surveyor walked slowly and carefully checked the top and underneath each felt, as well as looking for reptiles between the felts.

3.3 Results and Evaluation

- 3.3.1 The ‘refugia’ were laid on 19th March 2024, the dates and times of each survey are presented in Table 1.

Table 1: Reptile survey dates and weather conditions

Survey Number	Survey Date and Time	Weather Conditions
1	02/04/2024 10am	Temp: 10°C Humidity: 78% Cloud Cover: 20% Wind Speed: 10mph Precipitation: None
2	08/04/2024 04:20pm	Temp: 14°C Humidity: 64% Cloud Cover: 45% Wind Speed: 10mph Precipitation: None
3	16/04/2024 09:28am	Temp: 10°C Humidity: 73%

		Cloud Cover: 40% Wind Speed: 13mph Precipitation: None
4	26/04/2024 04:00pm	Temp: 11°C Humidity: 56% Cloud Cover: 20% Wind Speed: 5mph Precipitation: None
5	30/04/2024 10:45am	Temp: 16°C Humidity: 56% Cloud Cover: 0% Wind Speed: 15mph Precipitation: None
6	07/05/2024 04:45pm	Temp: 18°C Humidity: 60% Cloud Cover: 5% Wind Speed: 7mph Precipitation: None
7	13/05/2024 04:00pm	Temp: 16°C Humidity: 71% Cloud Cover: 40% Wind Speed: 13mph Precipitation: None

3.4 Limitations – Evaluation of the Methodology

- 3.4.1 This survey aims to follow best practice guidance to confirm presence/likely-absence of reptiles and where present, characterise the site in terms of species and distribution, habitat suitability and context with the wider landscape. However, this information is collected at finite dates and times, and provides an indication of the conditions on site only. This survey cannot provide an indication of population.
- 3.4.2 There were no other specific limitations regarding access, weather, safety or equipment during the survey.

4.0 Results and Evaluation

4.1 Field Survey Results

4.1.1 No reptiles were identified during the surveys.

5.0 Conclusions, Impacts and Recommendations

5.1 Informative Guidelines

- 5.1.1 Survey reports and mitigation plans are required for development projects that could affect protected species, as part of getting planning permission or a mitigation licence. Surveys need to show whether protected species are present in the area or nearby, and how they use the site. Mitigation plans show how any negative effects to protected species will be avoided, reduced or managed. Natural England's standing advice for local planning authorities assessing planning applications that affect reptiles. Smooth snakes and sand lizards are European protected species. Adder, grass snake, common lizard, and slow worm are protected species under UK law.
- 5.1.2 Taking the desk-based assessment and site survey results into account, the following evaluation and recommendations for reptiles are provided in Table 2 below.

