



Sinah Lane, Hayling Island

Reptile Presence/Likely Absence Survey



Barratt Homes

June 2018

1st Floor, The Pavilion, Botleigh Office Campus, Hedge End, Southampton, SO30 2AF

Tel: 02382 022800

Email: ecology@wyg.com



Document Control

Project: Sinah Lane, Hayling Island
Client: Barratt Homes
Job Number: A092944-3
File Origin: G:\Projects\Projects A092000 on\A092944-3 Sinah Lane, Hayling Island\REPORTS

Issue 2	June 2018	FINAL
Prepared by:		Dominika Muriénova GradCIEEM Assistant Ecologist
Checked By:		Max Ward GradCIEEM Consultant Ecologist
Verified By:		David West MCIEEM Associate Ecologist

Rev:	Date:	Updated by:	Verified by:	Description of changes:
2	19.06.2018	Ben Cooke	David West	Alterations throughout the report to reflect the current masterplan

WYG Environment Planning Transport Ltd. accept no responsibility or liability for the use which is made of this document other than by the Client for the purpose for which it was originally commissioned and prepared.



Contents

Executive Summary	1
Glossary	3
1.0 Introduction	4
1.1 Background	4
1.2 Site Location	4
1.3 Development Proposals	4
1.4 Purpose of the Report	4
2.0 Methodology	5
2.1 Desk Study	5
2.2 Field Surveys	5
2.3 Limitations	6
3.0 Baseline Conditions	7
3.1 Local Records Centre	7
3.2 Field Survey	7
4.0 Relevant Planning Policy & Legislation	10
4.1 National Planning Policy Framework	10
4.2 Biodiversity 2020: A strategy for England's wildlife & ecosystem services	10
4.3 Local Plan	10
4.4 Legislation	11
5.0 Ecological Constraints, Impacts and Recommendations	12
5.1 Summary of Findings	12
5.2 Recommendations	12
5.3 Habitat Management	12
5.4 Enhancements	13
6.0 References	14

FIGURES

Figure 1 – Site Location Plan

Executive Summary

Contents	Summary
Site Location	The site is located within the south west of Hayling Island, centred on OS Grid Reference SZ 70816 99897. Two residential streets separate the site from the coastline to the west. To the south further residential dwellings, whilst arable fields sit to the north and east.
Proposals	The erection of 195 dwellings, associated open space, pumping station, sub-station with vehicular access via Sinah Lane and change of use of land from agricultural to a Wader and Brent Geese refuge.
Existing Site Information	An Extended Phase 1 Habitat Survey was completed at the site in June 2016 which identified moderate potential for reptiles on the site due to the semi-improved grassland field margins with connectivity to other suitable habitat offsite through the hedgerows. Bare ground between the field margins and crop also offered potentially suitable basking habitat.
Scope of this Survey(s)	The aims of the survey work and the subsequent report presented herein were to: • Estimate the population size class (if possible) of reptiles where present; • Summarise the findings of reptile surveys across the site; • Suggest mitigation, enhancement and avoidance measures where appropriate.
Results	A peak count of four adult slow worms were recorded on site on the 28 th April. As such the site is considered to have a ' <i>low population</i> ' of slow worms. The population is also considered to be breeding as a maximum of three juvenile slow worms were also recorded. No other reptile species were recorded onsite and as such are considered to be likely absent from the application area. All reptiles were found on the field margins of the site, with no reptiles recorded within the arable area.
Recommendations	• Suitable habitat for reptiles is restricted to the field margins, and retention of this habitat is considered to be the most preferable option, with the field margins protected from impacts through one-way reptile exclusion fencing; • The proposed development area should be cleared under an ECoW, with any reptiles found moved to the retained and protected areas; • If this is not possible, or the margins of the site are required in order to facilitate development, an onsite or offsite receptor area will be required along with a translocation, followed by a destructive search under ECoW; • Habitat on-site should be managed for the benefit of reptiles during and post-construction through the implementation of a cutting regimes;



	• Mitigation and enhancement measures should include planting retained suitable areas with native species in order to provide additional shelter for reptiles; and • In addition to this, it is recommended that hibernacula is created within the retained area to offer suitable habitat for reptiles during hibernation.
--	---



