



Reptile Mitigation Report

Orchard Mews,
West End

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Report	Reptile Mitigation Strategy
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Executive Summary

Ecosupport Ltd was instructed by Macra Ltd to undertake Phase II reptile surveys of the Orchard Mews, West End site that may be affected by the proposed development of 8 units with associated gardens, garages and a road linking the dwellings to Westgate Mews. This was required following the results of the Preliminary Ecological Appraisal (PEA) previously carried out by Ecosupport Ltd., which identified:

- Low potential for common reptile species

Ecosupport Ltd undertook phase II reptile surveys during April – May 2024. During the surveys, a maximum count of 1 Slow Worm was recorded, confirming a '**low population**' of Slow Worm on site. The results of the surveys and required mitigation, compensation and enhancement measures are outlined within this report.

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was instructed to carry out the Phase II Reptile surveys at Orchard Mews, West End (here after referred to as ‘the site’) between April – May 2024.

1.2 Aims

The aim of the Phase II Reptile surveys was to confirm the presence/likely absence of these protected species within the site.

Reptile surveys were conducted to confirm the presence / likely absence of reptile populations within the grassland areas onsite. Once the presence of reptiles was confirmed onsite, the results from the surveys were used to estimate the population size.

NB If the development does not take place within 18 months¹ of this report then the findings may need to be updated.

1.3 Site Description & Location

The site comprises of a parcel of land to north-east of Westgate Mews, West End, Southampton, SO30 3RE (centered on OS grid reference SU 47362 14194). The north, east and west by residential dwellings and commercial properties, and the south by grassland associated with Utilia Bowl to the south-east (**Fig 1**).

Figure 1. Approximate redline boundary of the site (Google Satellite, 2024).



¹ <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

2.0 RELEVANT LEGISLATION & POLICY

2.1 Legislation

2.1.1 The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

The Conservation of Habitats and Species Regulations 2019 (EU Exit) makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 The Wildlife and Countryside Act (1981) (as amended)

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 part II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrot's Feather (*Myriophyllum aquaticum*).

2.2 Policy

2.2.1 National Planning Policy

The National Planning Policy Framework (NPPF) (2024) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and minimising impacts on and providing net gains for biodiversity including by incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and land should be allocated with the least environmental or amenity value and take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure for the enhancement of natural capital at a catchment or landscape scale.

To protect and enhance biodiversity, plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

The NPPF states determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Potential SPAs and possible SACs, listed or proposed Ramsar sites and sites required as compensatory measures for the previous should be given the same protection as habitats sites.

2.2.2 Local – Eastleigh Borough Local Plan 2016 – 2036

The Eastleigh Borough Local Plan 2016 – 2036 has a number of policies relating to ecology with the relevant ones listed below;

‘General Approach

1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:

- a. protect, conserve and enhance all:*
 - i. international, national and local nature conservation designations;*
- and*
- ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character; and facilitate their adaptation to climate change wherever possible;*
- b. assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);*
- c. seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and*
- d. contribute to major elements of the PfSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).*

International Designations

2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A ‘project level’ Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.

3. The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:

- a. *implementing:*
 - a. *the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and*
 - b. *the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;*
- b. *preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;*
- c. *protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and*
- d. *seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.*

National and Local Designations

4. *Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:*

- a. *there are no alternative solutions;*
- b. *the adverse effects are unavoidable;*
- c. *measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
- d. *there is an overall biodiversity net gain; and*
- e. *if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.*

Priority habitats, protected and priority species and the local ecological network

5. *Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:*

- a. *there are no alternative solutions;*
- b. *the adverse effects are unavoidable;*
- c. *measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
- d. *there is an overall biodiversity net gain; and*
- e. *if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.*

Irreplaceable habitats

6. Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Buffers

7. Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.

Surveys

8. Development will not be permitted unless it can be demonstrated that:

- a. there have been thorough habitat and species surveys;*
- b. the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and*
- c. the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.'*

3.0 METHODOLOGY

The surveys undertaken by Ecosupport were carried out in accordance with best practice guidelines as stated in various resources (Froglife 1999) (Gent & Gibson 1998) in April and May 2024. Artificial refugia comprising of bitumen roofing felt (16 No in total) were distributed throughout the suitable reptile habitats present around the site (**Fig 3**). These artificial refugia warm up faster and retain heat for longer than the ground or surrounding vegetation. Reptiles, being exothermic, shelter under the refuge in order for their bodies to reach the temperature required for activity.

Figure 3. Approximate locations of the reptile refugia placed around suitable habitat (red-line) for reptiles within the site (Google Earth, 2024).



These were allowed to bed in for one week, after which seven visits to the site were undertaken during suitable weather conditions. All the refugia were checked for the presence of reptiles in combination with a visual observation transect.

