

Reptile Survey 2017

Land east of Wandley's Lane
Fontwell, West Sussex

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LIABILITIES:

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

The recommendations 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 commissioned by ECE Architecture/Welbeck Land to undertake a reptile survey on land east of Wandleys Lane, Fontwell, West Sussex, BN18 0QR. This survey was recommended based on the findings of the preliminary ecological appraisal carried out in April 2017.
- 1.2 This report presents the results of the surveys in and around the site, which aims to specifically determine the likely presence or absence of reptiles on the site.
- 1.3 Section 2 of this report summarises previous surveys and section 3 sets out the methodology of The Ecology Partnership's survey. The results are contained in Section 4 and the implications discussed in Section 5. Conclusions are provided for in section 6 of this report.

Site Context and Status

- 1.4 The site lies on Wandleys Farm to the east of Wandleys Lane in Fontwell, West Sussex (SU 95648 06681). The site covers approximately 6.98ha and consists of a large grassland field with tree lines, hedgerows and a woodland edge. The surrounding area consists of medium-density housing, agricultural land and woodland. Part of the grassland is used for grazing a small number of sheep and a pony. The rest of the grassland is left to grow for hay.
- 1.5 The approximate red line boundary of the site is shown in Figure 1 below. This is also the approximate survey area.



Figure 1: Approximate red line boundary

2.0 Reptile Survey Methodology

2.1 A terrestrial survey of the site for reptiles was carried out over 7 survey visits between 15th May and 7th June 2017. Prior to the commencement of the survey, the site was set up with artificial refugia (roofing felts) for reptiles on 8th May 2017.

2.2 Reptile mats were placed liberally around the areas of suitable habitat on site, concentrated mainly along the boundaries of the site. They were left in place for a bedding-in period of 7 days prior to the commencement of the reptile survey as recommended in advice from Natural England. The timing and number of surveys completed were based on guidelines produced by Froglife (1999) and Gent and Gibson (1998). A total of seven survey visits were to check the refugia for the presence of reptiles. Visits were only carried out if the weather conditions were suitable for locating reptiles. On each visit to the site, a minimum of one circuit to check all refugia was carried out.

- 2.3 Natural refugia was also surveyed during the visits. Any natural refugia, such as log piles and brash piles, were lifted and hand searched for evidence of reptiles.

3.0 Reptile Results

- 3.1 Over seven visits, a peak count of 6 adult slow worms (*Anguis fragilis*) was recorded on a single survey visit and a peak count of 1 adult grass snake (*Natrix natrix*). It should be noted that an additional two juvenile grass snakes were also observed during the same survey. The results are summarised in Table 1 below.

Table 1: Reptile survey results

Visit	Date	Temperature (°C)	Weather	Reptile species & number
1	15 th May 2017	15	Overcast, humid, drizzle before survey	1 adult slow worm
2	18 th May 2017	13.5	60% cloud cover, humid, sunny spells	1 adult slow worm 2 juvenile grass snakes
3	22 nd May 2017	18	Sunny, light breeze	1 adult slow worm
4	26 th May 2017	14	50% cloud cover, humid	No reptiles found
5	31 st May 2017	18.5	Sunny, slight breeze	1 adult slow worm
6	5 th June 2017	15	Overcast, breezy	6 adult slow worms 2 juvenile grass snakes
7	7 th June 2017	16	60% cloud cover, sunny spells, windy	3 adult slow worms 1 adult grass snake 2 juvenile grass snakes

- 3.2 One adult female slow worm was noted to be gravid. This along with the presence of juvenile grass snakes indicates that reptiles are breeding on and around site.
- 3.3 Both the slow worms and grass snakes were found dotted at various points around the boundary of the site (Figure 2). Whilst the majority of sightings were concentrated around the scrubby area along the northern boundary close to the entrance of the site,

both species were also found along the eastern boundary adjacent to neighbouring gardens. Grass snakes were also found close to the mound near the entrance of the site and along the western boundary adjacent to neighbouring gardens.



Figure 2: Location of slow worms (yellow) and grass snakes (red) found on site

3.4 It should be noted that mats were placed along the boundaries only as requested by the landowner who cuts the meadow for hay. Therefore, it cannot be ruled out that there are other reptiles present within the centre of the grassland itself.

4.0 Discussion

4.1 Two species of reptile were found on site, slow worm and grass snake. No evidence of any other reptile species on site was found but this cannot be ruled out with certainty.

