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Reptile Survey

Land at Horndean Road

Emsworth

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Paul Whitby

Summary

- **Reptile surveys were conducted at a large plot of land at Horndean Road in Emsworth after a survey for protected species conducted by Azure Ecology in May 2013 identified suitable habitat to support reptiles and a biodiversity records search carried out by the Hampshire biodiversity Records Centre identified known records for adders and grass snakes within 2km of the site centre.**
- **After seven survey visits in suitable weather conditions a peak count of three common lizards was identified, suggesting that a 'low' population is present.**
- **Mitigation that will be necessary to ensure reptiles are protected throughout the development process has been outlined in section 6.**

1. Introduction

- 1.1 This report gives details of a reptile survey carried out by Paul Whitby, full member of the Chartered Institute for Ecology and Environmental Management at land on Horndean Road in Emsworth. The grid reference for this is SU 743 070.
- 1.2 This survey was conducted according to best practice guidance outlined by froglife and the Amphibian and Reptile Group UK (ARGUK).

2. Background

- 2.1 Azure Ecology was instructed by Bidwells to undertake a Reptile survey at an area of arable farmland adjacent to Horndean and Southleigh road in Emsworth, after suitable habitat for reptiles was identified during a Phase 1 habitat survey and assessment for protected species conducted by Azure Ecology on the 14th May 2013
- 2.2 The objective of the survey was to identify the presence or absence of reptile species, determine approximate populations and provide mitigation advice should it be necessary.

Site Description

- 2.3 The site is situated on the western outskirts of Emsworth on Horndean Road and a number of residential plots that border the road. The site is bounded to the north by Southleigh Road and a residential property and gardens to the south.
- 2.4 The majority of the site comprises of cultivated wheat fields, but suitable habitat identified for reptiles included wide grassy buffer strips, a small wooded area with dense scrub, a pond supporting breeding amphibians (and in turn prey for grass snakes) and a wet ditch with well vegetated banks.



Picture 1 – An aerial image of the Horndean Road site with the location of positioned reptile survey sheets along grassy field buffers.

Legal Protection

2.5 This section briefly describes the legal protection afforded to reptiles. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation, but summarises the salient points.

2.6 Common Lizard (*Lacerta vivipara*), Grass Snake (*Natrix natrix*), Slow-Worm (*Anguis fragilis*), and Adder (*Vipera berus*) are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), in respect of Section 9 (5) and part of Section 9(1). This protection was extended by the Countryside and Rights of Way (CROW) Act 2000. Under the legislation it is an offence to:

- Intentionally or deliberately kill or injure any individual of these species; or
- Sell or attempt to sell any part of these species either alive or dead.

3. Method

3.1 The survey was carried out by placing artificial refugia around the site, which heat up in the sun and provide cover (in this instance, 17 roofing felt sheets were used across the site). No features that could be used as refugia as part of the survey (such as compost heap sheets) were already present. Reptiles are attracted to these refugia to warm up in the mornings and late afternoon to regulate their temperature and a suitably qualified surveyor is able to count the number and in some cases the sex of each species present.

3.2 A total of seven surveys are undertaken and the highest count of reptiles from these visits is used to estimate the population of each reptile species on the site as low, good or exceptional. If no reptiles are identified upon the site following five visits, then the surveys can be ceased, with the conclusion that no reptiles are present.

3.3 The survey refugia were placed across the site, focusing on the tallest grassland areas, where they would warm up in the morning or afternoon sun. The coverage of the survey sheets was spaced evenly across the site where possible avoiding areas that would be constantly shaded by trees or might be disturbed by the public.

4. Results

4.1 A total of 17 survey sheets were placed across the site on the 16th of May 2013 and left for a minimum of ten days to 'bed in' before the commencement of the survey process.

Date	Start Time of Survey	Temp in sun/ in shade°C	Weather Notes	Species Total
10/06/13	17:30	18 / 15	30% light cloud cover, 0 – 5 mph wind	none
13/06/13	08:00	13 / 12	100% cloud cover, 0 – 5 mph wind	none
14/06/13	10:00	16 / 13	100% cloud cover, 0 – 5 mph wind	none
17/06/13	10:30	18 / 16	90% cloud cover, 0 – 5	3 common lizards

			mph wind	
20/06/13	08:00	18 / 16	100% cloud cover, 0 – 5 mph wind	none
21/06/13	15:00	22 / 18	50% light cloud cover, 0 – 5 mph	1 common lizard
25/06/13	9:00	19 / 16	80% light cloud cover, 0 – 5 mph	1 common lizard

5. Constraints/Limitations

5.1 All surveys were completed within the allocated temperature range (9-18°C) and without the influence of rain. All surveys were therefore deemed to be suitable.

6 Conclusions

5.2 The surveys conducted on the Horndean Road site identified a low population of common lizards, with a peak count of 3 individuals upon an area of suitable habitat estimated to be 0.5 hectares in area. No other reptile species were seen during the survey or any amphibian, mammal or invertebrate species of note.

5.3 Although no grass snakes were identified during the survey, as a very transient species, it is acknowledged that at other times of the year they could have been identified.

5.4 The identification of a small reptile population suggests that a lower number of trapping visits would be needed in order to translocate reptiles off the proposed construction zone and that enhanced adjacent grassland retained along the boundary with the wet ditch should easily act to suitably accommodate this population.

5.5 For any development to proceed, it is important that site-specific mitigation and compensation measures must be put in place to protect both individual common lizards and the longevity of the population. The main elements of this mitigation have been outlined below and it is recommended that a site specific Method Statement is written to prescribe the précis detail of all proposed mitigation measures and a letter of completion of these works is submitted to the planning authority:

1. The whole of the development site boundary would need to be fenced off with rigid semi-permanent reptile proof fencing that is strong and durable to keep reptiles out of the construction zone during all phases of the development process.

2. An increased number of reptile sheets (a minimum of 50 per hectare of suitable habitat) would need to be laid down to conduct a series of trapping surveys. A minimum of 60 trapping days is recommended under ARGUK guidance, although if at least 10 trapping visits are made without identifying any reptiles, then the translocation effort can cease.

3. The receptor site would need to be enhanced, through a dedicated management regime, the creation of new hibernacula and possibly a planting plan to improve grassland diversity.

5.6 In addition to a site-specific Method Statement, it is important that the site landscaping adequately addresses the need for a receptor site and has a design that is sympathetic to the needs for common lizards. This should be addressed within the application made to the planning authority and should incorporate ecological enhancements under the advice of an ecologist.