Reptile Survey

Westfields, Endon

June 2014

Notice to readers:

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Non-technical Summary

A reptile survey was carried out on a site known as land at Westfields, Endon

Planning permission is being sought to permit the construction of a new residential building.

The survey revealed the absence of reptiles on site. As no reptiles were identified on site, no negative impact would occur towards reptiles, therefore no further surveys or mitigation will be required.

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2.0 Introduction

Background

2.1 Absolute Ecology LLPwas commissioned to undertake a reptile survey on a site known as land at Westfields, Endon

2.2 The scope of this survey has been determined in line with the proportional approach to ecological survey, assessment and subsequent recommendations for avoidance and mitigation of impacts, which is encouraged in the emerging 'BS 42020: Biodiversity – Code of practice for planning and development'. This report has been prepared with du consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012)1 and the emerging BS 42020

2.3 Aims and objectives of the field survey were as follows:

- To establish presence/absence of reptiles
- If reptile presence confirmed, to determine species, sex, an approximate density and distribution.

Site Characteristics

2.1 The site is a small building plot and lawn, situated within a residential area. The site comprises of three distinct areas; access road, lawn and scrub. These are divided by two well-tended conifer hedges.

2.2 Residential properties lie to the north, east and south. To the immediate west is a small area of deciduous woodland, containing a stream and three ponds. Endon Brook lies approx. 275m to the east, with fields beyond in that direction. Fields are also present to the northwest (220m approx.), south (200m approx.) and southwest (160m approx.). To the southwest also lies Stoney Wood, approx. 170m away from site.

3.0 Legislation and Status

3.1 The Smooth Snake and Sand Lizard are fully protected under Schedule 5 of The Wildlife and Countryside Act (1981). As such they receive full protection under Section 9 of this Act. This Act has been amended several times, most recently by the Countryside and Rights of Way Act 2000 which added 'or recklessly' to Section 9(4) (a) and (b). They also are protected under Regulations 41/42 of The Conservation of Habitats and Species Regulations 2010. Collectively these pieces of legislation mean that it is an offence to;

- intentionally kill, injure, disturb or take any individual of these species
- intentionally take or destroy the eggs of any individual of these species
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by any individual of these species
- intentionally or recklessly disturb any individual of these species while it is occupying a structure which it uses for that purpose
- keep, transport, sell or exchange or offer for sale any individual of these species or anything derived from these species.

3.2 The other native species of reptiles (Common or Viviparous Lizard, Adder, Grass Snake and Slow Worm) are partially protected under Schedule 5 of The Wildlife and Countryside Act (1981), under part of Section 9(1) and all of Section 9(5). As such it is an offence to;

- intentionally kill or injure an individual of these species
- transport for sale or exchange, or offer for sale or exchange a live or dead an individual or any part of an individual of these species.

3.3 All native reptile species are UK BAP Priority Species (UK BAP, 2007), Slow Worms, Grass Snakes and Adders are listed on the Warwickshire Local BAP (BARS, 2010).

4.0 Methodology

Field Survey

4.1 Reptile survey equipment was set out in areas of potential habitat for reptiles on the 8th May 2014. The equipment consists of artificial refugia made of roofing felt that is cut into 500 mm x 500 mm mats. The refugia warm up quickly and retain the heat well, attracting reptiles. A total of 8 refugia were laid in suitable habitat around the site at positioned approximately 3m apart. The refugia were numbered and their locations were mapped to record reptile distribution and to calculate population density. The refugia were collected after completion of the fieldwork.

4.2 The refugia were placed in sunny areas near to cover, typically hedgerows and scrub. These were then left to bed down for 1 week. During this time, they develop favourable conditions (e.g. suitable humidity and temperature gradient) and the reptiles become more familiar with them. To assess presence or absence, the refugia were checked once each day for seven days during optimal weather conditions (in accordance with Gent and Gibson 2003). In circumstances where reptiles are found, the refugia are checked for a further eight days to obtain a population size class assessment, in accordance with recommendations set out by Hill *et al.* (2005).

