

ecological support,
management and solutions



Palk Road

Havant

Phase I & Reptile Surveys

April 2015

**Report prepared by Adam Jessop BSc (Hons) MSc
For Portsmouth Water**

Contents

1.0 INTRODUCTION	3
1.1 BRIEF.....	3
1.2 SITE DESCRIPTION & LOCATION.....	3
1.3 PROPOSED WORKS	4
1.4 RELEVANT LEGISLATION AND POLICY.....	4
1.4.1 <i>Relevant legislation</i>	4
1.4.2 <i>Policy</i>	5
2.0 METHODS	6
2.1 FIELD SURVEY METHODOLOGY	6
2.1.1 <i>Phase I Habitat</i>	6
2.1.2 <i>Reptile survey</i>	6
2.1.3 <i>Badger survey</i>	6
2.1.4 <i>Nesting bird survey</i>	6
2.2 DESKTOP SURVEY	7
2.3 ASSESSMENT METHODOLOGY	7
2.3.1 <i>Introduction</i>	7
2.3.2 <i>Valuation</i>	7
2.4 LIMITATIONS.....	7
3.0 SURVEY RESULTS	8
3.1 WALKOVER SURVEY.....	8
3.2 REPTILE PRESENCE/ABSENCE SURVEY	9
3.3 Nesting Birds	10
3.4 OTHER PROTECTED SPECIES	10
3.5 VALUATION	10
3.5.1 <i>Habitats and vegetation</i>	10
3.5.2 <i>Reptiles</i>	10
4.0 MITIGATION, COMPENSATION & ENHANCEMENTS	11
4.1 REPTILE MITIGATION STRATEGY.....	11
4.1.1 <i>Introduction</i>	11
4.1.2 <i>Donor site preparation</i>	11
4.1.3 <i>Receptor site</i>	12
4.1.4 <i>Reptile capture</i>	13
4.1.5 <i>Capture effort</i>	13
4.1.6 <i>Destructive search</i>	14
4.1.7 <i>Management and monitoring of the receptor</i>	14
4.2 RECOMMENDED ENHANCEMENTS	14
4.2.1 <i>Provision of bat boxes</i>	14
4.2.2 <i>Provision of bird boxes</i>	14
5.0 CONCLUSION.....	14
6.0 REFERENCES.....	15

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Portsmouth Water to carry out a Phase I ecological survey of a plot of land off Palk Road, Havant. This assessment was required to identify any ecological impacts that may arise from the proposed development within the site. The main objectives of this survey are as follows:

- Identify current land use distribution of broad habitat types including plant communities of ecological importance.
- Identify and classify any priority habitats,
- Identify signs of suitable habitat features of protected species.

This survey takes no account of seasonal variation and fluctuations in the presence of any species noted that may take up residence following this report. Lack of signs of a particular species does not necessarily confirm absence, merely that there was no indication of its presence during the time of the survey.

If no action or development of this land is undertaken within twenty four months of this report, then the findings of this survey will no longer be considered valid and should be repeated.

1.2 Site Description & Location

The site comprises of a plot of grassland and scrub associated with a pipe storage area used by Portsmouth Water off Palk Road, Havant, PO9 1NL (Fig 1). There are a number of pipes on the site itself (as well as in the adjacent hard standing areas as indicated by the aerial image) as well as waste construction material.

Figure 1. Bing aerial image of the surveyed area outlined in red. North is up.



The northern boundary of the site is bordered by the Havant railway station, whilst industrial work yards and buildings bound the south. The immediate surrounding environs are largely urbanised reflective of the sites location within central Havant.

1.3 Proposed Works

It is understood the proposals involve a change of use for the land to storage to increase the usable area for pipes to be stored by Portsmouth water.

1.4 Relevant legislation and Policy

1.4.1 Relevant legislation

The Wildlife & Countryside Act 1981 (as amended) (HMSO, 1981) is the primary piece of legislation by which biodiversity in the UK is protected. The most relevant areas of the Act to development related activities are:

- The identification and subsequent protection of Sites of Special Scientific Interest (SSSIs), which prohibits damaging activities
- The protection of certain species listed in Schedule 5, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale (it should be noted that all parts of this protection do not apply to all Scheduled species)
- The protection of wild birds and their nests, which prohibits damage or destruction of nests whilst in use.

