

Elmfield House, Salisbury

Reptile Survey Report

Elmfield Spinney Development Ltd

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Executive Summary

1.1 Executive Summary

- Low numbers of one species of reptile, twelve slow worms, were recorded during the survey. Using the reptile population score chart developed by Froglife the numbers found are considered to be a low population.
- **Reptiles constitute an ecological constraint to the proposed development.**
- **Undertaking any works on Site which may impact this group of species may result in a criminal offence, see Appendix 1.**
- Given the confirmed presence of low numbers of reptiles which are using the Site a Construction Environmental Method Statement (CEMP) should be prepared. This should set out the practical measures to be employed prior to and during any vegetation and habitat clearance on Site.

Introduction

1.2 Introduction

Daniel Ahern Ecology was commissioned by Elmfield Spinney Development Ltd to complete a reptile survey of land at Elmfield House in Salisbury.

1.3 Site Location and Description

Elmfield House and its surrounding land, hereafter referred to as 'the Site', measures approximately 1.0 Ha and is situated between the A36 and Petersfinger Road, on the outskirts of Salisbury in Wiltshire (OS grid reference: SU 16298 29207).

Figure 1. Redline Site boundary.



1.4 Development Proposals

The proposals are;

- To construct eleven houses on the Site

1.5 Survey Objectives

The aims of the survey were to:

- determine the presence or likely absence of reptiles within the Site;
- if present, to provide a preliminary assessment of population size/s; and

- if present, to provide recommendations for mitigation.

1.6 Quality Assurance

All ecological surveys are led by Ecologists who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level. By joining the CIEEM staff sign up to a professional code of conduct.

Methodology

2.1 Desk Study

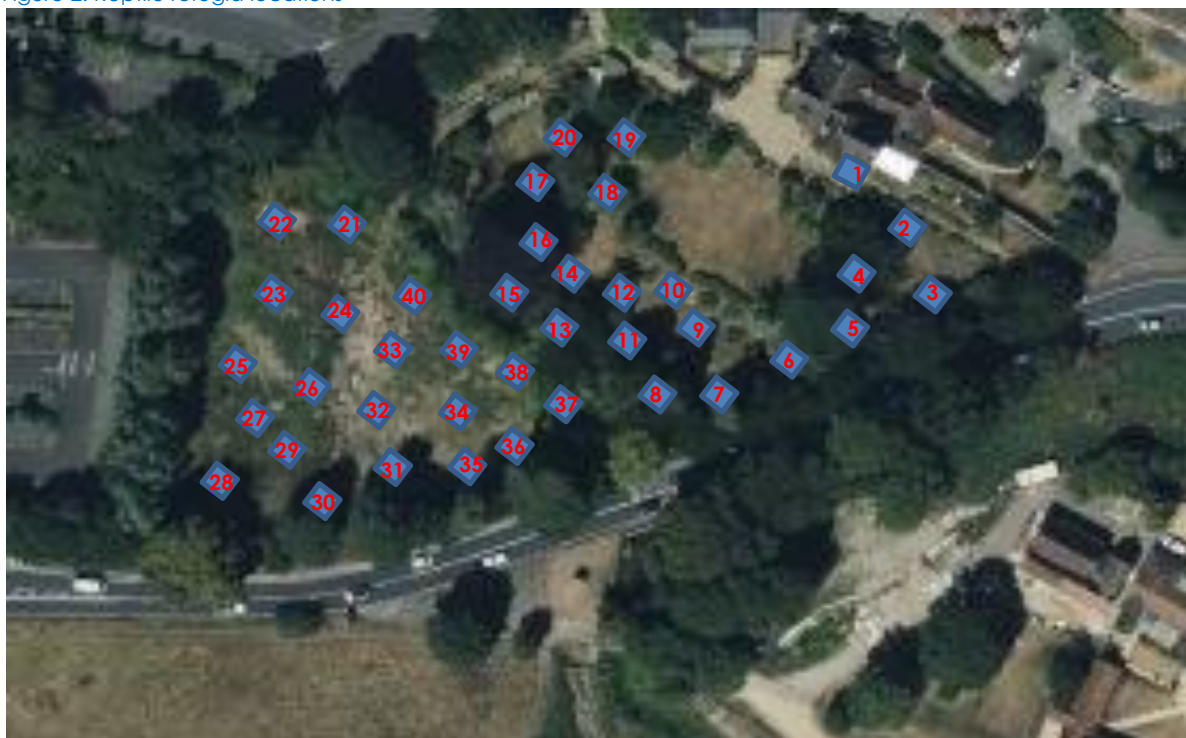
A desk study was carried out with the aim of supplementing the field survey results by collating and reviewing existing ecological information relevant to the Site and the local area.

2.2 Reptile Presence / Likely Absence Survey

The reptile presence / likely absence survey followed the methods set out in The Herpetofauna Workers' Manual (Gent & Gibson, 2003) and Froglife Advice Sheet 10: Reptile Survey (Froglife, 1999). Artificial refugia were placed in areas of suitable reptile habitat. Current best practice guidelines recommend a density of between five to ten refugia per hectare (Froglife, 1999). To determine the presence/likely absence of reptiles, a total of 40 artificial refugia were laid across the whole Site giving a density of just over 40 refugia per hectare, therefore exceeding the amount recommended.

