the ecology partnership

Reptile Presence/Likely Absence Surveys

Land at Reef Way, Hailsham, East Sussex

The Ecology Partnership, Thorncroft Manor, Thorncroft Drive, Leatherhead, Surrey KT22 8JB
T +44 (0) 1372 364133 E info@ecologypartnership.com W ecologypartnership.com

Contents

LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living creatures are capable of migration and whilst protected species may not have been located during the survey duration, their presence may be found on a site at a later date.

The views and opinions contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

Background

1.1 The Ecology Partnership was by Persimmon Homes South East to undertake a reptile presence/likely absence survey on land at Reef Way, Hailsham.

1.2 The Ecology Partnership previously undertook a preliminary ecological appraisal of the site in May 2018, which highlighted the potential for the site to support reptile species. The surrounding development has undertaken reptile translocations with the receptor site located to the east of the red line boundary. Local records include slow worm, grass snake, common lizard and adder.

1.3 Section 2 of this report sets out the methodologies of The Ecology Partnership's surveys. In section 3 the results of the surveys are presented. Discussions and implications for development are found in section 4. Section 5 presents the conclusions drawn from the report.

Site Context and Status

1.4 The site is located on the northern edge of the current Burfield Valley development on the eastern edge of the town of Hailsham. The site currently comprises an area of semi-improved grassland and areas of dense bramble scrub. The aerial photograph (Figure 1) below shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.

1.5 The aerial photograph (Figure 1) below shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.

Figure 1: Approximate location of the red line boundary

2.0 Methodology

2.1 A terrestrial survey of the site for reptiles (presence or absence) was carried out at the site between 23rd July and the 21st August 2018. Prior to the commencement of the survey, the site was set up with artificial refugia (roofing-felt mats) on 10th July 2018.

2.2 Refugia were placed around the areas of suitable habitat and were left undisturbed to bed in prior to the commencement of the reptile survey (as recommended in the advice from Natural England). Note that the guidelines produced by Froglife (1999) and Gent and Gibson (1998) recommend a density of artificial refugia of at least 25 per ha of suitable reptile habitat. The number of refugia used on site exceeds the recommended minimum.

2.3 The timing and number of survey visits completed were based on the same guidelines referred to above. A total of seven survey visits were made to the site to check the refugia for the presence of reptiles. Visits were only carried out if the weather conditions were

suitable and took place at a variety of times of day in order to maximise the probability of finding reptiles if they were present. On each visit to the site, a minimum of one circuit to check all refugia was carried out.

2.4 Note that whilst checking the artificial refugia, a visual check was also carried out for natural basking sites and refugia on suitable areas of the site. Any refugia – natural or otherwise - were lifted and hand searched for evidence of reptiles, again in accordance with Natural England guidelines.

3.0 Results

3.1 Over seven visits, slow worms (*Anguis fragilis)* and common lizards (*Zootoca vivipara*) were identified on site. The results are summarised in Table 1 below.

Table 1: Reptile survey results

Visit	Date	Temperature (°C)	Weather	Reptile species & number
1	23/07/2018	18	Sunny, scattered cloud	No reptiles
2	01/08/2018	16	Sunny, scattered cloud	One female slow worm
3	11/08//2018	19	Sunny, scattered cloud	No reptiles
4	15/08/2018	19	Sunny spells, light breeze	One female slow worm Four juvenile slow worms Two common lizards
5	17/08/2018	19	Sunny spells, light breeze	No reptiles
6	19/08/2018	19	Sunny, light breeze	No reptiles
7	21/08/2018	18	Sunny spells, no wind	Three male slow worms Five juvenile slow worms Four adult common lizards

3.2 The reptiles were all along the western aspect of the site (Figure 2). The habitat on the eastern aspect is considered to be unsuitable for reptiles.

Figure 2: Location of the reptile mats (squares) and the number of reptiles found under each mat (where white indicated 0 finds, green 0-2 finds)

4.0 Discussion and Recommendations

4.1 Two species of reptile were found on site: slow worm and common lizards. No evidence of any other reptile species on site was found.

4.2 The size of the reptile population can be estimated using the Froglife (1999) scoring system. This system assumes a density of 10 refugia per hectare, a number exceeded in our survey. A population size class assessment, which is based on the number of adults recorded in one survey visit, can be made using Table 2.