Glossary

CIEEM	Chartered Institute of Ecology & Environmental Management
CRoW Act	Countryside and Rights of Way Act 2000
EcIA	Ecological Impact Assessment
ECow	Ecological Clerk of Works
EPSL	European Protected Species Licence
GradCIEEM	Graduate Member of Chartered Institute of Ecology & Environmental Management
Habitat Regulations	Conservation of Habitats and Species Regulations 2017 (as amended)
HAP	Habitat Action Plan
Hedgerow Regulations	Hedgerow Regulations 1997
HPI	Habitat(s) of Principal Importance
JNCC	Join Nature Conservancy Council
LERC	Local Ecological Record Centre
LBAP	Local Biodiversity Action Plan
LPA	Local Planning Authority
LNR	Local Nature Reserve
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SAP	Species Action Plan
SINC	Sites of Importance for Nature Conservation
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site(s) of Special Scientific Interest
W&CA	Wildlife & Countryside Act 1981



1.0 Introduction

1.1 Background

WYG was commissioned by Barratt Homes in January 2017 to undertake a reptile presence/likely absence survey of the site known as Sinah Lane, Hayling Island.

This report was prepared by WYG assistant ecologist Dominika Muriénova GradCIEEM.

1.2 Site Location

The site is located within the south west of Hayling Island, centred on OS Grid Reference SZ 70816 99897. The site is located close to the coast with two residential streets separating the site from the shore to the west. South of the site are further residential dwellings, whilst arable fields sit to the north and east. A plan showing the site location can be found in Figure 1.

1.3 Development Proposals

The erection of 195 dwellings, associated open space, pumping station, sub-station with vehicular access via Sinah Lane and change of use of land from agricultural to a Wader and Brent Geese Refuge.

1.4 Purpose of the Report

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

- Determine the presence or likely absence of reptiles on 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;
- 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 Methodology

2.1 Desk Study

2.1.1 Previous Reports

WYG completed an Ecological Appraisal on 17th June 2016 by WYG assistant ecologist Sarah Cruickshank Grad CIEEM. This survey identified habitat suitable for reptiles within the field boundaries.

2.1.2 Local Ecological Records Centre

Information was requested from the Hampshire LERC for information on any nature conservation designations and protected or notable species records within 2 km of the site.

The data search covers:

- Statutory designated sites for nature conservation, namely SACs, SPAs, Ramsar sites, SSSIs, NNRs and LNRs;
- Non-statutory designated sites for nature conservation, namely SINC;
- Legally protected species, such as great crested newts, bats and badger;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance; and,
- Priority habitats or species within the Hampshire LBAP.

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

2.1.3 Online Resources

A search for relevant information was also made on the following websites:

- MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for statutory designations and information on any EPSL applications that have been granted in the local area since 2015.

2.2 Field Surveys

The site was assessed as having *moderate potential* for reptiles based on the hedgerow habitats present.

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 conducted between the 24th April and 13th June 2017 in suitable weather conditions (i.e. between 9°C - 18°C, no precipitation and outside of high winds).



2.3 Limitations

The details of this report will remain valid for a period of **two years** from the date of the survey, 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.

3.0 Baseline Conditions

3.1 Local Records Centre

3.1.1 Local Records Centre

The data provided by HBIC included 4 records of reptiles within 2km of the site comprising adder *Vipera berus* and slow worm *Anguis fragilis*. The nearest record relates to an adder located approximately 0.81km to the south of the site within Beachlands Golf Course. The record is separated from the site by the urban area of West Town and South Hayling.

The nearest record of slow worm was recorded 1.7km to the east of the site at the eastern extent of South Hayling. As with the adder record is separated from the site by the urban area situated along the southern coastline of Hayling Island.

None of the statutory or non-statutory sites within 2km of the site have been designated as they support a population of reptiles.

3.1.2 Online Resources

The search of the MAGIC website identified no EPSL granted for reptiles within 2km of the site.

3.2 Field Survey

Slow worm was the only species of reptile recorded at the site between 24th April and 13th June 2017.

3.2.1 Weather Conditions

Table 1 below provides the weather conditions during each of the reptile surveys conducted on site.

Table 1: Survey Weather Conditions

Survey	Date	Air Temp (°C)	Rain	Wind Speed	Cloud Cover (%)
1	24.04.17	14.7	None	Slight	70
2	28.04.17	13.1	None	Still	70
3	02.05.17	16.8	None	Slight	20
4	05.05.17	12.8	None	Slight	60
5	09.05.17	13.1	None	Slight	80
6	16.05.17	17.8	None	Slight	95
7	13.06.17	16.0	None	Still	90

3.2.2 Survey Results

Table 2 below provides the results of the reptile presence/ likely absence survey which was completed between 24th April and 13th June 2017.