Site Status Assessment

4.3 Each survey visit may reveal only a small sample of the reptile population occurring on site because the proportion of individuals recorded varies according to weather, migration patterns etc. A mechanism known as the Key Reptile Site Register can be used to obtain a basic evaluation of the population size and importance of the site. It has been designed to identify and promote the safeguarding of important reptile sites, with outstanding assemblages being the guiding principle in judging sites.

4.4 To qualify for the Key Reptile Site Register, the site must meet at least one of the following criteria (Froglife, 1999):

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

Table 1: Key Reptile Site Register Population Scores

Species	Low population *Score 1*	Good population *Score 2*	Exceptional population *Score 3*
Adder	< 5	5 – 10	> 10
Grass Snake	< 5	5 – 10	> 10
Common Lizard	< 5	5 – 20	> 20
Slow-worm	< 5	5 – 20	> 20

Figures in the table refer to maximum number of adults seen by observation and/or under refugia placed at a density of up to 10 per ha, in one day).

5.0 Results

Field Survey

5.1 The full survey results and weather conditions can be found in *Appendix 1*.

5.2 Though the site holds the correct habitat for reptile species to live, no species of reptile were recorded on site during the surveys.

6.0 Evaluation

Presence/Absence

6.1 During the survey the site no reptiles were evident during the presence/absence surveys.

Site Status Assessment

6.2 The site supports no reptiles and is considered that the proposed development will not have a negative impact on reptiles.

7.0 Impacts and Recommendations

Impacts

7.1 The site is the subject of a planning application to permit the construction of a residential building, which will involve substantial works on site. As no reptiles were identified it is not considered that the proposed development will have any adverse impact on reptiles locally as none were identified during the surveys.

Further Surveys

7.2 Further surveys would only be required if the works were delayed for two years or more. If this were to be the case a repeat reptile presence/absence survey would be recommended before work commenced to confirm that the status of the site remains the same as that described within this report.

Legislation

7.3 Common Reptile species are partially protected under Schedule 5 of The Wildlife and Countryside Act (1981), under part of Section 9(1) and all of Section 9(5). This means that they are protected from killing or injury. No licence is required to permit development but some form of mitigation to avoid contravention of the legislation afforded to common reptiles must be approved by the Local Planning Authority Ecologist or the statutory consultee, which in this instance would be Natural England.

7.4 Maintenance of conservation status can be achieved in one or more of the following ways:

- Identification of a safe receptor site that will not be affected by works
- Use of exclusion fencing to prevent reptiles entering the working footprint
- Capture and translocation of reptiles
- Creation and/or enhancement of reptile habitat
- Post development management and monitoring.

Care and Vigilance During Works

7.5 Contractors working in the development area should be briefed on the protocol to follow in the event a reptile is found during works. This is as follows:

- Halt work
- Contact appointed ecological consultant to transfer reptiles found to a safe receptor site and to seek confirmation that work can continue
- Resume work if the appointed ecological consultant has granted authorisation.

8.0 References

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Froglife. 1999. *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.

