REPTILE PRESENCE/ABSENCE SURVEY

Ref: 752 RS	**Barwick Road**
Client:	Oliver Davis Homes
Date of Completion:	09/10/22 v1
Principal Author:	Edward Clark

	Name	Company	Role
REPORT AUTHOR	Edward Clark	ECOassistance	Ecological Consultant
REPORT REVIEW	Julia Blackwood	ECOassistance	Director
SITE SURVEYOR	Edward Clark	ECOassistance	Ecological Consultant
SITE SURVEYOR	Matt Kelk	ECOassistance	Ecological Assistant

1 Executive Summary

ECOassistance were commissioned to undertake a reptile presence/likely absence survey and population assessment to inform a planning application on a site adjacent to Barwick road in Dover, Kent.

The site will be subject to a planning application for residential development.

The survey effort carried out was above acceptable industry standards and all of the survey visits complied with guidance on timings and prevailing weather conditions and were carried out within the optimum survey period.

The results show that a low population of slow worms are present on the site. A mitigation plan to translocate reptiles away from any designated works areas is required.

Table of Contents

2 Introduction

ECOassistance were instructed by Oliver Davis Homes (Hereafter: the client) to undertake surveys to establish the presence or likely absence of reptiles on land to the south of Barwick Road, Dover, Kent (Hereafter: the site).

This report has been prepared to inform on ecological constraints specifically with regards to protected reptile species after suitable reptile habitat was identified at the site during a Preliminary Ecological Appraisal (PEA) carried out by Native Ecology in July 2022[1].

All native reptiles are listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).

Smooth snakes, sand lizards and pool frogs are designated and protected as European protected species (EPS). EPS are protected under The Conservation of Habitats and Species Regulations 2017.

For EPS it is an offence to:

- deliberately kill, injure, disturb or capture them
- deliberately take or destroy their eggs
- damage or destroy their breeding sites and resting places
- possess, control or transport them (alive or dead)

For smooth snakes and sand lizards, it is also an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly:

- disturb them while they occupy a structure or place used for shelter or protection
- obstruct access to a place of shelter or protection

All other native reptiles are protected under the Wildlife and Countryside Act. It is an offence to kill or injure:

- adder
- grass snake
- common or viviparous lizard
- slow worm

The key objectives of the reptile presence/absence survey is to:

- assess the presence or likely absence of reptiles within the site and its local environs.
- if reptiles are present on the site, give an indication of the population size of each species present.
- recommend appropriate mitigation where necessary and suggest potential enhancements.

This report describes the survey findings.

[1] 1034_R01_Preliminary Ecological Appraisal

3 Methodology

Survey work was undertaken by Edward Clark and Charlie Birch. Edward and Charlie are experienced herpetological surveyors and have been carrying out reptile surveys and mitigation for a period of more than 24 years combined.

The surveys undertaken follow guidance including the Herpetofauna Groups of Britain and Ireland (HGBI) Guidelines, the Herpetofauna Workers Manual 2003 and: Froglife Advice Sheet 10. The reptile survey included all of the following measures:

- The survey utilised bituminous roofing felt (0.5m x 1m) to create artificial refugia to attract reptiles.
- Refugia were laid out/set at a minimum density of ten per hectare in suitable habitat.
- Refugia were left for a minimum period of seven days to 'bed in' prior to commencement of the survey.
- Refugia were inspected for reptiles on seven separate survey visits during optimal weather conditions.
- Survey visits were not carried out on consecutive days.
- Records were kept on an ECOassistance recording form (with details of the reptiles encountered including species, gender and breeding condition and prevailing weather and ground conditions recorded).

An overhead satellite image indicating the location of the refugia is shown in the results section.

Froglife (1999) basic means of evaluating reptile populations was used to predict 'low', 'good' or 'exceptional' populations based on the number of adult reptiles of each species recorded during a single survey visit (using a density of 10 refugia per hectare). Table 1 below shows the parameters for assessing population class size.

Table 1: Assessment criteria for reptile populations

Species	Low Population Score 1	Good Population Score 2	Exceptional Population Score 3
Adder	<5	5 to 10	> 10
Grass snake	<5	5 to 10	> 10
Viviparous lizard	<5	5 to 20	> 20
Slow worm	<5	5 to 20	> 20

The suitable habitat on the site measure c.0.9 hectares comprising mosaic habitat of grassland, ruderals and light scrub.

A total of 20 refugia were placed into the suitable habitat. It should be noted that this is a much higher density (>2x the density) of reptile refugia than recommended by Froglife. More refugia were deployed in order to increase the opportunities of finding reptiles and/or have more confidence in a negative result.

