



Land adjacent to No.54 Long Copse Lane

Reptile Presence/Likely Absence Survey

The Horne and Barry Families

November 2021

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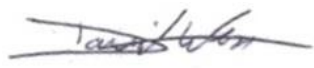
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Executive Summary

Contents	Summary
Site Location	The site is located to the south of Long Copse Lane in Emsworth, Hampshire and is centred at Ordnance Survey National Grid Reference SU 7518 0785. The site consists of neutral semi-improved grassland with hedgerow boundaries.
Proposals	The proposed development is for nine residential dwellings and access off Long Copse Lane, with open space to mitigate for the loss of grassland and to protect boundary features.
Previous Reports/Surveys	An Ecological Appraisal was completed at the site in May 2017 which identified high potential for reptiles on the site due to the semi-improved grassland and hedgerow boundaries offering potential sheltering, basking and foraging habitat for reptiles.
Scope of this Survey	WYG was commissioned to undertake presence/likely absence surveys for reptiles on the site. Surveys were completed between 21 st September and 9 th October 2017.
Results	A peak count of three adult slow worms was recorded on site on the 27 th September and 4 th October 2017 and a peak count of five common lizards was recorded on the 6 th October 2017. As such the site is considered to have a ' <i>low population</i> ' of slow worms and ' <i>good population</i> ' of common lizards. The populations onsite are also considered to be breeding as one juvenile common lizard and several juvenile slow worms were recorded. The reptiles were found mainly on the northern and western hedgerow boundary, with no reptile found towards the centre of the site.
Recommendations	As populations of two reptiles species have been found on the site, mitigation will need to be implemented at the site to meet the requirements of the NPPF and to prevent a breach of the Wildlife and Countryside Act 1981 (as amended). Reptile mitigation will comprise the following: • Suitable habitat for reptiles i.e. hedgerow boundaries will be retained in form of buffer zone and will be fenced off from the development. • A hibernacula will be created in the retained suitable habitat where the reptiles will be displaced. • Reptiles found will be displaced to the retained boundaries through phased vegetation cutting. • The proposed development area should be cleared under an Ecological Clerk of Works (ECoW), with any reptiles found moved to the retained and protected areas.



1.0 Introduction

1.1 Background

WYG was commissioned in May 2017 to undertake a reptile presence/likely absence survey at Long Copse Lane, Emsworth (hereafter referred to as the 'Site'). This was following an ecological appraisal carried out in May 2017 (WYG 2017), which identified suitable habitats for reptiles. Additionally, there was suitable habitat identified immediately to the east of the site. Overall, the site was considered to have *high potential* to support reptiles.

This report has been prepared by Assistant Ecologist Dominika Murienova MEnvSci(Hons).

1.2 Site Location

The site is located on an approximately 0.44ha plot of land to the south of Long Copse Lane in Emsworth, Hampshire and is centred at Ordnance Survey National Grid Reference SU 7518 0785. The site is shown on Figure 1 and consists of neutral semi-improved grassland with unmanaged species-rich hedgerows with mature trees along its southern and eastern boundaries and species-poor managed hedgerows along the northern and western boundaries. The site is situated on the settlement edge, immediately adjacent to dense residential development to the south and east.

1.3 Development Proposals

The proposed development is for nine residential dwellings and access off Long Copse Lane, with enhancement and management of adjacent habitat to mitigate for the loss of grassland and to protect boundary features.

1.4 Purpose of the Report

The objectives of this survey work and the subsequent report presented herein were to:

- Determine the presence or likely absence of reptiles at the site;
- Determine the population size class of reptiles if confirmed to be present;
- Provide an assessment of the potential ecological constraints to the proposed works at the site relating to the potential presence of reptiles at the site;
- Ensure that the required level of survey work and information is present to inform a method statement, should one be necessary; and
- Provide preliminary advice on mitigation strategies against any adverse effects on local reptile population(s) which may arise as a result of the proposed development.

Note that, where possible, common names for flora and fauna have been used throughout this report for ease of reading.



2.0 Planning Policy & Legislation

2.1 National Planning Policy

2.1.1 National Planning Policy Framework

The NPPF requires local planning authorities to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.

In the case of European Protected Species such as bats, planning policy emphasises that strict statutory provisions apply (including the *Conservation of Habitats and Species Regulations 2010* (as amended)), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species, it is necessary that protected species surveys are undertaken and submitted.