The Conservation of Habitats and Species Regulations 2010 (known as the 'Habitats Regulations') (HMSO, 2010), pass two EEC Directives into UK law. The Regulations protect sites and species deemed to be of conservation importance across Europe. The most relevant parts of the Regulations to development related activities are:

- The protection of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)
- The protection of species listed within Schedule 2 of the Regulations, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale, this confers some level of habitat protection.

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.

Sections 40 and 41 of The Natural Environment and Rural Communities Act (2006) NERC) place a duty on local authorities to have due regard for biodiversity and nature conservation during the course of a development as well as listing a number of species that are of conservation importance.

1.4.2 Policy

The development would seek to comply with relevant Planning Policy at a national level.

National Planning Policy Framework

Planning Policy Statement 9 (PPS9) was superseded by the National Planning Policy Framework (NPPF) in March 2012. The NPPF states that the planning system should contribute to and enhance the natural and local environment by:

- Recognising the wider benefits of ecosystem services; and
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Other key principles of the NPPF relating to biodiversity are:
 - The conservation of International and National statutorily designated sites;
 - Protection of ancient woodland and veteran trees;
 - The creation, protection, enhancement and management of networks of biodiversity and green infrastructure;
 - The preservation, restoration and recreation of priority habitats and ecological networks; and
 - The recovery of priority species populations.

2.0 METHODS

2.1 Field Survey Methodology

2.1.1 Phase I Habitat

The walkover survey was carried out by Adam Jessop (an experienced ecologist with Ecosupport Ltd) on the 9th March 2015. The survey consisted of a site walkover (loosely based on the "Phase 1" methodology (JNCC, 2003), modified to suit the situation) with all accessible areas of the site and adjacent land (where relevant) covered. The habitats present were generally described, with particular attention paid to their potential to support protected species. Where appropriate the DAFOR abundance scale was used:

Dominant

Abundant

Frequent

Occasional

Rare

2.1.2 Reptile survey

Based on the suitability of the habitat available within the grassland, a reptile survey was carried out to the guidelines published in Froglife advice sheet 10 (1999) to establish the presence or likely absence of reptiles using the site. A total of 22 bitumen roofing felts were distributed throughout the site covering all suitable habitat areas in March 2015. The refugia was allowed to 'bed in' for a week prior to any checking taking place. These were subsequently checked a total of 7 times in suitable weather conditions (defined as temperatures of between 9 – 18°C with intermittent periods of sunshine) by Adam Jessop. The results of this survey are presented in **Table 1**.

2.1.3 Badger survey

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, 'mammal paths' and setts. The survey was carried out during the initial walkover on the 9th March 2015.

2.1.4 Nesting bird survey

To prevent any potential issues with nesting birds at a later stage in the proposals it was recommended that all scrub be cut back on site. Prior to doing this a nesting bird survey was undertaken (over the course of 1 hour) which involved both observation and searches to ascertain:

- a) if any nests were present;
- b) if nests were present were they active and
- c) monitor bird activity to establish if any nesting activity was underway

2.2 Desktop Survey

Due to the nature of the proposals it was not considered necessary to carry out a desktop survey in support of this application, as there will be no residential element.

2.3 Assessment Methodology

2.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on *IEEM's Guidelines for Ecological Assessment in the UK* (IEEM, 2006). Although this assessment does not constitute a formal Ecological / Environmental Impact Assessment, the IEEM guidelines provide a useful framework for assessing ecological impacts at any level.

2.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/ or social significance.

2.4 Limitations

The reptile survey was carried out at an appropriate time of year and under suitable weather conditions with reptiles identified on site. The survey is therefore not considered to be significantly constrained.

3.0 SURVEY RESULTS

3.1 Walkover survey

The following broad habitat types were identified on site during the walkover. Where practical abundances have been given using the DAFOR scale.

- **Dense Scrub** – Where the site has been left derelict for a number of years, significant areas of Bramble (*Rubus fruticosus* agg) dominated scrub have begun colonising areas of the grassland and over where materials have been dumped (Fig 2). The scrub extended along the entirety of the southern boundary whilst also present along the northern extent bounding the fence line of the railway station.

Figure 2. Bramble scrub at entrance to site along with waste materials.



