

Reptile Survey Report

For:	Everill Gate Properties Ltd
Site	Land off Everill Gate Lane, Wombwell, Barnsley, South Yorkshire
Date of Report:	29 August 2019
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Client:	Everill Gate Properties Ltd
Site Name:	Land off Everill Gate Lane, Wombwell, Barnsley, South Yorkshire
Grid Reference:	SE 41000 02572
Report:	Reptile Survey Report
Planning Reference:	2018/1353 Barnsley Metropolitan Borough Council
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The contents of this report have been produced with due consideration of current best practice guidance, and in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct.

This report should not be submitted as part of a planning application without any accompanying species-specific reports which may have been recommended herein.

Data within this report is valid for a maximum of eighteen months from the date of the survey. After this period an updated site visit will be required to determine a new ecological baseline.

Summary

The survey site, land off Everill Gate Lane, Wombwell, Barnsley DN2 4RP recorded no reptiles using artificial refugia during the survey period and no field sign evidence of reptiles.

No evidence of amphibians was recorded during the terrestrial surveys.

Due to the negative survey results it is deemed that reptiles are likely absent from the site and do not pose a constraint to redevelopment of the land.

No formal mitigation is recommended other than standard best practice precautionary measures.

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1 Introduction and Background to the Site

- 1.1 A preliminary ecological appraisal of land off Everill Gate Lane, Wombwell, Barnsley, South Yorkshire commissioned by Everill Gate Properties Ltd (Estrada Ecology Ltd, September 2018) recorded potential for habitats on site to support reptiles. As a result, presence / likely absence surveys for reptiles were recommended.
- 1.2 The site is dominated by tall ruderal communities, with small areas of scattered scrub and bracken. Areas of bare ground and rock exposures / waste occur frequently where in parts ephemeral/ short perennial communities have colonised. The site is bordered on all elevations by fencing, some in a poor condition. Immediately outside the boundary fencing are mature, species-rich hedgerows and scattered trees.
- 1.3 The site is located approximately 1.5 km south of Darfield, Barnsley. The survey site crosses two local authority boundaries; those being Rotherham and Barnsley.

Figure 1: The survey site.



Google Earth

- 1.4 Under current proposals, the site is to be redeveloped for business use.
- 1.5 This report details the findings of a reptile survey of the site conducted during 2019.

2 Legislation Pertaining to Reptiles

- 2.1 All six British reptile species receive a degree of legislative protection that varies depending on their conservation importance.
- 2.2 The more widespread reptile species: common lizard (*Zootoca vivipara*); slow-worm (*Anguis fragilis*); grass snake (*Natrix helvetica*); and adder (*Vipera berus*), receive partial protection under the Wildlife and Countryside Act 1981 (as amended), whereby it is an offence to:
- Intentionally / recklessly kill;
 - Intentionally / recklessly injure; or
 - Trade (i.e. sale, barter, exchange, transport for sale, advertisement for sale / purchase) any of these species.
- 2.3 Sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) receive full protection under the Wildlife and Countryside Act 1981 (as amended). This prohibits:
- Intentional capture / killing;
 - Intentionally / recklessly injure;
 - Deliberate disturbance whilst occupying a 'place used for shelter or protection';
 - Possession;
 - Damage, destroy, or obstruct access to any place used by these species for shelter or protection; or
 - Trade (i.e. sale, barter, exchange, transport for sale, advertisement for sale / purchase) any of these species.

3 Reptile Ecology

- 3.1 Six native species are present in England, namely: smooth snake; sand lizard; grass snake; adder; common lizard; and slow worm.
- 3.2 The smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) are very rare reptiles and are heathland specialists; largely restricted in distribution to the sandy heaths of Dorset, Hampshire, and

parts of Surrey. As such, neither of these species is likely to be present within the site.