Table 2: Survey Results

Survey	Date	Records			Mat No.
		Species	Adult	Juvenile	
1	24.04.17	Slow worm	2 females	-	1
			1 female	-	28
			1 female	-	43
2	28.04.17	Slow worm	1 female	-	37
			-	1	38
			1 female	-	45
			2 females, 1 male	-	47
3	02.05.17	Slow worm	1 male	-	48
			2 females	-	49
4	05.05.17	Slow worm	1 female	-	1
			1 female	-	42
5	09.05.17	Slow worm	1 female		3
			1 male		6
			-	2	20
			-	1	46
			1 male	-	47
6	16.05.17	No reptiles found			n/a
7	13.06.17	No reptiles found			n/a

Table 3: Calculating Reptile Populations (Froglife, 1999)

Species	Low Population	Good Population	Exceptional Population
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 the above table refer to the maximum number of adults seen by observation and/or under mats by one person in one day.

Based on the assessment in Table 3 it is considered that at present the site has a '**low population**' of slow worm (a maximum of 4 adults recorded in a single day). In addition the presence of juvenile slow worm indicates that the population is breeding on-site.

Most of the slowworms were recorded under refugia along the north-western boundary by residential gardens, with a small number found in south-eastern corner by the public path. As most slow worms were found by residential gardens, it is likely that they use the field margins to move between the gardens. Due to the suitable weather conditions present, the confidence in these results is high. No reptiles were found towards the middle of arable field.

4.0 Relevant Planning Policy & Legislation

4.1 National Planning Policy Framework

The NPPF was adopted in March 2012. Section 11 of the NPPF, *Conserving and Enhancing the Natural Environment* replaces *Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation*. However, government Circular 06/2005, *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*, which relates to PPS9 remains valid and is referenced within Paragraph 113 of the NPPF.

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. The NPPF also states that '*planning policies should promote the protection of priority species populations linked to national and local targets*'.

Furthermore, central and local government policy now points towards ecological enhancement on development sites. The NPPF considers enhancement in the statement '*The planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes....and minimising impacts on biodiversity and providing net gains in biodiversity*'.

4.2 Biodiversity 2020: A strategy for England's wildlife & ecosystem services

Biodiversity 2020 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 the SPI & HPI detailed under NERC Act (see Appendix A for further details).

4.3 Local Plan

The Havant Borough Local Plan (Core Strategy) includes Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough.

- Planning permission will be granted for development that:
- Has particular regard to the following hierarchy of nature conservation designations within the borough (i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar (ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves. (iii) Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR) and other Ancient Woodland.
- 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.
- 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.

4.4 Legislation

All six species of reptile native to the UK are protected under the W&CA 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 W&CA. This legalisation 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.

The smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) are listed in Annex IVa of the EC Habitat and Species Directive and in Annex II of the Bern Convention. They are also listed in Schedule 5 of Section 9 of the Wildlife and Countryside Act 1981 (as amended) and in Schedule 2 of the Conservation Regulations 2010 (as amended). As a result it is an offence to:

- Intentionally or recklessly kill or injure these animals;
- Deliberately disturb these animals;
- Take or destroy their eggs;
- Damage, destroy or disturb or impede access to breeding or shelter sites used by these species; and
- Sell, offer for sale, possess or transport for the purpose of sale or publish advertisement to buy or sell individual reptiles.



5.0 Ecological Constraints, Impacts and Recommendations

5.1 Summary of Findings

Following the desk study and field survey, reptiles have been confirmed as being present on site with a **low population of slow worms**. As no other species of reptile was recorded despite suitable habitat being present, it can be concluded that other reptile species are likely absent from the site.

Given that reptiles have been recorded on site, there is potential adverse effects (e.g. loss of habitat, killing, injury and disturbance during the construction and operational phase) if the whole of the site is to be impacted in the absence of suitable mitigation. Reptile mitigation will need to be implemented at the site to meet the requirements of NPPF and prevent a breach of the W&CA.

5.2 Recommendations

Given that reptiles have been recorded on the development site, reptile mitigation is recommended to be implemented at the site to prevent breaching the W&CA. The proposals for the site have been informed by ecology and ecological input.

The retention of the suitable field margins is considered the most preferable option. These areas would require protection from construction phase impacts through the erection of one-way reptile exclusion fencing surrounding the development area. If this approach is taken, the development area should be cleared under an ECoW, with any reptiles found during the destructive search moved into the protected retained area.

If the option of a habitat retention is not possible, then a reptile translocation strategy will need to be implemented. This should include a methodology that details the translocation exercise to ensure reptiles are moved from the site to an onsite or offsite area of suitable habitat to be agreed in advance with the LPA.