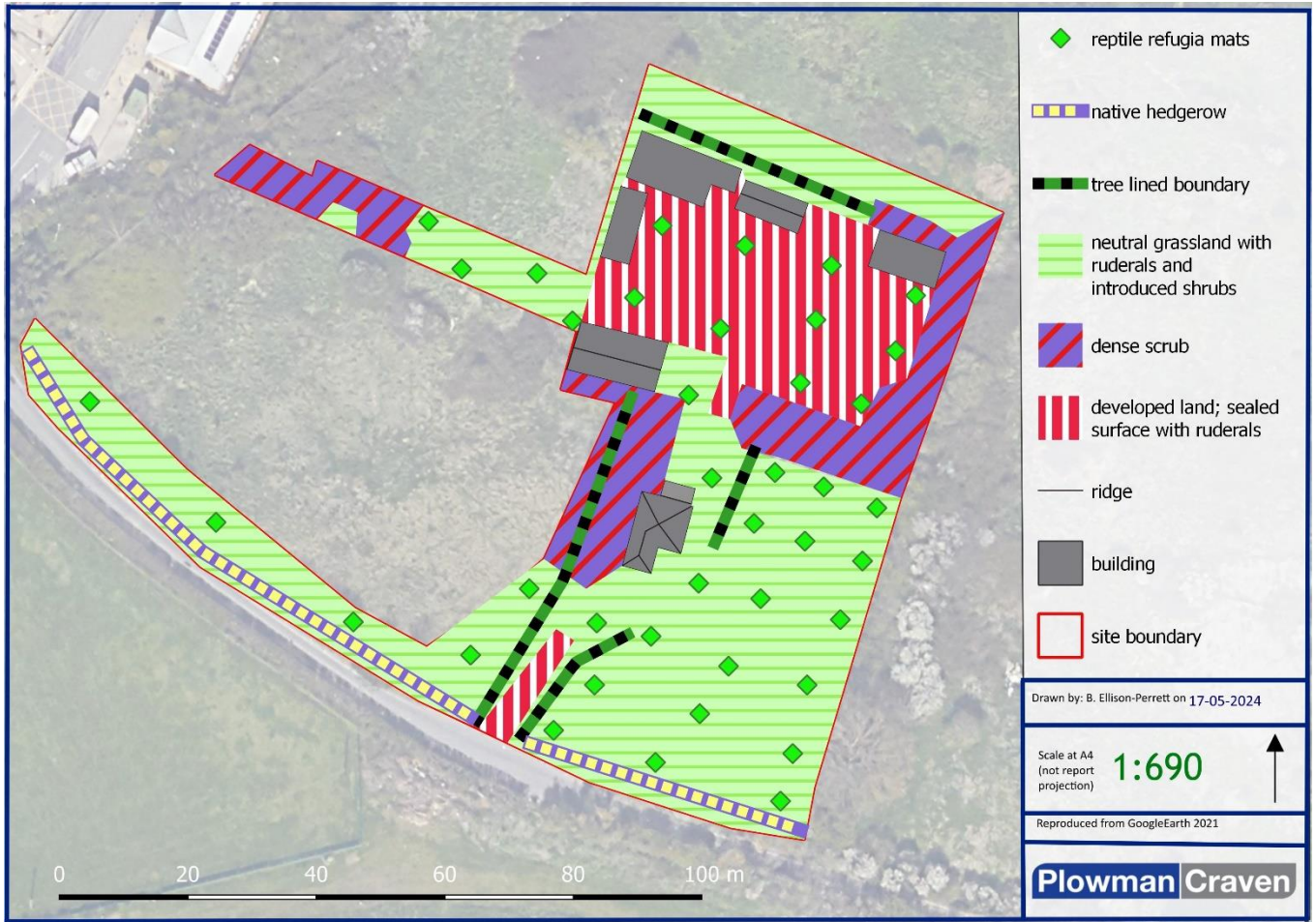
Table 2: Evaluation of survey

Survey assessment conclusions	Foreseen impacts	Recommendations	<i>Biodiversity Enhancements</i>
No reptiles were identified on the site.	No impacts to reptiles are anticipated as a result of the proposed development.	None.	None applicable.

6.0 Bibliography

- Chartered Institute of Ecology and Environmental Management (2012). Developing Statutory Guidance for Reptile Mitigation - Reptiles: Research, Survey and Mitigation. Chartered Institute of Ecology and Environmental Management, Winchester.
- Edgar, P., Foster, J. and Baker, J (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth
<http://downloads.gigl.org.uk/website/Reptile%20Habitat%20Management%20Handbook.pdf>
- Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.
- Gent, T. and Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Google Earth. Accessed on 24/06/2022.
- HMSO: Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019
<https://www.legislation.gov.uk/uksi/2019/579/contents/made>
- HMSO: Natural Environmental and Rural Communities Act (2006)
<http://www.legislation.gov.uk/ukpga/2006/16/contents>
- HMSO: Wildlife and Countryside Act 1981 (as amended 01.04.1996) <http://jncc.defra.gov.uk/page-1377>

Appendix I – Survey Plan



Appendix 2 – Indicative Proposed plan



Appendix 3 – Legislation

LEGAL PROTECTION

The sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - i. To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - ii. To impair their ability to hibernate or migrate
 - iii. To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

These species are also listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended) and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

[REPORT BACK PAGE]



115 Southwark Bridge Road | London | SE1 0AX

+44 (0) 20 7490 7700

webenquiry@plowmancraven.co.uk

<https://www.plowmancraven.co.uk/>