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

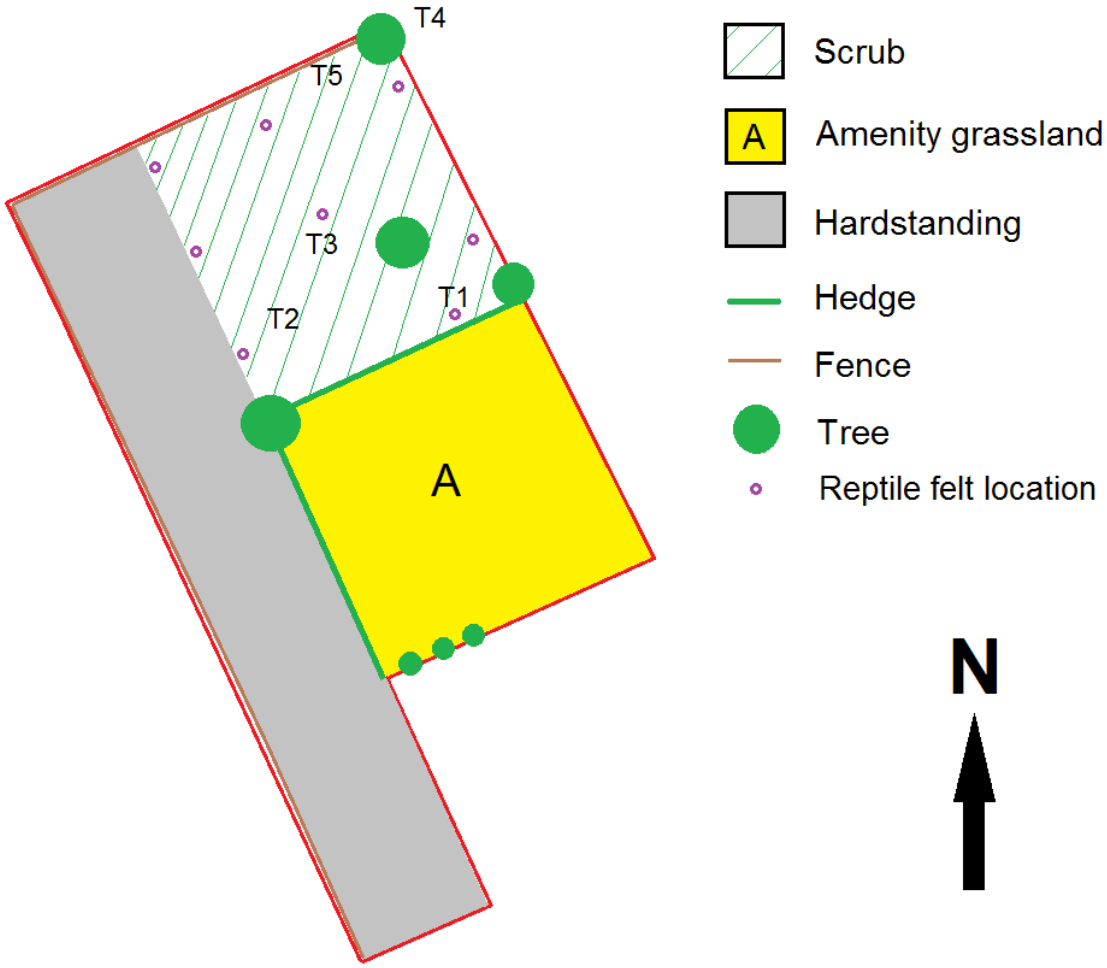
Hill D., Fasham M., Tucker G., Shrewry M. and Shaw P., 2005, *Handbook of Biodiversity Methods, Survey, Evaluation and Monitoring*, Cambridge University Press, Cambridge.

UK Biodiversity Action Plan (2007). *UK List of Priority Species.* Joint Nature Conservation Committee. [Online]. Available at: http://www.ukbap.org.uk/NewPriorityList.aspx [accessed on 14th July 2010].

Wildlife and Countryside Act 1981 (and amendments), (c.69), London: HMSO

9.0 Plans

Reptile Survey Results



10.0 Appendix 1

Reptile Survey Results

				Slow Worm			Common Lizard				Grass Snake	
Date	Time	Temp °C	Weather Conditions	Adult Male	Adult Female	Juvenile	Adult Male	Adult Female	Unknown sex	Juvenile	Adult	Juvenile
15/05/14	07:00	12	75% cloud cover, light wind	0	0	0	0	0	0	0	0	0
22/05/14	10:00	11	50% cloud cover, light wind	0	0	0	0	0	0	0	0	0
29/05/14	09:00	11	40% cloud cover, light wind	0	0	0	0	0	0	0	0	0
05/06/14	08:30	11	80% cloud cover, light wind	0	0	0	0	0	0	0	0	0
12/06/14	07:00	13	10% cloud cover, light wind	0	0	0	0	0	0	0	0	0
19/06/14	07:00	15	75% cloud cover, light wind	0	0	0	0	0	0	0	0	0
22/06/14	07:15	13	75% cloud cover, light wind	0	0	0	0	0	0	0	0	0