

Reptile Survey

Land off Cheadle Rd

Alton,

Staffordshire

April 2021

Notice to readers:

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Non-technical Summary

A reptile survey was carried out on a site known as Cheadle Rd, Alton, Staffordshire, Grid Reference SK 05353 42653.

The Reptile survey was undertaken during April & May 2021, by an experienced and ecologist who is a member of the Chartered Institute of Ecology & Environmental Management (CIEEM) & Full member of the Royal Society of Biology

Planning permission is being sought to permit the construction of caravan site.

Absolute Ecology was commissioned to carry out a Preliminary Ecological Appraisal report in March 2020 & Update 2021 which identified that the site provided suitable habitat for reptiles, it was therefore recommended that a further survey for reptiles should be conducted and this was commissioned and carried out, during the survey no reptiles were identified.

As no reptiles were identified on site, no negative impact would occur towards reptiles, therefore no further surveys will not be required, though a precautionary approach has been recommended.

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2.0 Introduction

Background

- 2.1 Absolute Ecology LLP was commissioned to undertake a reptile survey on a site known as Cheadle Rd, Alton, Staffordshire, Grid Reference SK 05353 42653.
- 2.2 The Reptile survey was undertaken during April & May 2021, by Matthew James Haydock an experienced ecologist who is a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM) & Full member of the Royal Society of Biology but whom has been involved in many projects including reptile presence & absence surveys, assessment of reptile habitats and mitigation projects matthew has also undertaking ecological habitat surveys and site nature conservation evaluations; writing and implementing site management plans; acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures; protected species surveys under Natural England licence for survey and development; undertaking ecological impact assessment, appropriate assessment. Matthew has a National Diploma in ecology and Landscape studies and holds higher National Diploma in Environmental Management.
- 2.3 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 due consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2016)¹ and the emerging BS 42020
- 2.4 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 survey area is situated in a predominantly rural location, which boundaries the hamlet of Alton. The site is immediately bounded to the south by a B5032 and to the north is the SSSI Dimmings Dale & The Ranger.
- 2.2 The site itself is dominated by species poor semi-improved grassland, hard standing, fencing & dry stone walling.

Legislation and Status

- 2.3 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.
- 2.4 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.
- 2.5 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).

3.0 Methodology

Field Survey

- 3.1 Reptile survey equipment was set out in areas of potential habitat for reptiles on the 18th March 2021. The equipment consists of artificial refugia made of roofing felt, tin and carpet that is cut into 500 mm x 500 mm s. The refugia warm up quickly and retain the heat well, attracting reptiles. A total of 38 refugia were laid in suitable habitat around the site and 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.
- 3.2 The refugia were placed in sunny areas near to cover, typically stone walling and scrub. These were then left to bed down for 2 weeks. 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) all survey visits were conducted over short periods. 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).
- 3.3 During the seven survey visits additional refugia searches were carried out for example under wooden boarding, rubble piles and brash piles were possible.

Site Status Assessment

- 3.4 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.
- 3.5 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	Good population	Exceptional population
	<i>Score 1</i>	<i>Score 2</i>	<i>Score 3</i>
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).

4.0 Results

Field Survey

- 4.1 The full survey results and weather conditions can be found in *Appendix 1*.
- 4.2 Though the site holds the correct habitat for reptile species to live no species of reptile were recorded on site during the surveys.

Plate1: Showing reptile matt that was settled in to assist with the reptile survey.



Plate 2: Showing typical habitat (Scrub & rock pile) that can support reptiles for a place of rest.



5.0 Evaluation

Presence/Absence

- 5.1 No reptiles were found during the seven survey visits. All of the survey visits were undertaken in optimum weather conditions. The use of artificial refugia and the searches of existing refugia, gave the best chance of determining whether reptiles are using the site. From the results, it can be deemed that reptiles are not currently using the site.

Site Status Assessment

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

6.0 Impacts and Recommendations

Impacts

- 6.1 The site is the subject of a planning application to permit the creation of a caravan park, which will involve substantial works on site. Record show by the Staffordshire Ecological Records Centre has identified one UK protected species of reptile were returned; slow worm (*Anguis fragilis*).
- 6.2 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. Though it would be recommended that a precautionary approach should be adopted.

