



Project

Broadchalke Road, Bishopstone
Reptile Survey Report

Project No

EC1973

Client

Cherrington Planning

Date

October 2024



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Client:

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Project Manager Disclosure:

The advice which we have prepared and provided is true to the best of our knowledge and utilises information available at the time. The advice has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct.

Quality check completed by:

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Date

October 2024

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Summary

Following an Ecological Appraisal, enims Ltd were commissioned to carry out reptile surveys at the land at Broadchalke Road, Bishopstone. The Ecological Appraisal found areas of habitat with reptile potential noted within the vicinity of the site. As the proposed works could potentially cause foreseeable injury or death to species protected under UK nature conservation legislation, it was considered necessary to perform specific reptile surveys so that impacts could be more precisely predicted.

Seven specific reptile surveys were carried out, using a combination of visual searches and artificial refugia checks, in accordance with the Joint Nature Conservation Committee's Herpetofauna Workers' Manual.

No reptiles were found during each of the survey visits. Habitats suitable for foraging reptiles are present, generally around the edges of the application site as well as the adjacent surrounding fields. Refuge and hibernation opportunities are also provided by rubble, tree roots, hedgerow and scrub habitat on site. Therefore, it is possible that reptiles may be present on site should they be in the local area at the time of site clearance works, however, it is not anticipated that this would be more than an individual or low numbers of individuals. Survey work has confirmed that the application site does not support a significant reptile population.

To protect reptiles which may be opportunistically present at the time of works, a Precautionary Method of Working for clearance of suitable habitat should be followed including ecological supervision and timing works to avoid disturbing activities during the reptile hibernation period. Hibernacula should be created to compensate lost habitat and be used to relocate reptiles should they be present during works, This should be retained post-development, along with areas of shrub and tree vegetation on the northern boundary of the application site.

With adherence to the mitigation steps proposed here, it is predicted that there will be no negative impact on a protected reptile species, or their conservation status, as a result of the proposed works

1 Introduction

1.1 Context and Site Description

enims were commissioned in August 2024 to carry out reptile surveys on the land near Broadchalke Road in Bishopstone, as the proposed works could potentially cause foreseeable injury or death to species protected under UK nature conservation legislation, it was considered necessary to perform specific reptile surveys such that impacts could be more precisely predicted). This is to support a planning application for proposed development of residential development.

The application site is located off Broadchalke Road near Bishopstone (around grid reference SU 07542 26336) and is situated within the administrative authority of Wiltshire Council. The site is approximately 1ha in size. The application site was an agricultural site comprising a field and three old farm buildings. Areas of woodland and scrub habitat were also present on site, along with scattered trees on the boundaries. Residential properties were located to the east and west and an arable field was immediately adjacent to the northern boundary. Broadchalke Road ran along the southern boundary of the application site. Overall, the site and surrounding landscape indicates optimal habitat for reptiles, especially south of the road.

Plans showing the location of the site and surrounding landscape are included in Figures 1 and 2 in Appendix A.

1.2 Project Overview

Proposals are for a residential development comprising 15 units with associated gardens, parking and access roads as well as communal green space.

1.3 Legislation and Policy Context

All native wild reptiles are protected by UK nature conservation legislation. Protection is afforded by Schedule 5, Section 9, of the Wildlife and Countryside Act 1981 (as amended). Furthermore, certain reptile species are defined as European Protected Species through inclusion in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); the UK implementation of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

In brief, these legislative instruments make it an offence to intentionally or recklessly capture, injure, or kill any wild reptile in the UK. Places of shelter used by reptiles are protected from disturbance, damage, destruction, or obstruction while in use. The sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) are further protected under European legislation, making deliberate disturbance an offence, whether or not in a place of shelter.

In addition, all native reptiles are identified as Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Such species are defined 'material considerations' when considering development proposals.

1.4 Local Policy

Other planning policies at the local level, which are of relevance to this development, include CP50 and CP69 of Wiltshire Council's Core Strategy 2015, which satisfies their obligations under the NERC Act. These two core policies require the protection of important nature sites, habitats and species in relation to development and seek enhancement for the benefit of biodiversity through the planning system. Wiltshire Council requires major applications to demonstrate a net gain for biodiversity through the use of Natural England's Biodiversity Net Gain Metric.

