

ecological support, management &
solutions



Palk Road

Havant

Reptile Capture

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1.0 INTRODUCTION

This document outlines the results of the reptile translocation carried out at land off Palk Road, Havant, PO9 1NL. **Fig 1** shows the site in its entirety (yellow outline) along with the receptor site (outlined in red)

Figure 1. Aerial image of the site (yellow outline), along with the receptor site (red boundary).



1.1 Background

The initial Phase I highlighted the potential for reptiles on site and therefore subsequent Phase II work was carried out to establish the presence/likely absence of reptiles. The surveys, conducted during March – April 2015, identified a small population of Slow Worm (*Anguis fragilis*) (HGBI, 1998). As reptiles are protected under the Wildlife and Countryside Act (1981) as amended, a brief mitigation strategy was produced, the works for which were commissioned by Portsmouth Water and contracted to Ecosupport Ltd.

1.1.1 Proposals

It is understood that the proposed works involve a change of land use to a tarmacked storage area to increase the usable area for pipes to be stored by Portsmouth Water.

1.2 Previous Survey Results

1.2.1 Initial Phase I Survey

The Phase I Survey was carried out by Ecosupport Ltd. in April 2015. The survey recorded that the site was dominated by Semi-improved Grassland / Tall Rudural vegetation. Due to a lack of management, areas of dense scrub had begun to colonise areas of grassland. During the Phase I Survey the site was considered to be suitable for reptiles. Consequently, a presence/likely absence survey was recommended to assess the presence, distribution and the conservation value of any reptile populations and to inform appropriate mitigation.

1.2.2 The Status of Reptiles on Site

Following the results of the initial Phase I Walkover Survey, Ecosupport Ltd. carried out a full reptile survey of the site. The surveys were carried out in accordance with published guidance. A total of 22 bitumen roofing felts were distributed throughout the site in areas suitable reptile habitat (for example in the edges of the semi-improved grassland and along areas of dense scrub).

The results of the survey effort are shown in **Table 1** below. Slow Worm was the only species of reptile recorded on site during the survey with a maximum of 3 individuals noted on any one day.

Table 1. Results of the reptile survey.

Date	Time	Temp (°C)	Weather conditions	Reptile Spp	Location
23/3/15	13:40	10	20% cloud cover, calm	-	-
24/3/15	10:30	11	40% cloud cover with intermittent sunshine	-	-
27/3/15	9:15	11	Sunny, clear	-	-
30/3/15	10:04	9	20 % cloud cover, light breeze	1 <i>A. fragilis</i> yearling	By metal pipes
1/4/15	10:36	12	Sunny spells, 25 % cloud cover	1 <i>A. fragilis</i> adult female	Within central grassland area
7/4/15	9:56	13	Sunny and clear	2 <i>A. fragilis</i> adult females	Within central grassland
13/4/15	10:37	14	Mild, overcast with hazy sunshine	2 <i>A. fragilis</i> 1 adult female and 1 adult male	Within central grassland area

1.2.3 Valuation

This population of Slow Worms is considered small according to the HGBI (1998) population assessment criteria. Due to Slow Worms being one of the UKs most common and widespread species their presence on site is therefore considered to be of **Local Value** for reptiles according to the IEEM (2006) assessment criteria.

1.2.4 Impact Assessment in the Absence of Mitigation

Development of the site will entail the clearance of vegetation and topsoil stripping from the site and the tarmacking of the whole site. This would result in damage to and physical loss of habitats present on the site. Should clearance take place whilst reptiles are present, death or injury to these individuals could occur causing an offence under the Wildlife and Countryside Act (1981). If significant numbers are killed, it may have a negative impact on the viability of populations within the local area. The use of the site for storage would ensure that the habitats lost during site preparation would be permanent.

Given the above, the development was likely to result in the potential killing and injuring of individual Slow Worms. In combination, these impacts would result in the loss or partial loss of the population within the local area and subsequently a decrease in the conservation status of reptiles.

2.0 WORKS CARRIED OUT: METHODS OF CAPTURE & EXCLUSION

2.1 Timing

All work has taken place between May and July 2015. This timing has avoided the hibernation period when reptiles are particularly vulnerable to disturbance. The optimum period for capture of reptiles is April to June and September, however it is possible to capture reptiles outside of this period providing weather conditions are suitable. By ensuring that all reptiles were translocated by the end of September, it has allowed them sufficient time to find suitable hibernation sites within the off-site receptor area.

2.2 Pre-translocation

Prior to the capture process starting, the north eastern extent of the development site, which bounds the railway station, was fenced off with temporary exclusion fencing. This fence was installed to ensure that reptiles in the wider area were not able to re-colonise the site following the translocation. Due to the lack of other suitable habitat linked to the site it was not deemed necessary to fence the entire boundary of the development site.

32 bitumen felt reptile refugia were distributed across the development site on the 11th May, at a high density, to facilitate the capturing process.

2.3 Trapping

A Suitably Qualified Ecologist, with experience in reptile capture, carried out the trapping of reptiles during the active reptile season on days where reptiles were likely to be found (i.e. between 10°C and 20°C with little or no wind or rain). This began in mid May and continued until the end of June.

Reptiles were captured by hand from beneath the artificial refugia and placed into a suitable container for transportation to the receptor site. All captured reptiles were released within the Meyrick Road receptor zone on the same day they were captured. Throughout the capture operation, capture rates within each area were monitored.