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 'good' population of slow worms on site and a 'low' population of grass snakes.
- 4.4 A key reptile site is defined as one which supports 3 or more reptile species or has an exceptional population of one type of reptile species. This site cannot be classed as a key reptile site. Nevertheless, since it supports a 'good' populations of slow worms and a 'low' population of grass snakes, a mitigation strategy must be developed to ensure that reptiles are not harmed by the development.

Reptile Mitigation Strategy

- 4.5 The final plans for the site will result in the majority of the grassland being cleared in order to build a residential development. Therefore, the reptiles in this area must be moved outside the construction zone to ensure that individuals are not harmed by the proposals.
- 4.6 Mitigation will involve the construction of a reptile fence around the development footprint. This should take into account the 15m buffer zone between the development and the ancient woodland adjacent to site. The habitats outside the reptile fence are to be maintained and enhanced. The habitats within the fence are to be cleared of reptiles. The reptile fence will be constructed following the standard below (Figure 2).

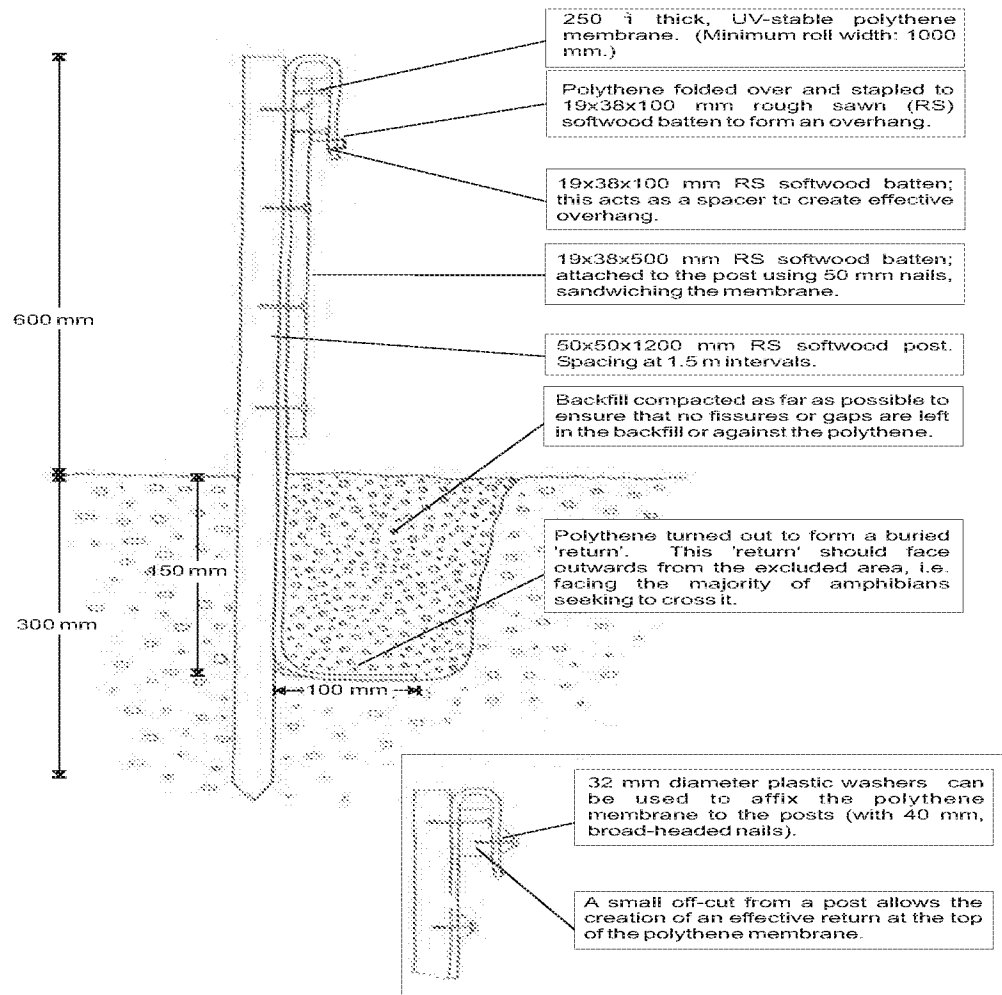


Figure 2: Fence line standards

4.7 With the exclusion fence set-up, the area inside can be trapped intensively for reptiles. Artificial refugia for the reptiles would be set out in a density of at least 50 refugia per hectare of suitable habitat (HGBI guidelines 1998) and allowed to bed in. Trapping will take place in optimal weather conditions, between March and October (inclusive) and for a period of at least 90 days or until there are 5 consecutive no reptile-catch days.