2 Methodology

2.1 Reptile Surveys

A standardised methodology was used during reptile surveys, which were carried out in accordance with the Joint Nature Conservation Committee's Herpetofauna Workers' Manual. Thirty heavy duty roofing felt mats were cut into 0.5 m x 0.5 m sections and distributed on site as "artificial refugia". These refugia were strategically placed in the most appropriate habitat, by an appropriately qualified ecologist and allowed to bed-in for one week before surveys commenced. Suitable habitat was chosen to maximise the likelihood of their use by any reptiles present on-site. A total of seven surveys were completed September through to October on days with preferable weather conditions (temperatures between 10°C and 20°C, dry, and with no more than a light wind). During each survey, all the tiles were carefully lifted to check for the presence of any reptiles. Where reptiles were encountered, the species, sex, life-stage, and precise location were recorded.

Visual searches were carried out on transect walks between refugia checks, so that reptiles foraging in the vegetation or basking away from artificial refugia would also be noted.

2.2 Impact Assessment and Approach to Mitigation

A standardised methodology is adopted to undertake impact assessments for reptile species identified within the zone of influence. The zone of influence comprises the area(s) over which ecological features may be affected by biophysical changes caused by the proposed project and associated activities. For example, this can include areas of land along the highways verges that are impacted by the site being assessed. This process supports the design of sufficient yet proportionate mitigation strategies.

Guidance on appropriate levels of mitigation can be found in 'Evaluating Local Mitigation/Translocation: Best Practice and Lawful Standards', published by Herpetofauna Groups of Britain and Ireland (HGBI).

When assessing potential impacts from development operations, the following factors are considered:

- Baseline value of the ecological feature or resource.
- Positive or negative biodiversity outcome.
- Confidence in predictions.
- Magnitude of impact.
- Extent of impact.
- Duration of impact.
- Reversibility of impact.
- Timing and frequency of impact

2.3 Personnel

Surveys were led by Pete Satchell, managing director of enims Ltd. Pete was assisted by assistant ecologist Holly McIndoe all of whom are experienced in widespread reptile ecology and field survey techniques.

3 Survey Results

3.1 Reptile Surveys

No reptiles were found during the course of the survey.

Refer to Appendix B for full survey results, including meteorological data.

3.2 Data Constraints

The survey commenced in the beginning of September with weekly surveys carried out weekly to October. Four surveys out of the seven were conducted outside of guideline recommendations to be done before 11am or after 4pm. However, this timing advice relates to avoiding the hottest part of the day when temperatures are more likely to exceed the maximum for survey. All survey visits were within the temperature guidelines and therefore this is not believed to be a constraint to the survey results. Although best practice states that surveys should be carried out over a longer period of time, the visits were at least three days apart.

The data and conclusions presented here are an evidence-based assessment of the current status of the application site. Should the scheme be delayed beyond 18 months from the date of the survey, it is recommended that repeat assessment be undertaken in order to ensure the continued validity of conclusions.

4 Assessment and Recommendations

4.1 Discussion

During the seven presence/likely absence survey visits conducted during September and October 2024, no reptiles were recorded. There is good quality reptile habitat onsite and immediately adjacent. The longer grassland habitat on-site around the edges of the application site is suitable for foraging, whilst refuge and hibernation opportunities are provided by rubble, tree roots, hedgerow and scrub habitat. The application site is connected to a wide landscape of arable fields in every direction with grass field margins providing movement across the wider landscape and woodland pockets to the north. The nearby roadside verges are likely to provide undisturbed suitable habitats. Records of common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*) are present in the local area and grass snake (*Natrix natrix*) have large home ranges covering many kilometers. Due to the optimal habitat on site and surrounding area, reptiles may utilise the site occasionally for foraging, breeding and hibernating due to the connectivity between the site and habitats to the east and west.

According to available guidance (Herpetofauna Groups in Britain and Ireland, 1998; Froglife, 1999), based on the findings of the survey and habitats present, and making an allowance based on professional judgement for increased density of artificial refuges, it is determined that the site does not support a significant population of reptiles. It is considered that there is still potential for reptiles to venture on to site occasionally, should they be in the local area, but would not be any more than very low numbers.

4.2 Potential Impacts of Proposed Works

Short term impacts

There is a low risk the proposed works could result in disturbance and the injury or death of reptiles should they be present on-site during clearance.

Long term impacts

The application site has connectivity to surrounding areas providing foraging, hibernation and breeding areas. It is considered that the works would result in a loss of suitable reptile habitat, as a result of new housing and gardens on site. The woodland habitat will remain post-development, along with sections of scrub and a tree along the northern boundary. Overall, a negative impact on the conservation status of the local population of reptiles is not anticipated.