This survey is considered sufficient to identify the presence or likely absence of reptiles on the site. It does not provide sufficient information to allow an accurate assessment of population sizes, however, it does allow inferences to be made as to population size class in combination with other considerations such as the extent and quality of the habitat.

3.3 Limitations

It is not considered there were any limitations to the survey, which was conducted in the optimal season during suitable weather conditions.

4.0 RESULTS

4.1 Reptiles

4.1.1 Reptile Surveys

A suite of reptile surveys was carried out by Ecosupport Ltd during April – May 2024 which identified a peak count of 1 Slow Worm, a mature adult on site. The results from these surveys to establish reptile presence / likely absence are presented below in **Table 1** & **Figure 4**.

Table 1. Results of the reptile surveys undertaken on site during April – May 2024. AF = Adult Female, AM = Adult Male, SA = Sub-adult, Juv = Juvenile, SW = Slow Worm.

Date	Time	Temperature (°C)	Weather Conditions (Wind, Cloud &, Precipitation)	SW	Mat No
24/04	13:10	11	0, 80%, 0%	-	-
30/04	10:20	15	2, 5%, 0%	-	-
07/05	09:30	15	0, 5%, 0%	-	-
09/05	10:20	17	1, 5%, 0%	-	-
15/05	11:00	17	1, 40%, 0	1 (AF)	1
17/05	08:30	13	0, 30%, 0	-	-
20/05	10:15	16	0, 0%, 0	-	-

Figure 4. Reptile survey results with approximate refugia distribution and numberings.



4.1.2 Evaluation

Based on the maximum number of adult Slow Worms on site (1), while accounting for the density at which refugia were distributed on site, it is considered that a '**Low**' population (as defined by the Froglife guidance 1999) of Slow Worms is present. Slow Worms are however relatively widespread within Hampshire and as such the site it is considered to be **Local Value** for reptiles.

5.0 ASSESSMENT OF IMPACTS IN THE ABSENCE OF MITIGATION

5.1 Introduction

This chapter considers the likely ecological impacts (both positive and negative) of the proposals in the absence of mitigation. In many cases, whilst a potential negative impact is identified at this stage, mitigation can be implemented to ensure no residual negative impacts. Correctly identifying the impacts of the development will ensure appropriate and proportionate mitigation to be designed and implemented.

5.2 Reptiles

5.2.1 Site Preparation and Construction Activities

Site clearance works would result in the loss of reptile habitat. Subsequent construction of the new dwellings and associated landscaping would ensure this loss is permanent. Should reptiles be present during the clearance of these areas, this could result in their death and/or injury. As all reptile species are protected, this would constitute an offence under the Wildlife & Countryside Act (1981). Given the size of the suitable habitat on site, the low numbers of Slow Worms recorded during the survey and the status of Slow Worms in Hampshire, the loss of habitat and individual reptiles would have an **adverse impact** at the **local level** of significance.

5.2.2 Site Operation Activities

The development will result in an increased level of human activity within the site and reduced area of reptile habitat. This is likely to result in increased disturbance of reptiles remaining within these areas and within the receptor site and may reduce their ability to bask and forage. It may also increase their vulnerability to killing by humans and cats. Therefore, it is considered that an **adverse impact is possible** at the **local level** of significance.

6.0 MITIGATION & COMPENSATION

6.1 Introduction

In order to fully comply with applicable legislation and planning policy, it is necessary to mitigate or compensate for any significant ecological impacts.

The chapter deals with the mitigation, compensation and enhancement for each affected species. Mitigation refers to measures that can be undertaken to avoid or reduce ecological impacts, for example, by timing works to avoid active seasons for protected species. Compensation refers to measures taken in order to offset potential significant impacts, for example by providing alternative roost sites to replace roost sites lost as a result of the works.

6.2 Reptiles

6.2.1 Introduction

Due to the legal protection relating to reptiles, it is necessary to implement mitigation to ensure these animals are not harmed as a result of the impending construction works and to ensure that there is no net reduction in the conservation status of reptiles in the local area. Therefore, this mitigation strategy has been produced in accordance with best practice guidelines relating to reptiles and development, published by Gent & Gibson (1998) and the HGBI (1998). The desirable approach is to avoid development within the areas used by reptiles. If this is not possible, reptiles should be moved to areas within the site that are to be retained, enhanced and managed to provide suitable habitat (relocation).

6.2.2 Receptor Area

6.2.2.1 Location & Description

The Herpetofauna Workers Manual (Gent & Gibson 2003) recommends that *in situ* relocations are always preferable and as such, the proposals have retained the existing habitat within which reptiles were recorded. A strip (2.5-5.8m) (c 120m² total area) of hedgerow understory habitat along the eastern boundary of site will be retained as a reptile receptor (**Fig 5**). This will be fenced off from the proposed development during construction to ensure it is protected and retained permanently. This receptor will allow connection to the existing surrounding grassland to the east as currently exists.

