Environmental Business Solutions

SURVEY & ENGINEERING PROJECTS ltd

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REPTILE POPULATION SURVEY
PRESENCE / LIKELY ABSENCE
September 2012

Proposed Development at Petre Wood, Langho, Blackburn, BB6 8FE (Grid Ref: SD 709 349)

Conducted by EBS on behalf of Cranfield Golf Centre.

Environmental Business Solutions
Client: Hardgreaves Contracting Limited
Revision: 01
Surveys Conducted –September 2012
Report Issued – 26th September 2012

1 Introduction

1.1 During an initial Extended Phase 1 Survey of the land off Petre Wood Cresent, Langho (Grid ref: SD 709 349), evidence of reptile presence was found (1x female grass snake disturbed). Therefore, SEP Ltd were commissioned to conduct a full population survey to ascertain the presence / likely absence of reptiles on the site and /or a population assessment. The areas to be developed ('The Site') and the habitats immediately adjacent were assessed for this report.

1.2 The objectives of the survey were to:

- Determine presence/likely absence of reptiles on site
- Assess the population of any reptiles found
- To advise on future possible surveys
- To advise on possible mitigation should development commence

1.3 Although the initial survey in July 2012 disturbed a female grass snake, no further evidence was found of reptiles being on site during 9 visits in suitable weather conditions during September 2012. The area in which the Grass snake was disturbed, was targeted for high density trapping and refugia searches.

1.4 The area in question is only accessible by reptiles via the agricultural land to the east, as it is surrounded by housing and busy roads to the north, south and west. The presence of the 1 specimen noted back in July 2012 is thought to be a one off visit to the area possibly at the extent of it's range.

1.5 Due to these results, it is of the opinion of SEP Ltd that a Natural England European Protected Species disturbance licence is not required at the present time. However, mitigation methods are required to ensure that no reptiles are harmed during the development.

2. Legal Status and Protection of Reptiles in the UK

2.1 Common Lizards, Slow Worms, Grass Snakes and Adders are protected under the Wildlife and Countryside Act 1981 (as amended) they are listed as a schedule 5 species therefore part of Section 9(1) and section 9(5) apply; the Countryside and Rights of Way Act 2000 (CROW) also strengthens their protection.

2.2 It is offence to:

- Intentionally, or recklessly, kill or injure any of the above species, and/or;
- Sell, or attempt to sell, any part of the species, alive or dead.

2.3 If a proposed development is likely to have an impact on these reptiles the statutory nature conservation organisation must be consulted.

2.4 The rare Sand lizard and Smooth Snake receive 'full protection' under the Wildlife and Countryside Act (1981) Section 9 and the Conservation (Natural Habitats &c.) (Amendment) Regulations 2007; the Sand Lizard and Smooth Snake are listed on Schedule 2 thus regulation39 applies. Read together it is an offence:

- Deliberately kill, injure or capture any wild animal of European protected species;

- Deliberately disturb wild animals of any European protected species in such a way to be likely to significantly affect:
- The ability of any significant groups of animals of that species to survive, breed, rear or nurture their young; or
- The local distribution of that species.
- Recklessly disturb sheltering European protected species or obstruct access to their resting place;
- Damage or destroys breed sites or resting places of such animals;
- Deliberately takes or destroys the eggs of such an animal;
- Possess or transport or any part of a European protected species, unless acquired legally;
- Sell, barter or exchange any part of a European protected species.

3 Methodology

3.1 The reptile population survey was undertaken during September 2012.

3.2 The survey was supervised by Mr Bill Gaudie Bsc hons (Wildlife Conservation) MIEEM.

3.3 The survey was conducted using artificial refugia made from roofing felt (tins) approximately 0.5m² at a density of 20 tins per ha. They were placed to provide shelter and basking opportunities for reptiles, which can be recorded on or under the refugia in suitable weather conditions. Natural refugia (rocks, logs etc) were also searched. The survey followed the recommended methodology outlined in the Herpetofauna Workers' Manual (JNCC, 2003) and Froglife's Advice Sheet 10 (1999).

3.4 Sunday 19th Aug 2012, 40 artificial refugia were placed in suitable areas of longer grassland, scrub edge and rubble piles. Tins were allowed to bed in for 14 days prior to the first survey visit being conducted. See fig 1 for placement areas.

3.5 Natural refugia were identified for future surveying.

3.6 A total of twenty survey dates were then conducted with inspections to both the artificial refugia and the newly marked natural refugia.

3.7 On each visit, all refuge was lifted and the number, sex and species of any reptile observed were recorded (if any).

3.8 Rubble piles were hand searched and dismantled for signs of reptile habitation. See fig 1 for position of rubble piles

3.9 Transects were also walked in desirable areas for signs of reptile activity.

3.10 No reptiles were discovered.

3.11 All visits were conducted in weather conditions suitable for recording reptile activity i.e. Temperature between 10°C and 19°C.