A GPS reading was taken of each refugium, enabling their locations to be accurately mapped. The refugia were approximately 0.5m² in size and made from roofing felt. The artificial refugia material absorbs heat from the sun quickly, providing suitable basking habitat and conditions for reptiles. The location of the refugium can be seen in Figure 2, below.

Figure 2. Reptile refugia locations -



The artificial refugia were installed on 26th May and left for seven days prior to the first survey visit. This allowed time for the refugia to 'bed down' into the habitats and for reptiles to find and start using them. Seven survey visits were undertaken to check the artificial refugia. The surveys were done in suitable weather conditions and either in hazy or intermittent sunshine with little or no wind.

The optimal survey temperature range is 10-18°C; however individual species do have their own optimal basking temperature range (Froglife, 1999), as presented in Table 1 below. Any suitable existing refugia noted within the Study Area were also checked.

During the seven survey visits, any reptiles observed basking on, below or adjacent to the refugia were recorded. Direct observations of any reptiles along the transect routes across the Study Area were also recorded. Any reptiles observed were recorded to species, sex where possible, and life stage i.e. adult or juvenile.

Table 1: Optimal Survey Periods & Temperature Ranges for Widespread Reptile Species (Gent, T., Gibson S (2003))

Species	Survey period	Optimal temperatures (°C)
Adder	Early March - late September	8-16
Grass snake	April - early October	12-20
Common lizard	Early March - early August (adults) August - September (juveniles)	9-18
Slow worm	Early March - early August	No data

The results of the presence / likely absence survey can be used to provide an estimate of reptile population size(s) although this is ideally based on 20 survey visits per season (Froglife, 1999). The population size gives an indication of the importance of a reptile population at a site.

Population size estimates are based on the maximum number of adults seen by observation on or under refugia (placed at a density of up to 10 per hectare) by one person in one day (Froglife, 1999). Reptile population scores are shown in Table 2, below.

Table 2: Reptile Population Scores

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

2.3 Survey Dates and Personnel

The reptile survey visits were undertaken by the following suitable experienced ecologist:

- Daniel Ahern CEnv MCIEEM, Mike Tennick

A summary of the survey dates and conditions are presented in Table 3, below.

Table 3: Reptile Survey Visits – Dates and Conditions

Survey number	Date	Time of visit	Temperature (°C)	Weather conditions
1	04/06/23	08:15	14.0	Cloudy
2	05/06/23	09:15	16.0	Sunny
3	07/06/23	08.30	13.5	Sunny
4	08/06/23	08:30	14.0	Cloudy and warm

5	10/06/23	16:40	24.0	Mild
6	11/06/23	08.40	14.5	Cloudy and warm
7	12/06/23	09.15	16.5	Sunny

2.4 Limitations

The details within this report will remain valid for a period of 24 months; beyond that date it is advised that a review of ecological conditions is undertaken.

Results

3.1 Desk Study

The data search returned the following records of reptile species within 2km of the Study Area.

Table 4: Data Search Results Summary

Species	Number of records (since 1986)	Date of records
Slow worm	9	2009 - 2012

3.2 Reptile Presence / Likely Absence Survey

A low number of slow worms were found during the survey visits.

Table 6: Reptile Presence / Likely Absence Survey Results Summary

Survey number	Date	Refugia number	Species	No. adults	No. juveniles	Total count
1	04/06/23	19, 22	slow worm	3, 1	0	4
2	05/06/23	19	slow worm	-	1	1
3	07/06/23	-	-	-	-	-
4	08/06/23	-	-	-	-	-
5	10/06/23	8, 22, 38	slow worm	1, 1, 2	0	4
6	11/06/23	17, 19	slow worm	1, 2	0	3
7	12/06/23	-	-	-	-	-

Discussion & Requirements

4.1 Discussion

Low numbers of one species of reptile, slow worms, were recorded during the survey, using the reptile population score chart developed by Froglife the numbers found are considered to be low populations.

Reptiles constitute an ecological constraint to the proposed development.

Undertaking any works on Site which may impact this group of species may result in a criminal offence being committed, see Appendix 1.

4.2 Requirements

Given the confirmed presence of low numbers of reptiles which are using the Site a Construction Environmental Method Statement (CEMP) should be prepared. This should set out the practical measures to be employed prior to and during any vegetation and habitat clearance on Site.

References

Edgar, P.; Foster, J. and Baker, J. (2010) *Reptile Habitat Management Handbook and Reptile Conservation*; Bournemouth

Froglife (1999) *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*; Froglife Advice Sheet 10, Froglife, Halesworth

Gent, T. & Gibson, S. (2003) *Herpetofauna Workers' Manual*; JNCC, Peterborough

Appendix 1 – Legislation

Legislation and Policy

4.3 Legislation

4.3.1 Reptiles

The four more widespread reptile species (adder *Vipera berus*, common lizard *Zootoca vivipara*, grass snake, slow worm *Anguis fragilis*) are listed under Schedule 5 of *The Wildlife and Countryside Act 1981* (as amended) and are afforded protection under Section 9(5) of the Act. Under this legislation, a person is guilty of an offence if he:

- Intentionally or recklessly kills or injures any reptile.

This legislation applies to all life stages.

Additional statutory protections for wildlife and biodiversity (which includes protected species, such as reptile species) are provided through the planning system, including:

- National Planning Policy Framework (NPPF) (2012); and
- UK and Local Biodiversity Action Plans

Full details of how biodiversity issues are considered by through planning determination processes are provided in the Phase 1 Habitat Survey report and are therefore not replicated here.