If required, a translocation exercise will be carried out for a minimum of thirty days, and continuing until five clear days (i.e. without finding any individuals) have been achieved. Whilst *in-situ* receptor sites are considered to be a preferable option, the location of possible offsite receptor sites can be discussed with LPA, should the retention of habitat not be possible onsite. Reptile translocation 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.

Following the translocation, a destructive search of the site should be completed under ECoW, with any individual reptiles found moved into the translocation site.

5.3 Habitat Management

Following translocation/displacement works, it is recommended that the cleared works areas are regularly managed to maintain a short vegetation height unsuitable for reptiles. This will seek to prevent future establishment of a reptile population in these areas and thus avoid potential impacts during the construction phase of the development.

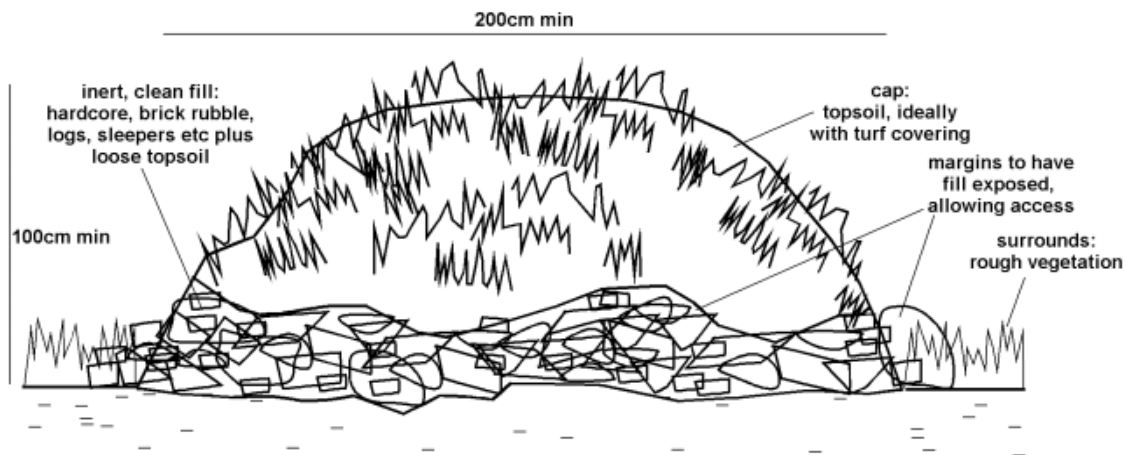
In addition it is also recommended that a programme of works is implemented post-construction to maintain suitable vegetated areas for reptiles. The management of habitat on site both during and post-construction will be further detailed in the EMMP.

5.4 Enhancements

It is a requirement of the NPPF to provide enhancements for biodiversity as part of development. The following measures are proposed in order to enhance the site for reptiles.

It is recommended that the incorporation of hibernacula into the proposed development site will enhance the habitats at the site and act as a release point for the translocation. This is likely to reduce the potential for predation immediately following individuals being moved. A design of hibernacula is presented in Drawing 1, below.

Drawing 1: Taken from the Great Crested Newt Mitigation Guidelines



There is further opportunity to enhance retained areas of the site for reptiles through the planting a species-rich native plant composition, which will attract a range of invertebrates suitable for foraging reptiles as well as providing additional cover for reptiles either resting or in hibernation. A species-list of potentially suitable plants for this purpose will be detailed within the EMMP.



6.0 References

- Chartered Institute for Ecology and Environmental Management (2013). Guidelines for Preliminary Ecological Appraisal.
- Communities and Local Government (2012) National Planning Policy Framework.
- Gent, T. & Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.
- WYG (2018). Sinah Lane, Hayling Island Extended Phase 1 Habitat Survey.



FIGURES

Figure 1 – Site Location Plan



Rev	Date	Notes
A	28/06/18	Initial map production

Legend

Site Boundary

0 50 100 200 300 400 Metres



Site Location Plan

Project Name
Client Name

Scale at A3: 1:8,996	Project No: A092944-3	Drawing No: Figure 1	Revision: A
-------------------------	--------------------------	-------------------------	----------------

Drawn by: Ben Cooke	Drawn date: 28/06/2018	Approved by:
------------------------	---------------------------	--------------

Contains Ordnance Survey Data © Crown copyright and database right 2017. © Northern Ireland Environment Agency. Open Government Data reproduced contains public sector information licensed under the Open Government Licence v3.0 Other Credits: Contains OS data © Crown Copyright and database right 2017