4.3 Mitigation Requirements

Due to the potential for reptiles to be in the area and that individuals may be present on site at the time of works in very low numbers, it is recommended that the site is cleared following a Precautionary Method of Working (PMW). This includes:

- Phased vegetation clearance during the active season (March to October inclusive) using a directional, two-stage cut of suitable vegetation. To avoid potential conflicts with nesting birds, it may be possible to cut scrub vegetation down to approximately 300mm using hand held tools over winter, with ground clearance then completed during the reptile active season.
- Careful dismantling of potential refuge / hibernacula such as rubble and woody piles.
- Supervision by a suitably qualified ecologist of habitat clearance works.

At the start of works, a hibernaculum should be constructed away from the site works on the north-west or north-east boundary corner of the application site in suitable habitat that will be retained in the long-term. Construction of a hibernacula should comprise placing rocks, logs, and dead wood into a shallow pit which should be filled just proud of ground level then loosely capped with turf moss or topsoil (Figure 4, Appendix E). This area will act as a receptor site should any reptiles be found during clearance and provide compensatory habitat for that lost or disturbed. It may be possible to use clean rubble and logs obtained from the site as hibernation features are dismantled and the first phase of vegetation cutting takes place.

The loss of scrub habitat from the northern boundary of the site should be kept to a minimum and the mature ash tree must be retained and protected, along with the woodland habitat. Once the hibernaculum has been constructed, it should be made clear to all on site that it is an ecological feature that must not be disturbed during construction activities. There should be at least a 0.5m buffer around the hibernaculum.

5 Conclusion

Following the recommendations given in the Ecological Appraisal, targeted reptile surveys were carried out within the application site during September and October 2024. During the survey, no reptiles were found. These results rule out the likelihood of a high population of reptiles present, however due to the ideal habitats in the surrounding areas, the site still has potential to support occasional foraging reptiles within the edges of grassland fields. Habitats suitable for foraging reptiles are present, generally around the edges of the fields. The scrub habitats provide suitable breeding and hibernating habitats.

As these habitats are present, any works proposed may injure or kill any individual reptiles that may be present on site at the time of works. Therefore, to protect reptiles which may be present at the time of works, a Precautionary Method of Working of vegetation clearance should be followed.

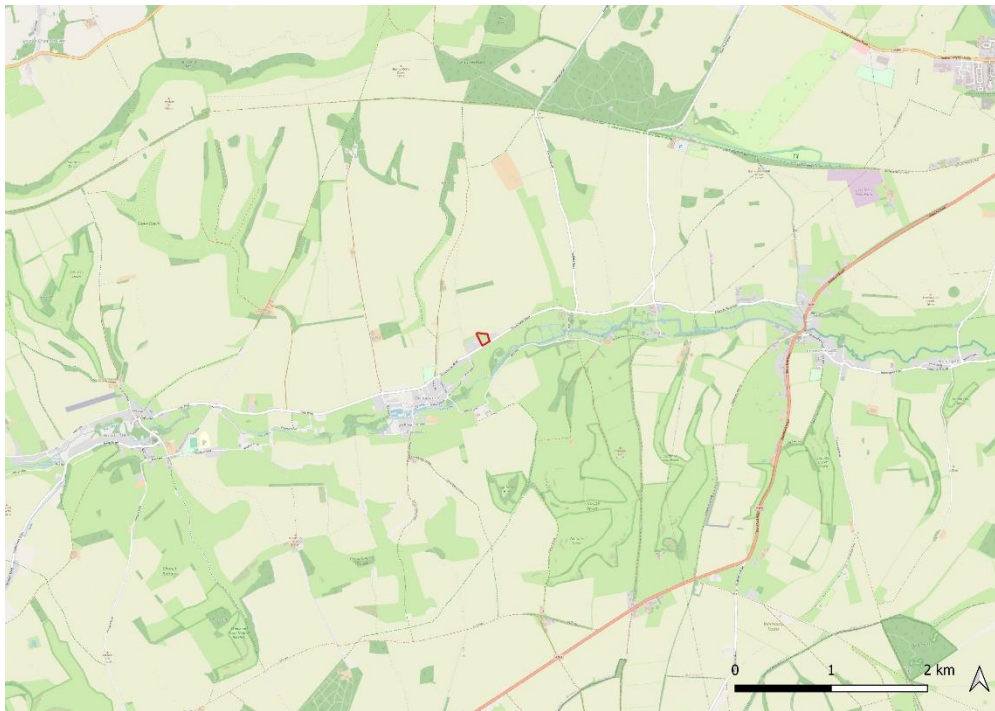
Habitat connectivity should not be destroyed therefore vegetation loss on the northern boundary should be minimized and the woodland habitat retained. A hibernaculum should be created to relocate any reptiles which may be present during works, and this should be retained post works.