The HGBI guidelines (1998) recommend that for 'low' populations of Slow Worms, a total of 60 days trapping is required during suitable weather conditions. However given the limited size of the capture site and the low numbers observed during the surveys, it was considered that approximately 30 days capturing would be sufficient to obtain the 5 negative days required by the relevant guidance (Froglife 1999, HGBI 1998). Capture efficacy was enhanced by using a high density of capture refugia along with selective habitat management which aimed to create a mosaic of longer grassy areas with shorter ones. In the longer areas a high density of capture refugia were used with the aim of increasing the Slow Worms reliance of using the refugia for shelter.

2.4 Habitat manipulation

Once the capture operation was underway, habitat on site was managed in order to increase capture rates. Habitat manipulation aimed to create a mosaic of longer grassy areas with shorter

ones. This involved strimming areas of suitable habitat to reduce natural cover for reptiles and increase their reliance on the artificial refugia.

2.5 Relocation

2.5.1 Receptor Site Requirements

HGBI Guidelines (1998) state that receptor sites should be as close to the donor site as possible and should not be subject to planning or other threats for the foreseeable future. In addition, the guidelines also state that receptor sites should be subject to written, agreed and funded pre- and post-translocation management and monitoring programmes. Receptor sites for reptiles require sufficient quantity and quality of habitat to accommodate the population with no net loss of conservation status, long-term safeguard from sufficient land use changes and preferably have some form of protected status (Gent and Gibson, 1998).

2.5.2 Receptor Site Description

The receptor site is situated at Meyrick Road, approximately 0.15km to the south of the development site (**Fig 1**). The site consists of 5535m² of land, of which the northern extent is managed for the benefit of reptiles, through habitat management and the construction of two hibernacula's. This receptor site has previously been used as a receptor site for a nearby development associated with Ranelagh Road. The translocation of reptiles off the Ranelagh Road site resulted in a total of 110 Slow Worms being placed into the Meyrick Road receptor site.

Given the limited area of habitat at the development (donor) site and the low number of Slow Worms identified during the Reptile Survey it was not considered that there would be any issues with the carrying capacity of the receptor site being exceeded, therefore no pre translocation management works were deemed necessary.

3.0 RESULTS

3.1 Capture

Table 2 below contains the details of when captures took place and the numbers of Slow Worms caught.

Table 2. Reptile capture results.

Date	Weather/ Temperature (°C)	Number of Males	Number of Females	Number of Yearlings	Number of Juveniles	Total Slow worms
19/05/15	15, Sunny	4	12	3		19
22/05/15	11, Fine rain		1	1	4	6
25/05/15	13, Mostly sunny	1				1
26/05/15	12, Heavy clouds	1		1	2	4
27/05/15	13, Sunny		1			1
28/05/15	14, Sunny		1			1
29/05/15	11, Cloudy		2		1	3
01/06/15	11, Rain				1	1
03/06/15	17, Sun				1	1
05/06/15	17, Showers			1	1	2
06/06/15	15, Sunny				2	2
08/06/15	16, Cloudy		1		1	2
09/06/15	15, Slight Cloud		1			1
10/06/15	18, Sunny		1			1
11/06/15	18, Sunny		2			2
12/06/15	19, Showers		2		2	4
15/06/15	16, Cloudy	2				2
16/06/15	15, Cloudy		1			1
16/06/15	18, Sunny		2	1		3
17/06/15	22, Sunny		1			1
18/06/15	18, Sunny					0
19/06/15	16, Sunny					0
22/06/15	14, Rain					0
22/06/15	18, Sun/Cloud					0
23/06/15	17, Cloudy					0
23/06/15	19, Sunny					0
24/06/15	19 Sunny					0

27 capture days took place. In total 58 Slow Worms were translocated from the development site to the receptor area Meyrick Road. As is evident from **Table 3**, the highest numbers occurred on the first capture day on 19th May. Numbers significantly dropped following the first day of capture. From the 18th June no reptiles were captured resulting in seven negative capture days, therefore exceeding the five negative visits required by the guidelines to state that sufficient effort has been expended. The capture operation was therefore considered completed.

3.2 Destructive Search

On Thursday the 2nd July the destructive search (using a 360 digger with a ditching bucket) took place supervised by Adam Jessop, the suitably qualified ecologist. During this time one Slow Worm was caught and placed within the receptor area at Meyrick Road.

4.0 Future Works

4.1 Continual Annual Management

Habitat management of the receptor site are detailed in Ecosupports report; 'Reptile Capture and Proposed Management of Meyrick Road POS' (Jessop, 2014). An overview of these works is detailed below.

4.1.1 Annual Cutting

The area north of the post and rail fence within the Meyrick Road site, will be managed for its suitability for reptiles. This area will be allowed to grow with minimum intervention and cut between November and February, thereby minimising harm to reptiles and increasing structural diversity of the grassland vegetation. All cuttings will be removed from site.

Alternating strips of grassland will be cut on a rotational basis every autumn. Vegetation can be graded from a height of 35cm to longer areas with Brambles, with no two sections being cut in the same year to allow reptiles to utilise these areas. All habitat management works should be carried out using a hand operated reciprocating cutter, brush cutter or strimmer.

4.1.2 Monitoring

HGBI (1998) guidelines state that at least 5 years monitoring of the receptor site should be carried out to ensure the translocated population has successfully established. Appropriate monitoring will take place annually over a 5 year period following the methodology outlined within Froglife (1999).

A site visit to assess and remedy any management problems within the receptor site should be undertaken annually by a SQE. This may include the implementation of annual weed management and managing areas of scrub should coverage exceed 20 % by area.

Summary results of this and the monitoring will be made available to the LPA.

4.2 Funding and Safeguard

As part of the Ranelagh Road development it is understood that the Section 106 agreement transferred the ownership and subsequent management responsibilities for the receptor area to Portsmouth Water.

5.0 REFERENCES

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