It also includes a requirement for the planning system to contribute to and enhance the natural and local environment through protecting and enhancing valued landscapes, ecosystem services and provide net gains in biodiversity.

2.1.2 Biodiversity 2020

Biodiversity 2020: A strategy for England's wildlife and ecosystem services replaces the previous *UK Biodiversity Action Plan* and sets national targets to be achieved. The intent of *Biodiversity 2020*, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are those detailed under Section 41 of the NERC Act (as detailed below).

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities. Although no-longer accountable at a national level, many are still managed and implemented at a local level.

2.2 Adopted Havant Borough Council Local Plan

The relevant local planning policy is Policy CS11 of the Havant Borough Council Core Strategy, March 2011. This policy states that Planning permission will be granted for development that:

1. *Ensures the key landscape and built form principles set out in the Havant Borough Townscape, Landscape and Seascape Character Assessment are protected and where possible enhanced by partnership working with developers, groups and the wider community.*
2. *Protects and where possible enhances the borough's statutory and non-statutory designated landscape, habitats and features of biological, hydrological or geological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures including wardening, education and information and the creation of new habitats, water bodies/courses planting of new trees and woodland.*



3. *Has particular regard to the following hierarchy of nature conservation designations within the borough (as identified on the Proposals Map):*
 - i. *Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar [International].*
 - ii. *Sites of Special Scientific Interest (SSSI) and National Nature Reserves [National].*
 - iii. *Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), other Ancient Woodland not identified in (ii) above [Local].*
4. *Protects and where appropriate enhances the borough's statutory and non- statutory heritage designations by appropriately managing development in or adjacent to conservation areas, listed buildings, scheduled ancient monuments, historic parks and gardens, archaeological sites, buildings of local historic or architectural interest.*
5. *Supports an ongoing programme of survey of habitats and species and designation of Sites of Importance for Nature Conservation.*
6. *Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly on the coast, to reduce harm to nature conservation interests.*
7. *Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh.*
8. *Protects wildlife habitats and wildlife corridors to prevent the fragmentation of existing habitats and to allow species, for example Brent Geese, to respond to the impacts of climate change by making provision for habitat adaptation e.g. coastal managed realignment and species migration.*
9. *Maintains undeveloped gaps between the settlements of Emsworth/Havant; Havant/Waterlooville; Havant/Portsmouth; Emsworth/Westbourne and Leigh Park/Rowlands Castle as shown on the Proposals Map.*
10. *Protects the best and most versatile agricultural land that has the greatest potential for local food security.*
11. *Responds to the emerging evidence from the Solent Disturbance and Mitigation Project, the published recommendations, and future related research.*

The site lies adjacent to an area of open countryside on its western boundary which is allocated as Local Green Space in the Havant Borough Local Plan (Allocations) Adopted Version, July 2014 Policy AL8 of the Allocations Plan describes the policy for Local Green Spaces as follows: *Planning permission will be granted for development proposals that protect or enhance the Local Green Spaces, as shown on the Policies Map. Development proposals that would be harmful to these Local Green Spaces will not be permitted other than in very special circumstances.*

The site is also broadly within an area that is being considered for to meet the additional future housing requirements of Havant Borough. The Local Plan 2036 - Proposals for new housing development in the borough up to 2036 published in July 2016 proposes a New Urban Extension Site, at Emsworth including 166 dwellings north of Long Copse Lane; 5 dwellings to the rear of Redlands House, Long Copse Lane and 54 dwellings north of Hollybank Lane and Long Copse Lane.



2.3 Legislation

All six species of reptiles native to the UK are protected under the *Wildlife and Countryside Act 1981* (as amended) and benefit from various levels of protection. The adder (*Vipera berus*), grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*) receive partial or full protection under Section 9 of the Act. This legislation makes it an offence to:

- Intentionally or recklessly kill or injure these animals; and
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell individual reptiles.



3.0 Methodology

3.1 Desk Study

Wildlife information was requested from the Hampshire Biodiversity Information Centre (HBIC), the ecological records centre for Hampshire, for information on any nature conservation designations and protected or notable species records within 2 km of the boundary of the proposed development site. This provided the overall ecological context for the site and surrounding areas and potential basis for the reptile survey.

HBIC returned five records of reptiles within 2km of the site, comprising of slow worm and grass snake. The closest record is located 1.65km south of the site. No records were returned of any reptiles present within the application site boundary.