- 3.3 The grass snake is widely distributed throughout England and Wales and may be found in a wide variety of habitats that include grassland, open woodland, hedgerows and marshland. Often associated with water, due to its strong swimming ability, they can often be seen hunting small fish, tadpoles and frogs in ponds, ditches, lakes and streams.
- 3.4 The adder (*Vipera berus*) is our only venomous reptile. It generally prefers dry localities, ranging from heath and open woodland to upland moors.
- 3.5 The common or viviparous lizard (*Lacerta vivipara*) is the most widespread of the British reptiles. It can be found in a range of habitat types including heaths, grasslands, woodland clearings, and gardens.
- 3.6 The slow worm (*Anguis fragilis*) is a legless lizard that inhabits a wide range of habitats. The young are born alive, usually in September. Slow worms hibernate in the ground between October and February.

4 Survey and Site Assessment

4.1 Pre-existing information on reptiles at the survey site

- 4.1.1 Two reptile records were returned by Barnsley Biological Records Centre (BBRC), both for grass snake (*Natrix helvetica*), dated 2004 and 2016; the former being recorded on Everill Gate Lane, the latter at Parkhill Nature Reserve Local Wildlife Site.

4.2 Objectives of the survey

- 4.2.1 The objectives of this survey were to establish whether reptiles (of locally endemic species) were present on the proposed development site and, if present, to determine the population size.
- 4.2.2 The data will then be used to determine the impacts on any population of reptiles by the proposed development, and to devise a suitable mitigation strategy, if necessary.

- 4.2.3 Where appropriate, the presence of other protected species was surveyed for and findings reported within.

5 Reptile Survey Methodology

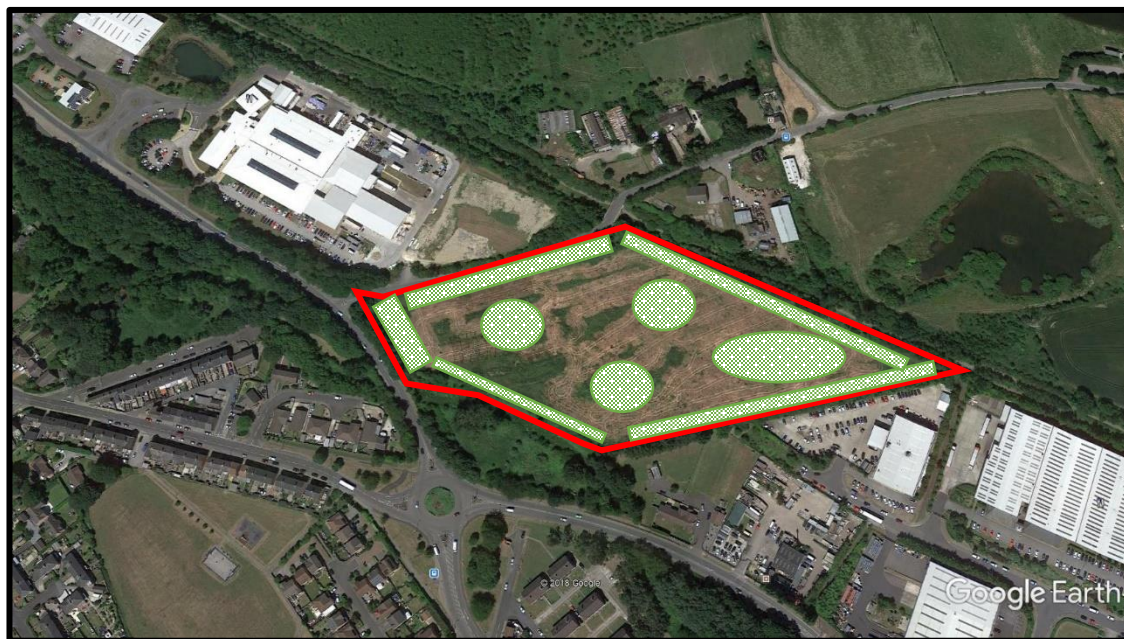
5.1 Methods

- 5.1 Accepted guidance on reptile survey methodologies is set out within the JNCC Herpetofauna Worker's Manual (2003) and within Froglife's Advice Sheet 10 entitled 'Reptile Survey' (Froglife, 1999).

5.2 Refugia

- 5.2.1 In mid-May 2019, a total of sixty artificial reptile refugia were deployed within the site within areas of previously identified suitable habitat as shown in Figure 2.
- 5.2.2 Artificial refugia in the form of 50cm x 50cm squares of corrugated tins, carpet tiles, and thick roofing felt were placed for reptiles to bask on or take refuge under. A mixture of refugia materials was used to provide a variety of climatic conditions and optimise results.