6 References

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*. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI, c/o Froglife, Halesworth.

Appendix A: Aerial Photograph of the Site.



*Figure 1. Location of application site (red line) and surrounding landscape
(map data: QGIS 3.10, OpenStreetMap)*



*Figure 2. Application site red line boundary
(map data: QGIS 3.10, Google 2023)*

Appendix B: Reptile Survey Data

Weather:	Clear & still		
Temperature	15°C	Survey No./Date	1 – 11.09.2024
Start time:	14:00	End time:	15:00
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Weather:	Cloudy & still		
Temperature	14°C	Survey No./Date	2 – 14.09.2024
Start time:	09:30	End time:	10:30
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Weather:	Cloudy & still		
Temperature	14°C	Survey No./Date	3 – 27.09.2024
Start time:	14:00	End time:	15:00
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Weather:	Clear & still		
Temperature	13°C	Survey No./Date	4 – 03.10.2024
Start time:	10:00	End time:	11:00
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Weather:	Clear & still		
Temperature	14°C	Survey No./Date	5 – 09.10.2024
Start time:	09:30	End time:	10:30
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Weather:	Clear & still		
Temperature	15°C	Survey No./Date	6 – 12.10.2024
Start time:	12:00	End time:	13:00
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Weather:	Cloudy & still		
Temperature	13°C	Survey No./Date	7 – 16.10.2024
Start time:	12:00	End time:	13:00
Refuge Number	Species Found	Notes (sex, life stage, other information)	
No reptiles found			

Appendix C: Artificial Refugia Map



Figure 3. Reptile mat deployment (orange)

Appendix D: Site Photos



Photograph 1. Modified grassland with tall sward and old hay piles



Photograph 2. Scrub, common nettle and scattered trees along northern boundary



Photograph 3. Scrub near south boundary

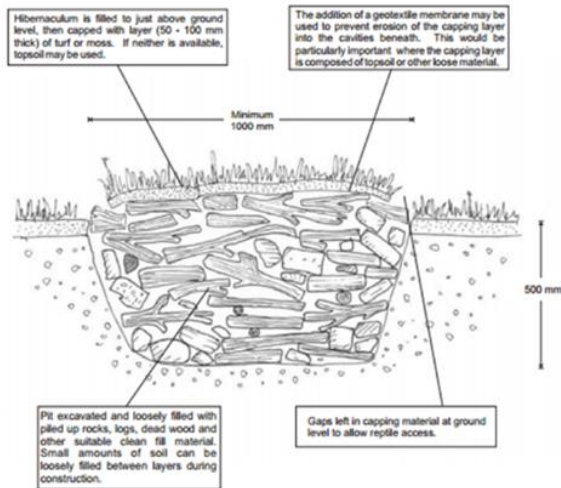


Photograph 4. Rubble pile at edge of woodland habitat

Appendix E: Hibernacula

Hibernaculum on free-draining ground

Where ground conditions allow, the hibernaculum should be incorporated into a shallow pit. This design is more likely to remain frost-free, and will be less obtrusive and thus unlikely to be subject to interference.



Hibernaculum on impermeable ground

Where ground conditions are impermeable, then an 'above-ground' or mounded design should be utilised in order to prevent the hibernaculum from flooding. This design should also be used if it is not possible to excavate a pit for any other reason.

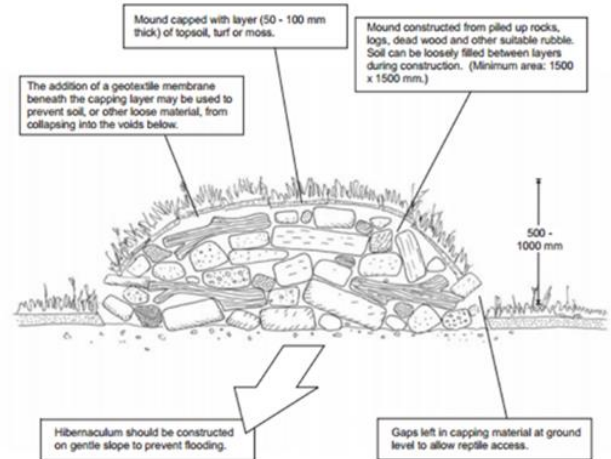


Figure 4. Hibernacula design