4.8 A receptor site for the reptiles that are to be removed needs to be identified. Given the size of the reptile population, it is recommended that a significant area of the site or wider landscape should be enhanced and managed for reptiles. However, this is dependent on the scale and nature of the development proposals.

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- 4.9 Once the trapping has been completed, or that there are 5 no catch days, the grassland will then be strimmed to 150mm, checked, and then finally strimmed down to ground level. This will be undertaken under ecological supervision. The arisings can be taken off site or placed in several compost heaps within the retained habitat, providing good habitat for breeding slow worms and grass snakes.
- 4.10 For the final stage of the translocation process, any natural reptile refugia will need to be dismantled by hand or using sensitive machine work under close supervision of an ecologist.
- 4.11 The mitigation strategy will therefore follow:
- Reptile fencing being placed around the edges of the site, ensuring that the area outside the development footprint is fenced off, therefore fencing off any potential movement of reptiles on to the site. This physical barrier will protect any species using the edges of the site.
 - The site will be trapped until there are 5 clear days. The slow worms and common lizards will be removed from the site. The fence line will prevent them moving back on to the construction zone.
 - This area will be monitored during site works by an ecologist to ensure the fence line is fit for purpose and that the area is respected as a 'wildlife exclusion area'.
 - Once 5 clear trapping days has been gained, the grass within the development zone will be strimmed.
 - Any areas which support dense vegetation should be removed sensitively under ecological supervision. The process would entail a visual inspection and fingertip search by an ecologist for the presence of reptiles. This is followed by a cut of the vegetation to 150mm above ground. This cut is inspected once more for the presence of reptiles. Finally, vegetation is cut to ground level.
 - Final clearance works and sensitive soil removal will also be carried out under the supervision of an ecologist.
 - Once this is complete, development works can start.

- 4.12 It is always recommended that enhancements are included within the plans for a range of species. Understorey planting with species such as hawthorn, blackthorn, honeysuckle and hazel, along with shrubs such as dog rose, holly and dogwood are important sources of food for native wildlife and provide a layering of different habitats along the boundaries of the site.
- 4.13 Any open green spaces as part of the development should aim to leave a section of meadow which is cut only once a year so as to provide an area on site for reptiles and other wildlife, such as invertebrates and birds. This can be planted with species of value to wildlife and appropriate seed mixes can be purchased from native species stockists.
- 4.14 It is also recommended that log piles are created for use as refugia by reptiles, amphibians, small mammals and invertebrates (Figure 3). These can be located in a variety of locations, such as damp places with some situated in sunnier locations. They can be placed close to retained scrub and grassland, around the very edges of the site and positioned under mature trees. These should be stacked and perhaps some leaf litter added. Planting around log piles with species such as honeysuckle or clematis can also add value.



Figure 3: Log piles and hibernculas can be created within the edges of the site or in the retained habitats on site

5.0 Conclusions

- 5.1 A 'good' population of slow worms and a 'low' population of grass snakes were found to be present on site within the red line boundaries. Both species were found dotted around the boundary of the site.
- 5.2 The development will involve the loss of grassland habitat, largely sub optimal habitat, with pockets around the buildings and edges of the site being more optimal for reptiles. As such, slow worms and grass snakes are required to be translocated from the area to be affected by future works. The receptor site for the reptiles to be translocated will be incorporated into the design of the site, likely to be along the ancient woodland buffer, which will be enhanced for reptiles prior to translocation.
- 5.3 It is considered that the translocation of slow worms and grass snakes would ensure that none are harmed by the development.
- 5.4 General site enhancements have also been recommended to provide new opportunities for a range of wildlife post-development.

6.0 References

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. eds. (1998) *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.

HGBI (1998) *Evaluating local mitigation/translocation programmes: Maintaining Best Practices and Lawful Standards*. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). Herpetofauna Groups of Britain and Ireland, c/o Froglife, Halesworth.

Internet resources:

Google Maps: www.maps.google.co.uk

Magic Maps: www.magic.gov.uk

The Ecology Partnership

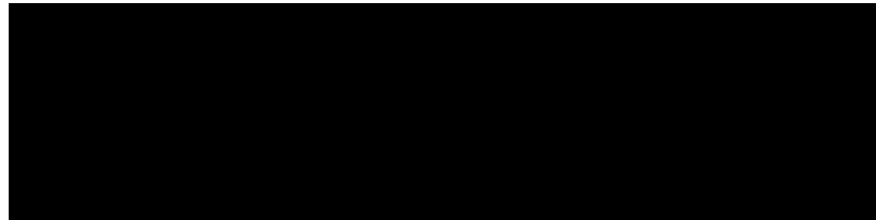
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