Table 2: Population class assessment categories (Froglife 1999)

	Low Population (Score 1)	Good Population (Score 2)	Exceptional Population
Adder	<5	5-10	>10
Common Lizard	<5	5-20	>20
Grass Snake	<5	5-10	>10
Slow Worm	<5	5-20	>20

4.3 According to the Froglife criteria, it is considered that there is a 'low' population of slow worms, and a 'low' population of common lizards.

4.4 To qualify as a Key Reptile Site, the site must meet at least one of the following criteria:

1. Supports three or more reptile species
2. Supports two snake species
3. Supports an exceptional population of one species (See table 2 above)
4. Supports an assemblage of species scoring at least 4 (See table 2 above)
5. Does not satisfy 1-5 but which is of particular regional importance due to local rarity.

4.5 With only two species of reptiles present on site, the site is therefore not considered to be a Key Reptile Site. Regardless of this, mitigation would be required in order to ensure no individuals are harmed during development works.

Reptile Mitigation Strategy

4.6 The proposals are for a residential development the construction of a new residential development with associated car parking and landscaping within the red line boundary. As such, a large proportion of the site will be impacted by the development which would lead to considerable habitat loss and potentially cause harm to reptiles. Therefore, reptiles must be moved outside of the construction zone to ensure that individuals are not harmed by the proposals.

4.7 Mitigation will involve the construction of a reptile fence around the development footprint. The habitats within the fence are to be cleared of reptiles whilst the habitats

outside the fence are to be maintained and enhanced. The reptile fence will be constructed following the standard below (Figure 3).