4 Constraints and Limitations

By placing more than the recommended density of refugia, observational data would be subject to further extrapolation and calculation for a population estimate rather than simply from reading the table provided by Froglife. Due to the low number of reptiles that were present this did not prove to be necessary as numbers were within the low population score range anyway.

The measurement for the area of suitable habitat within the site is an estimate. Large areas including the buildings and hardstanding are unsuitable. Of the remaining habitat which has been estimated at 0.9 hectares, most is sub optimal and dominated by scrub.

5 Results

During the surveys a peak count of one adult slow worm was observed on the visit of 24/09/22.

The results of the surveys including the prevailing weather conditions and time on site are shown in Table 2 below.

Table 2: Survey results form

Survey Date						
06/09/2022	10/09/2022	18/09/2022	22/09/2022	24/09/2022	28/09/2022	03/10/2022
Cloud 0%, wind 1, 18°c	Cloud 70% 19°,	Cloud 70%, 11°, wind 2	Cloud 20%, wind 1, 16°c	cloud 80%, wind 4, 14c	Cloud 90%, wind 1, 14°c	Cloud 10%, 16°c, wind1
15:30	14:50	09:50	10:00	10:50	14:20	16:20
Nil	Nil	Nil	1 Juvenile Slow worm	1 female slow worm	Nil	Nil

6 Conclusion

Reptiles are generally active from March to October. The Froglife advice sheet 10 states that 'the most profitable months for surveying tend to be April, May and September. This survey was almost entirely carried out in September and therefore carried out during the optimum survey period. The survey was also carried out in ideal weather conditions.

Just over two times the recommended density of refugia were deployed in order to give more confidence in a negative result.

The survey findings are that a low population of slow worm is present on the site.

Development without suitable mitigation would have a negative impact on the animals and their habitat and could lead to harm or mortality which would constitute and offence under The Wildlife & Countryside Act.

7 Recommendations

In order for proposed development works to be lawful, every reasonable effort has to be taken not to injure or kill slow worms.

There is likely to be only a low population present but the nature of the habitats means it is not straightforward to manage the habitats and displace the reptiles to the surrounding areas as might be the case for a grassland site. The habitat contains piles of rubble and scrub that are likely to be used by the reptiles.

In order to develop the site it will be necessary to translocate the slow worms away from harm and out of the proposed works area. In order for this to be possible there is a need to find a suitable receptor site/area to which the animals can be translocated prior to works commencing.

Once a receptor site is determined a mitigation plan can be submitted to the Local Planning Authority and this can be conditioned with planning approval.

8 References

JNCC (2003). Herpetofauna Workers' Manual, JNCC, Cambs.
Gent, A.H and Gibson, S.D eds (1998). Herpetofauna Workers Manual. Joint Nature Conservation Committee, Peterborough.Herpetofauna Groups of Britain and Ireland (1998) Evaluating Local Mitigation/ Translocation Programmes: Maintaining Best Practice and Lawful Standards. HBGI Advisory Notes for Amphibian and Reptile Groups. Froglife, Halesworth, Suffolk.
Natural England (2018) Reptiles: surveys and mitigation for development projects https://www.gov.uk/guidance/reptiles-protection-surveys-and-licences
Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Frogife, Halesworth

Appendix 1: Review of legislation protecting reptiles

The four widespread reptile species (grass snake, adder, common lizard and slow worm) found in Kent are all protected under Schedule 5, section 9 of the 1981 Wildlife and Countryside Act (1981), as amended by the 1988 Wildlife and Countryside Act 1981 (variations of schedules) Order, against intentional injury or killing (section 9(1)) and trade (section 9(5)). They are also listed under Appendix III of the Bern Convention; Article 8 of the convention regulates exploitation and sale of Appendix III species to maintain population levels. There is no specific protection for habitats (under Schedule 5, section 9(4) of the 1981 Act, as amended by Schedule 12 of the 2000 Countryside and Rights of Way Act) in the case of slow-worm, grass snake or the other commoner reptiles.

The widespread reptiles are also priority species for the maintenance of biological diversity in England, listed in Section 41 of the 2006 Natural Environment and Rural Communities Act.
Listing on Schedule 5, section 9(1) of the 1981 Wildlife and Countryside Act gives slow-worm the status of protected species in terms of planning policy. Government planning policy guidance throughout the UK consistently identifies the conservation of protected species as some consideration that local planning authorities should consider when determining planning applications. For instance, ODPM's Circular 06/2005 (paragraph 98) states "The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat". Planning policy further states that "It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision' (ODPM Circular 06/2005; paragraph 99).

While the legal protection for the widespread reptiles is more narrowly focused on avoidance of killing or injury, in terms of planning policy where reptiles occur it is desirable to maintain their conservation status in the wider area of the development site.

Appendix 2: Refugia/trap locations (indicative plan)