Additionally, a medium population of slow worm and low population of grass snake was recorded within the Hampshire Farm site to the south in 2010 (WYG, 2010). These reptiles were translocated to the large area of mixed grassland and scrub to the east of the site.

3.2 Field Surveys

The site was assessed as having *high potential* for reptiles. The main areas identified as suitable included semi-improved grassland and hedgerows within the site. These habitats provide suitable foraging, basking and sheltering areas.

In accordance with the guidance outlined in the *Herpetofauna Workers' Manual* (Joint Nature Conservation Committee - JNCC, 2003), *Advice Sheet 10 – Reptile Survey* (Froglife, 1999) and the *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring* (Hill *et al.*, 2005) surveys were carried out to establish the presence or likely absence of reptile species. This involved seven survey visits between the 21st September and 9th October 2017 in suitable weather conditions.

Twenty-five clearly numbered artificial refugia (0.5m x 0.5m sections of bitumen roofing felt) were placed within the areas of suitable habitat (regularly placed throughout the field and along hedgerow boundaries) see Figure 3 for a plan showing the mat locations. Suitable reptile habitat was present throughout the site on approximately 0.4ha and therefore the number of refugia used well exceeds the minimum of ten per hectare as recommended by Froglife guidelines (Froglife, 1999), thus increasing the chance of accurately concluding presence/likely absence. Each refugia was first checked for basking/resting individuals from a distance before being slowly approached and searched for sheltering reptiles. Terrestrial habitat between artificial refugia was also visually searched for reptile species on each visit. The location of each reptile sighting where applicable was then recorded to allow for analysis of population distributions across the site.

The optimal time to survey reptiles is between 8:30am to 11:00am and between 16:00pm and 18:30pm and when air temperature is between 9°C and 18°C. Strong rain and wind are deemed unsuitable (Froglife, 1999). As reptile activity is heavily dependent on weather conditions the following conditions were recorded during each survey: air temperature, wind levels, rain, and cloud cover.



3.3 Limitations

The optimal period to undertake reptile presence/likely absence survey is April-October. The survey was completed in September-October which is in the optimal survey window. As such this is not considered to be a limitation to the accurate assessment of the reptile presence, and confidence within the data is high.

The details of this report will remain valid for a period of **two years** from the date of the survey (i.e. until October 2019), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

An update site visit in May 2020 confirmed there have been no significant changes to site conditions which would alter the recommendations or assessment within this report.



4.0 Results

4.1 Survey results

Weather conditions are outlined below in Table 1.

Table 1 Survey weather conditions

Survey	Date	Air Temperature (°C)	Rain	Wind Speed	Cloud Cover (%)
1	21.09.2017	17	None	Light breeze	100
2	25.09.2017	17	Light drizzle	Light breeze	100
3	27.09.2017	17	None	Calm	100
4	02.10.2017	18	None	Light breeze	75
5	04.10.2017	17	None	Moderate breeze	90
6	06.10.2017	18	None	Light breeze	70
7	09.10.2017	17	None	Calm	100

The results of the reptile presence/likely absence survey are summarised below in Table 2.

Table 2 Site Survey Results

Survey	Date	Records			Mat No.
		Species	Adult	Juvenile	
1	21.09.2017	Slow worm	-	2 juvenile	7
			1 female	1 female	6
			1 female	1 juvenile	22
2	25.09.2017	Slow worm	1 female	-	5
			-	1	7
		Common lizard	1	-	23
3	27.09.2017	Slow worm	1 female	2	6
			1 male	-	21
			1 female	-	22
		Common lizard	1	-	22
			3	-	23
4	02.10.2017	Slow worm	1 female	-	4
			1 female	1	6
			-	2	21



Survey	Date	Records			Mat No.
		Species	Adult	Juvenile	
5	04.10.2017	Slow worm	1 female	-	24
			1 female	-	22
			-	2	21
			1 female	1	6
		Common lizard	1	-	25
			1	-	6
6	06.10.2017	Slow worm	1 female	-	21
			1 female	1 female	11
		Common lizard	1	-	Near entrance
			2	-	Log pile near entrance
			1	-	6
			1	-	Near 6
7	09.10.2017	Common lizard	-	1	22
			1	-	Near 11
		Slow worm	1 female	-	16
			-	1	6

Slow worm and common lizard were recorded throughout the survey. Slow worm was the most common species found on all surveys and common lizard was found on five out of seven surveys. Populations of both species included adults and also juveniles.