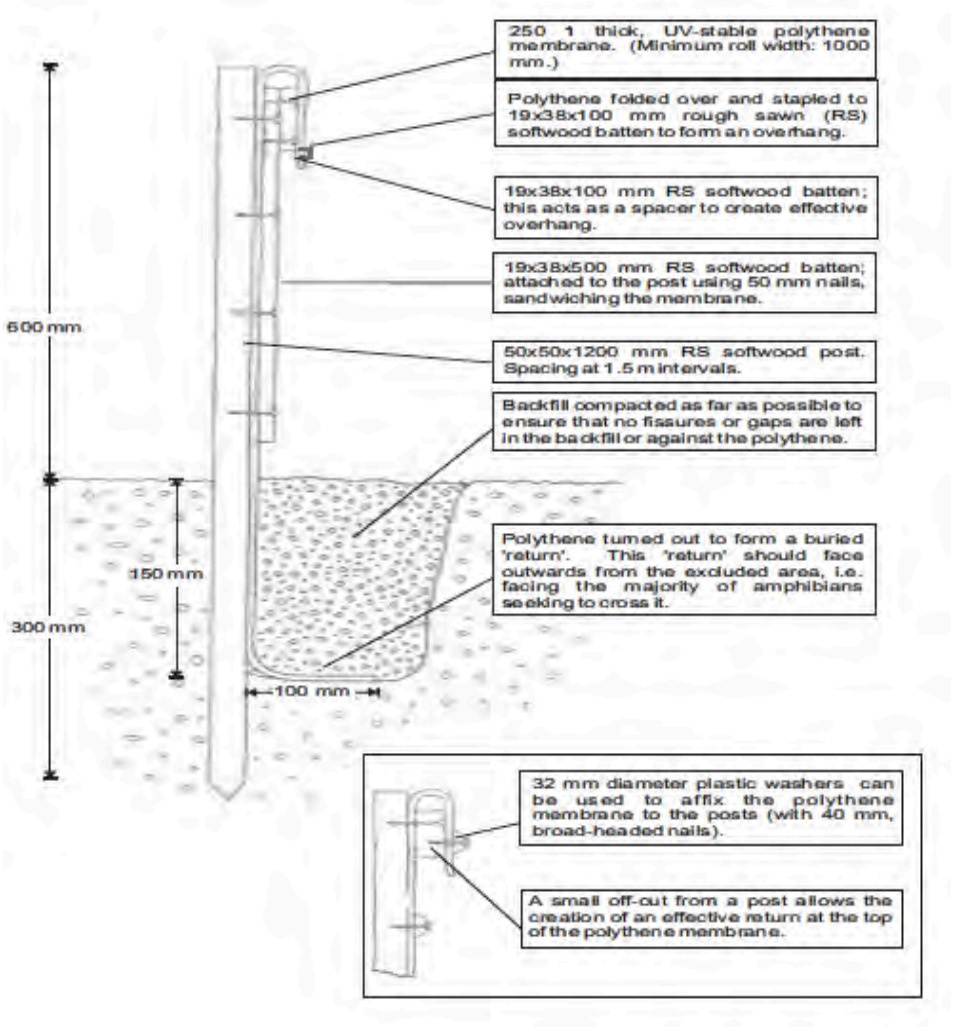

Figure 3: Fence line standards

4.8 Before the translocation can begin, a receptor area for the reptiles needs to be allocated and prepared.

4.9 A receptor area has already been developed as part of the previous application, with the site appearing to have been previously excluded from the receptor site with reptile fencing.

As such it is considered that the current receptor site from the adjoining development would be suitable for the on site reptiles. However, it is recommended that some habitat management within the receptor area is undertaken to maintain the receptor site in suitable condition. The receptor site for GCNs and reptiles as part of the adjacent development site is identified in purple in figure 4 below.

Figure 4: location of the previous receptor area outlined in purple as part of the wider development site. This is considered to be suitable for the on site reptiles. Enhancements to the receptor area must be made prior to translocation.

4.10 Once the receptor area has been suitably managed and enhanced and the fencing has been installed under ecological supervision, the area inside the fence can be trapped intensively for reptiles. Artificial refugia (square roofing felt mats) will be set out in a density of at least 50 refugia per hectare of suitable habitat (HGBI guidelines 1998) and allowed to bed in for a period of at least seven days. Trapping will take place in optimal weather conditions,

between March and October (inclusive), for a period of least 30 days and until there are five consecutive days of no captures.

4.11 Once the trapping has been completed, the grassland will be strimmed to 150mm, checked and then finally strimmed down to ground level. This will be carried out under ecological supervision. The arisings can be placed in compost heaps within the retained habitat, providing good habitat for breeding slow worms and grass snakes.

4.12 Following strimming, the soil will need to be sensitively removed under ecological watching brief. A fingertip search will be carried out and then the soil can be slowly raked through with a toothed bucket. Any reptiles found will be caught and moved before the soil can then be completely removed.

4.13 For the final stage of the translocation process, any natural refugia will need to be dismantled by hand or using sensitive machine work under close supervision of an ecologist.

4.14 This process will make the construction area unsuitable for reptiles and other species. However, to ensure that no reptiles venture back on to site, it is recommended that the reptile fence remain intact until construction is complete. This will also aid in preventing machinery and works from entering receptor areas and retained habitats. Therefore, the fencing should be maintained to a high standard and will be periodically checked by an ecologist until it is ready to be removed.

Enhancements

4.15 Log piles should be created for use as refugia by reptiles, amphibians, small mammals and invertebrates (Figure 5). They should be placed in a variety of locations, including the receptor areas, around the pond and adjacent to the boundaries of the receptor site. Log piles should contain a mixture of log sizes and shapes with some small-diameter material to create a diverse structure.

4.16 Some scrub management within the receptor site maybe required. Any such management should be undertaken under ecological supervision and / or direction.

Figure 5: Examples of log piles which can be created on site

5.0 Conclusion

5.1 Reptile surveys were undertaken in July and August 2018. A 'low' population of slow worms and a 'low' population of common lizards were on site.

5.2 The development would involve the disturbance and loss of terrestrial habitat for reptiles. To prevent harm to any reptiles, a translocation is required. The receptor site for the wider application area is considered to be suitable and the reptiles should be translocated outside the redline boundary and re homed within this receptor area. This area should be enhanced before a translocation is carried out during suitable weather conditions between March and October. The development area will be trapped out for a minimum of 30 days and until there are five consecutive days of no captures.

5.3 Once the translocation is complete, the habitats on site will be sensitively removed under ecological watching brief. The reptile fence will remain intact until construction is complete.

5.4 It is considered that the translocation of reptiles would ensure that none are harmed by the development.

5.5 Enhancements including log pile creation have been recommended to provide opportunities for wildlife on site post-development.

6.0 References

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The Ecology Partnership Ltd

Thorncroft Manor

Thorncroft Drive

Leatherhead

Surrey

KT22 8JB

Tel: 01372 364 133

www.ecologypartnership.com

Approved: Alexia Tamblyn MA (Oxon) MSc CEnv MCIEEM FRGS

Date: 23/08/2018