3.12 All refugia was replaced as near as possible to original position after examination.

3.13 All artificial refugia were removed from site after the final survey on the 30th September 2012.

3.14 See Figs 1 - 4 for site photos of surveys.

Fig 1. Debris on site used as refugia

Fig 2. Artificial refugia (Tins) used for surveying

Fig 3. Rubble pile dismantled during surveying

Fig 2. Dismantling of rubble piles during surveying

Fig 1. Areas of artificial refugia and rubble piles dismantled.

4 Results

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4.1 In all 20 site visits were made from the 2nd September – 30th September 2012.

4.2 Throughout the entire surveying period no reptiles were discovered (see Table 1 for full breakdown and conditions).

Table 1 Reptile survey results with date and weather conditions for each visit
Key: M = Male Adult; F = Female Adult; Ad = Unsexed Adult; I = Immature, Y = Young.

Date Visit	Weather Conditions*	Species	Area Found	Number / Details
010912	18.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
020912	19.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
030912	18.5◦C max Wind N/A Light shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
040912	18.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
050912	17.0◦C max Wind N/A Short shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
060912	19.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
070912	19.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
080912	18.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
090912	20.5◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
100912	17.5◦C max Wind N/A Drizzle	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
110912	14.0◦C max Wind N/A Short shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
120912	15.0◦C max Wind N/A Light shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0

130912	14.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
140912	13.5◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
150912	17.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
170912	14.5◦C max Wind N/A Short shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
190912	12.5◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
210912	13.0◦C max Wind N/A Short shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
220912	14.0◦C max Wind N/A Short shower	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0
270912	14.0◦C max Wind N/A Dry	Adder	Not applicable	0
		Grass Snake	Not applicable	0
		Common Lizard	Not applicable	0
		Slow-worm	Not applicable	0

*Faulty equipment, therefore exact wind speed unavailable, however only slight winds noted on all occasions.

4.3 No reptiles were discovered on site.

5 Mitigation

5.1 No reptiles were discovered throughout the surveying period, therefore the site does not qualify as a "Key Reptile Site" (see Appendix 1) and it is thought likely that reptiles are absent from the site at the present time (September 2012). However as a precaution, mitigation measures should be adhered to and the development treated sensitively throughout the construction phase.

4.2 All rubble piles and debris that is deemed suitable as reptile refugia should be removed from site by hand under the supervision of a suitably qualified ecologist.

4.3 Vegetation should be cut between November - February so as to avoid active periods for reptiles under the supervision of a suitably qualified ecologist.

4.4 All cut vegetation to be removed from site immediately.

4.5 Once all rubble, debris and vegetation has been removed, the site is to be inspected by a suitably qualified ecologist to ensure no animals are left on site.

Conclusions

The survey was conducted throughout September 2012 under suitable climatic conditions as per JNCC Herpetofauna Working Manual and Frog life's guidelines. No reptiles were discovered throughout the surveying period, therefore the site does not qualify as a "Key Reptile Site" (see Appendix 1) and it is thought likely that reptiles are absent from the site at the present time (September 2012). It is the opinion of SEP Ltd that if the above recommendations are followed then it is thought that any chances of any harm coming to any reptiles on site is negligible.

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References

Froglife, 1999 **Froglife Advice Sheet 10**
Gent, T and Gibson, S (Eds.), 2003 **Herpetofauna Worker's Manual**. Joint Nature Conservation Committee, Peterborough.
HMSO, 1981 **Wildlife and Countryside Act 1981 (as amended)** HMSO, London. The Stationery Office, Norwich.
HMSO, 1994 **Conservation (Natural Habitats (&c.) Regulations 1994**. HMSO, London. The Stationary Office, Norwich.
1998 **HGBI Advisory Notes for Amphibians and Reptiles Groups**
Environmental Business Solutions, **Reptile Survey – Presence / Likely Absence, Cranfield Golf Centre,**

Appendix 1

Froglife Criteria for the Estimation of Reptile Populations Sizes

Table A3. Criteria for the estimation of population sizes of common British reptile species. Where adult reptiles are found to be present at a site during artificial refugia surveys (using up to 10 refugia per hectare), sites can be assigned to one of three population classes (low, good or exceptional) for each reptile species, based on the numbers of adults shown in the table. Based on *Froglife Advice Sheet 10. Reptile Survey. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.*

Species	**Species Numbers of Adults Recorded**		
	Low Population	Good Population	Exceptional Population
Adder	<5	5-10	>10
Grass Snake	<5	5-10	>10
Common Lizard	<5	5-20	>20
Slow-worm	<5	5-20	>20

Froglife Criteria for the Identification of Key Reptile Sites

Table A4. Criteria published by Froglife for the identification of Key Reptile Sites.

To qualify as a Froglife Key Site, a site must meet at least one of the following criteria	
1	Support three or more reptile species
2	Support two snake species
3	Supports an exceptional population of one species
4	Supports an assemblage of species scoring at least 4 (where each low population contributes 1 point, each medium population contributes 2 points, and each exceptional population contributes 3 points.
5	Does not satisfy any of the above, but is of regional importance because it supports a locally rare reptile species.
Based on *Froglife Advice Sheet 10. Reptile Survey. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.* Froglife 1999.	