Slow worms were found along the western, northern and the southern hedgerow borders, while common lizards were encountered on the northern and western borders (Figure 3). Due to the suitable weather conditions present, the confidence in these results is high.



5.0 Ecological Constraints, Impacts and Recommendations

5.1 Results Evaluation

Two species of reptile were recorded on site – slow worm and common lizard. A peak count of three adult slow worms was recorded on 27th September and 4th October 2017, and a peak count of five common lizards was recorded on 6th October 2017. As such, under Froglife (1999) population calculation guidelines (see Table 3) the site is considered to have a '*good population*' of common lizards and a '*low population*' of slow worms (Froglife, 1999). The site is considered to offer good habitat for foraging and basking reptiles on the semi-improved grassland field and hedgerow edges, and it is connected to other habitat for reptiles to the east. As such it likely that reptiles found on site are part of a wider population inhabiting the land to the east of the Site. Several slow worm juveniles and one common lizard juvenile were observed during the surveys. As such the population of slow worms and common lizards is considered to be breeding.

Table 3 Calculating Populations (from Froglife, 1999).

	Low Population <i>Score 1</i>	Good Population <i>Score 2</i>	Exceptional population <i>Score 3</i>
Adder	<5	5 – 10	>10
Grass Snake	<5	5 – 10	>10
Common Lizard	<5	5 – 20	>20
Slow Worm	<5	5 – 20	>20

Figures in a table refer to maximum number of adults seen by observation and/or under tins (places at a density of up to 10 per hectare), by one person in one day.

5.2 Mitigation

Given that reptiles have been recorded on the site, reptile mitigation will need to be implemented at the site to meet the requirements of the NPPF and prevent a breach of the Wildlife and Countryside Act 1981. The proposed mitigation programme is explained below:

- Suitable habitat for reptiles will be retained in form of hedgerow boundaries on the site. These areas will act as a buffer zone of the development and would require protection from construction phase impacts through the erection of one-way reptile exclusion fencing surrounding the development area. The development area should be cleared under an Ecological Clerk of Work (ECoW), with any reptiles found during the destructive search moved into the protected retained areas.
- A hibernacula will be created within the retained habitat as an enhancement and to act as a release point, thus reducing the potential for predation immediately following individuals being moved.
- A displacement exercise will be carried prior to site clearance. This will comprise two phases of directional strimming, one to 300mm and one to ground level. Each phase will be preceded by a fingertip search for reptiles. Displacement can only be undertaken during the animals' active period which runs from mid-March until mid-October and in suitable weather conditions. Reptile capture may not take place between November and February, as reptiles



are not active during this period. This is considered to be suitable as reptiles were only recorded along the edges of the site which will be retained and protected.

- Once the displacement is concluded, a destructive search of the site should be completed under ECoW, with any individual reptiles found moved into the translocation site.



6.0 References

- Communities and Local Government (2019) National Planning Policy Framework.
- Froglife, (1999). Advice Sheet 10: Reptile Survey.
- WYG (2021). Ecological Appraisal.



FIGURES

Figure 1 – Site Location Plan

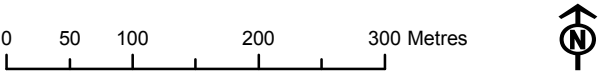
Figure 2 –Reptile Refuge Locations



Rev	Date	Notes
A	14/11/17	Initial map production

Legend

Site boundary



Site Location Plan

Long Copse Lane, Emsworth
Emma Barry

Scale at A3: 1:6,000	Project No: A102878	Drawing No: Figure 1	Revision: A
Drawn by: Ben Blowers	Drawn date: 15/11/2017	Approved by: Dominika Muriénova	

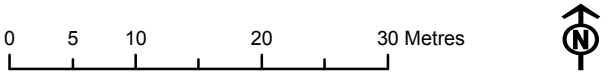
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Rev	Date	Notes
A	14/11/17	Initial map production

Legend

- Site boundary
- Reptile mats



Reptile Refugia Locations

Long Copse Lane, Emsworth
Emma Barry

Scale at A3: 1:600	Project No: A102878	Drawing No: Figure 3	Revision: A
Drawn by: Ben Blowers	Drawn date: 15/11/2017	Approved by: Dominika Muriénova	

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