- **Semi - improved Grassland / Tall Ruderal** – This was the dominant habitat type on site (Fig 3) and was of limited species diversity and damp in parts. The more grassy areas were dominated by tussocks of Cocks Foot (*Dactylis glomerata*) and False Oat Grass (*Arrhenatherum elatius*) with occasional herbs Hogweed (*Heracleum sphondylium*), Yarrow (*Achillea millefolium*), Lesser Celendine (*Ranunculus ficaria*) and Thistles (*Cirsium* spp). The Ruderal species were defined by abundant Horsetail (*Equisetum arvense*) (which was also found with the grassy areas) with occasional – rare Ragwort (*Jacobaea vulgaris*), Teasel (*Dipsacus fullonum*), Willowherb (*Epilobium* spp), Ivy (*Hedera helix*) and Stinging Nettle (*Urtica dioica*).

Figure 3. Tussocky grassland area on site and Bramble transitions providing good habitat for reptiles.



3.2 Reptile Presence/Absence survey

The results of the seven checks of the reptile refugia are presented in Table 1 below.

Table 1. Results from reptile surveys.

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	Within central

				females	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

3.3 Nesting Birds

Despite a high level of bird activity on site (which was mainly associated with a Elder (*Sambucus nigra*) tree along the southern boundary fence), no nests were found or evidence of nesting activity observed. It is understood that the client employed some ecological contractors to remove the scrub the day after this survey was undertaken.

3.4 Other Protected Species

There were not considered to be any other potential impacts to protected species based on the results of the field surveys and nature of the on site and surrounding habitats.

3.5 Valuation

3.5.1 Habitats and vegetation

The grassland on site was considered to be of negligible ecological value (i.e. of value within the zone of influence only) and despite the scrub providing a potential resource for nesting birds, as this has since been removed it has not been considered within a valuation assessment.

3.5.2 Reptiles

The presence / likely absence surveys have indicated that there is a '**LOW**' population of Slow Worms on site according to the HGBI (1998) population assessment criteria. As this is one of the UKs most common and widespread species their presence on site can be considered a feature of **LOCAL** value according to the IEEM (2006) assessment criteria.

4.0 MITIGATION, COMPENSATION & ENHANCEMENTS

4.1 Reptile Mitigation Strategy

4.1.1 Introduction

The general principles of reptile mitigation entail the protection of reptiles from harm by capturing them and removing them from within the footprint of the development. The favourable conservation status of reptiles within the local area must also be maintained by ensuring there is sufficient suitable reptile habitat within the local area to support the reptile populations from the development site.

Given the nature of this development, the reptile mitigation strategy will follow the below format:

- Fencing of donor site and distribution of high density of capture felts
- Capture of Slow Worms
- Translocation to nearby receptor site associated with Meyrick Road

All works carried out will avoid the hibernation period (November – early March dependant on weather) so as not to harm any reptiles whilst they are still vulnerable to disturbance.

NB Given the timescales within which the client wishes to start on site and the low impact to Slow Worms arising from the mitigation proposals, Ecosupport Ltd staff members will commence the works described below from late April 2015 (i.e. before planning permission is granted).

4.1.2 Donor site preparation

Prior to the capture process starting, the northern extent of the site which bounds the railway station will be fenced off with a temporary exclusion fence. This will likely be a standard specification constructed of polythene with wooden stakes erected within a hand-dug trench to a minimum depth of 30 cm. The purpose of this fence is to ensure once the capture process is underway, no reptiles from outside of the site lead to its re-colonisation. As there is no other suitable habitat linked to the site (i.e. hard standing bounds the remain site boundaries) it is not considered necessary to fence the entire boundary.

Once the fence is in place a high density of capture refugia will be placed (i.e. > 200 / ha) and allowed to 'bed in' for a minimum period of 1 week. The refugia used to survey will also be left *in situ* to add to those used in the capture process.

4.1.3 Receptor site

The proposed receptor site is situated at Meyrick road approximately 0.15 km to the south (**Fig 4**).

Figure 4. The proposed receptor site (outline in red) and the existing site (outlined in yellow).



It has an approximately 5535 m² and was used as the receptor for the nearby development associated with Ranelagh Road (planning condition 40 on application number App/14/01262). During the translocation process (which was carried out by Ecosupport staff members over spring / summer 2014 the results of which are appended) a total of 110 Slow Worms were captured and placed into the site, which has subsequently been managed for the benefit of reptiles (including the construction of 2 hibernacula's). **Fig 5** below provides an indication of the current status of this area, which has been landscaped in accordance with **Plan 1** appended.

Figure 5. The current status of the Meyrick Road receptor site with the 'reptile area' beyond the post and rail fence.



As part of this development, it is understood that the Section 106 agreement transferred the ownership and subsequent management responsibilities for the area to Portsmouth Water (who are therefore seeking to re-use it as a receptor site).