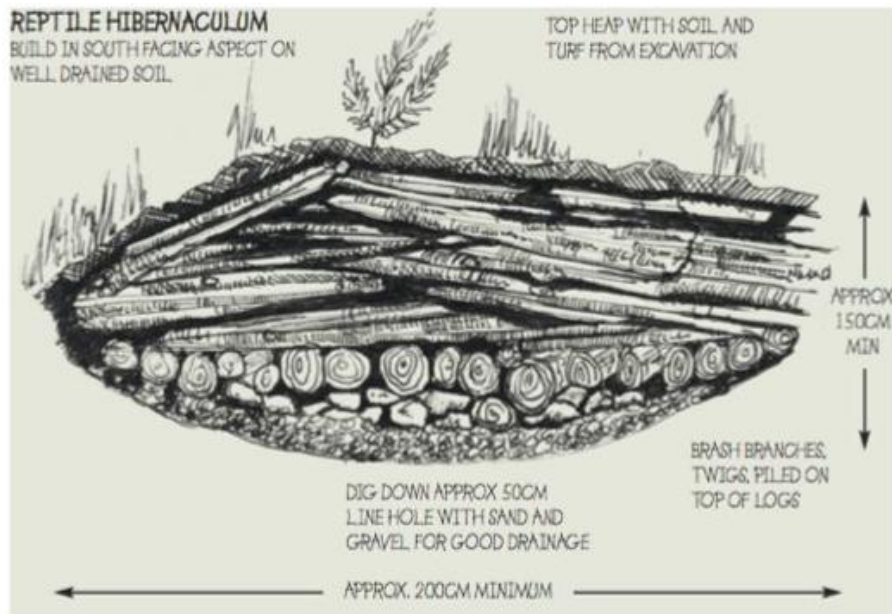
Figure 5. Reptile receptor area (shown in blue) along the eastern boundary of the site, with location of hibernaculum in centre of receptor (green square) and protected during construction by HDPE fencing (blue dotted line).



6.2.2.2 Enhancement of Receptor

The reptile receptor will not be managed long-term but since the Slow Worm were present in a similarly unmanaged habitat this is expected to be sufficient for the individuals present. However, it will be enhanced with a hibernaculum, which will provide a suitable shelter and overwintering population for the reptiles present. The hibernaculum (location provided in **Fig 5**) following the specification outlined within Reptile Habitat Management: Guidelines for Landowners (HART, 2009) (**Fig 6**). This will provide shelter and hibernation opportunities for reptiles as well as providing a significant habitat resource for invertebrates (a food resource for reptiles). The hibernaculum may be constructed of wood / branches from removed vegetation on site and/or construction materials from the demolished buildings such as brick, tiles, etc.

Figure 6. Reptile hibernaculum design as provided in HART (2009).



6.2.3 Passive dispersal

Given the size of site and small population of individuals, it is considered a passive dispersal is the most appropriate method of relocating the Slow Worms. Initially the unmanaged portion of the garden vegetation will be strimmed to 15cm, using hand tools only. Following a period of 24 - 48 hours, vegetation will be taken down to ground level. All works will be directional (i.e. towards retained habitat). These works will be done immediately before any ground works if possible to prevent the habitats regrowing and will be undertaken during the active reptile period (April – September) when temperatures are above 12°C with sunshine. If there is a delay in commencement of works, vegetation will be retained at ground level to prevent the site potentially becoming suitable.

6.2.4 Destructive Search

Following the conclusion of the passive dispersal, a destructive search of the site may be necessary. This would entail the sensitive stripping of vegetation on site using a toothed bucket where habitat is suitable for reptiles and can be focused on areas where reptiles were found.

6.2.5 Protection of Receptor Area

6.2.5.1 During Construction

Once the passive dispersal and destructive search have been completed and the site is due to commence building works, the edge of the reptile receptor used during construction (as per **Fig 5** and which will be marked by semi-permanent 1mm HDPE reptile fence) will have a line of Heras fence or similar placed in front of it. Signage will be placed on this fence with phrases such as:

Protected Reptile Habitat, Do Not Disturb

This level of protection will remain in place for the duration of the construction works and any repairs in the HDPE fence will be made as necessary. Upon completion of the construction works, these fences will be removed, with the permanent fencing installed as below (*NB: if preferred, the permanent fencing may be installed prior to construction rather than Heras fencing to protect the receptor, which will remain in situ after completion of construction*).

6.2.5.2 Once Operational

To ensure the retained reptile receptor is afforded the appropriate level of protection once the site has been built, it will be listed within the S106 (or similar such as a restrictive covenant) as protected reptile habitat along with the installation of a permanent fence along the boundary (to prevent access / disturbance by residents).

6.2.6 Post-Completion Monitoring

Given the low population of Slow Worm present on-site it is not considered post development population monitoring will be needed.

7.0 REFERENCES

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