Further Surveys

- 6.3 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

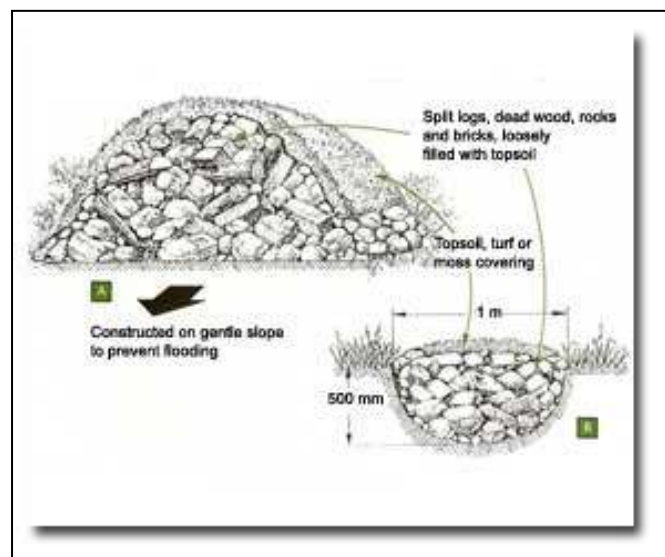
- 6.4 Common Reptile species are partially protected under Schedule 5 of The Wildlife and Countryside Act (1981), under part of Section 9(1) and all of Section 9(5). This means that they are protected from killing or injury. No licence is required to permit development but some form of mitigation to 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.

Enhancement & Precautionary Measures

6.5 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:

- Work will not be permitted to start on the clearance of the area until a thorough hand-searching exercise for reptiles has been undertaken by a suitably experienced ecologist;
- The site owner/site manager will ensure that anyone undertaking construction works on the site (including sub-contractors) is made aware of the potential for the site to support common reptiles, where to expect them, their protected status and the procedure (see iii below) to follow in the unlikely event that common reptiles are discovered during works. Where applicable this advice will be given through site inductions, tool box talks or similar. A copy of this Method Statement will be kept on site and available for inspection at all times.
- Should any common reptiles be discovered during construction, which are likely to be affected by the development, works will cease immediately. The owner/ site manager will then seek the advice of a suitably qualified and experienced ecologist and works will only proceed in accordance with the advice they provide.
- Any reptiles found during the hand searching exercise will either be left to move away of their own accord or be picked up and physically removed to a pre-defined safeguard area by a suitably qualified ecologist (please note slow worms and common lizards must not be held by the tail as they may shed part of the tail in order to escape); Within the development's construction zone the following methods of working will be adopted:
- All clearance works will be undertaken when common reptiles are likely to be fully active i.e. during the April to September period.
- Clearance of logs, brash, stones, rocks or piles of similar debris will be undertaken carefully and by hand.
- Clearance of tall vegetation should be undertaken using a strimmer or brush cutter with all cuttings raked and removed the same day. Cutting will only be undertaken in a phased way which may either include:
 1. Cutting vegetation to a height of no less than 30mm, clearing no more than one third of the site in anyone day or;
 2. Cutting vegetation over three consecutive days to a height of no less than 150mm at the first cut, 75mm at the second cut and 30mm at the third cut;
- Following removal of tall vegetation using the methods outlined in vi) remaining vegetation (outside of the biodiversity mitigation/compensation/enhancement area) will be maintained at a height of 30mm through regular mowing or strimming to discourage common reptiles from returning.
- Ground clearance of any remaining low vegetation (if required) and any ground works will only be undertaken following the works in vi) above.

- Any trenches left overnight will be covered or provided with ramps to prevent common reptiles from becoming trapped.
 - Any building materials such as bricks, stone etc. will be stored on pallets to discourage reptiles from using them as shelter. Any demolition materials will be stored in skips or similar containers rather than in piles on ground.
- 6.6 No reptiles were identified during the surveys, though there is opportunity to create some habitat opportunities within the site, in particular to the area which had potential to support reptiles, as enhancement may attract reptiles to the site by retention of grassland were possible and the creation of new grassland area. The reptile enhancement could include hibernacula log piles: this would provide more cover and a place of rest for reptiles and other species of wildlife. If material is piled loosely along with rubble and dead wood, the turves arising from the turf strip can be used to provide refuge / hibernacula habitat for reptiles (see Pictures below).



- 6.7 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. It has been decided however to adopt a precautionary approach to the works, in order to avoid direct harm to any reptiles that might be present during works.

7.0 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

8.0 Appendix 1

Reptile Survey Results

Date	Time	Temp °C	Weather Conditions	Slow Worm			Common Lizard			Grass Snake		
				Adult Male	Adult Female	Juvenile	Adult Male	Adult Female	Unknown sex	Juvenile	Adult	Juvenile
1/04/21	15.00	12.1	50% cloud cover, intermittent sun, light wind	0	0	0	0	0	0	0	0	0
08/04/21	15.00	11	70% cloud cover light overcast, light wind	0	0	0	0	0	0	0	0	0
15/04/21	15.20	11.4	40% cloud cover, light wind	0	0	0	0	0	0	0	0	0
19/04/21	10.10	11.9	40% cloud cover, light wind	0	0	0	0	0	0	0	0	0
23/04/21	10:00	10.2	10% cloud cover intermittent, light wind	0	0	0	0	0	0	0	0	0
27/04/21	14:50	13.7	80% cloud cover, light wind	0	0	0	0	0	0	0	0	0
07/05/21	15:40	11.2	50% cloud cover, light wind	0	0	0	0	0	0	0	0	0

9.0 Reptile Mats Location