Given the area of the habitat and the likely low numbers of Slow Worms that will be caught from the Palk Road site, there are not considered to be any issues with the carrying capacity of the site being exceeded and no pre translocation management works are necessary.

4.1.4 Reptile capture

Once the refugia have been allowed to 'bed in' they will be regularly checked and any Slow Worms encountered captured by hand by experienced staff from Ecosupport Ltd (using the best practice handling techniques described within Gent and Gibson, 2003). Once captured the Slow Worms will be placed into a large plastic container and immediately transported to the receptor site.

4.1.5 Capture effort

Following the HGBI (1998) guidelines, it is recommended that for a 'low' population of Slow Worms a total of 60 days trapping during suitable weather conditions should be expended. However given the limited size of the capture site and the low numbers observed during the surveys, it is anticipated that 30 days capturing will be sufficient to obtain the 5 negative days required by the relevant guidance (Froglife 1999, HGBI 1998). Capture efficacy will be enhanced through using a high density of capture refugia along with selective habitat management which will seek to create a mosaic of longer grassy areas with shorter ones. In the longer areas a high density of capture refugia will be used which will increase the Slow Worms reliance of using the refugia for shelter. Any

habitat management will be undertaken using a hand held strimmer and cut to a height no lower than 10 cm.

4.1.6 Destructive search

Once the capture process has been completed, works will be carried out to render the habitat unsuitable for reptiles. This will involve a mini digger or similar stripping the topsoil under the careful supervision of an ecologist to ensure that no Slow Worms are harmed. Once the vegetation has been stripped the capture process can be considered complete.

4.1.7 Management and monitoring of the receptor

The Reptile Capture & Proposed Management of the Meyrick Road POS document outlines management practices for the receptor site and this document has been appended.

4.2 Recommended Enhancements

Given the nature of the habitats on site and the proposals, it is not considered appropriate to provide enhancements on the proposed development site itself and instead the below recommendations should be considered applicable to the Meyrick Road receptor site.

4.2.1 Provision of bat boxes

A total of 5 bat boxes should be erected on the suitable trees within the receptor site. The Schwegler 2 with double front panel should be used as in this ecologist experience; these tend to have a high degree of occupation incidence. The boxes should be erected at a minimum height of 3 m from the ground and with the entrance facing in towards the tree.

4.2.2 Provision of bird boxes

A total of 5 bird nesting boxes will also be erected on the suitable trees within the receptor site. A mixture of closed and open fronted boxes should be used which will provide suitable nesting opportunities for a variety of bird species. The boxes should ideally be placed at a minimum height of 1.5 m from the ground.

5.0 CONCLUSION

The proposed development at Palk Road entails the clearance of a area of grassland, scrub and waste to facilitate its use as an increase in the pipe storage area used by Portsmouth Water. The site supports a low population of Slow Worms that is of local value.

The proposals would result in adverse ecological impacts due to the loss of suitable Slow Worm habitat and the potential killing and or injuring of Slow Worms when the site is cleared.

In order to minimise ecological impacts a translocation scheme has been proposed which would see the Slow Worms captured and moved to a nearby receptor site that is within the same clients ownership and has already been sued to receive a Slow Worm population and is therefore suitable to support the specie's. Provided the measures are followed as described within this document, are followed, it is not considered that the proposals would result in any long term ecological impacts.

6.0 REFERENCES

Froglife (1999) Froglife Advice Sheet 10, Reptile Survey, An Introduction to Planning Conducting and Interpreting Surveys for Snake and Lizard Conservation. Froglife

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

Herpetofauna Groups of Britain and Ireland (HGBI) (1998) Evaluating Local Mitigation / Translocation Programmes: Maintaining Best Practice and Lawful Standards

IEEM (2006) Guidelines for Ecological Assessment in the United Kingdom. Institute of Ecology and Environmental Management.

JNCC (2003). Handbook for Phase 1 habitat survey. Joint Nature Conservation Committee, Peterborough



Licence number 1000022432

Amenity grassland



Reptile receptor area –
Rough grassland subject to
seasonal management



Chipped-bark public
pathway with timber edging
18x100mm



Knee-Rail fencing to
prevent public access
within 'Reptile area'



Deadwood log pile –
Invertebrate hibernacula



Reptile hibernacula



Interpretation board



Project Name: **Meyrick Road**
Client: **Foreman Homes**
Title: **POS Landscape Plan**
Date: **August 2014**