Figure 2: Areas refugia were located.



Google Earth

5.2.3 The refugia were left undisturbed for a fortnight prior to the commencement of the survey to allow them to bed in and give reptiles enough time to locate them.

5.2.4 During each survey visit, the refugia were approached to not cast a shadow over any basking animals and cause disturbance. Where practical refugia were approached from downwind.

5.2.5 Any reptiles recorded were logged as following:

- Location;
- Species;
- Abundance;
- Life stage;
- Sex.

5.3 Terrestrial search

5.3.1 The site was subject to a walk over during each visit for other signs of reptiles, including actual sightings, sloughs (shed skins) and eggs.

5.4 Population Class Assessment

5.4.1 Any populations of reptiles recorded during the surveys were categorised into a population size class, based on guidance outlined by the HGBI 1998.

Table 1: Population size class of common reptile species (HGBI, 1998).

Survey	Date	Timing	Weather
Grass snake	<2	2-4/ ha	>4/ha
Adder	<2/ha	2-4/ha	>4/ha
Slow worm	<50/ ha	>50/ha	>100/ha
Common Lizard	<20/ ha	>40/ha	>80/ha

5.5 Timing

5.5.1 Reptiles are ectothermic, obtaining body heat from their external environment. As such, all surveys were conducted during suitable weather condition, as outlined Table 2. Wet and windy days were avoided.

5.5.2 Seven surveys to ascertain presence / absence were conducted throughout the months of late May to late July 2019.

5.5.3 Timings included morning (6am to 10:30am) and afternoon (1pm to 4pm) visits, in order to maximise survey effort and variability.

5.6 Experience

5.6.1 The surveys were led by experienced ecologist, Natasha Estrada, who is experienced in reptile surveying, handling, identification and mitigation having been the lead ecologist on several reptile translocation projects, assisted by junior ecologist, Joanne Toller.

6 Survey Results

6.1 The results of the initial seven surveys are highlighted in Table 2.

Table 2: Results of reptile surveys.

Survey	Date	Timing	Weather	Grass snake	Common lizard	Slow worm	Adder	Amphibians
N/A			N/A Deployment of refugia	-	-	-	-	-
1	30/05/2019	10:00	17°C, Cloud: 20%, Wind: 2, Rain: 0	0	0	0	0	0
2	14/06/2019	09:45	19°C, Cloud: 80%, Wind: 3, Rain: 0	0	0	0	0	0
3	24/06/2019	14:30	16.5°C, Cloud: 20%, Wind: 2, Rain: 0	0	0	0	0	0
4	10/07/2019	10:30	16°C, Cloud: 100%, Wind: 4, Rain: 0	0	0	0	0	0
5	17/07/2019	16:00	17°C, Cloud: 40%, Wind: 6, Rain: 0	0	0	0	0	0
6	24/07/2019	09:05	17°C, Cloud: 50%, Wind: 1, Rain: 0	0	0	0	0	0
7	30/07/2019	09:15	15°C, Cloud: 20%, Wind: 1, Rain: 0	0	0	0	0	0

6.2 No reptiles of any species were recorded during the survey period. No reptile sightings or field sign evidence of reptiles were recorded during the survey period.

6.3 No amphibians of any species were recorded during the survey period under artificial refugia.

7 Interpretation and Evaluation

7.1 Population size class assessment

- 7.1.1 Due to the surveys recording negative for the presence of any reptile species throughout their duration, it is deemed unlikely that reptiles are using the site.
- 7.1.2 No field sign evidence such as sloughs (shed skins) or eggs were recorded during walkover or terrestrial searches of the site.
- 7.1.3 No amphibians of any species were recorded throughout the survey period.

8 Site Status Assessment

- 8.1 The survey data indicates that the site supports no populations of reptiles.

9 Ecological Constraints

- 9.1 No major constraints were experienced during the survey period.
- 9.2 Periods of extensive drought are known to affect activity levels of reptiles. Such conditions were not experienced throughout the survey period.

10 Assessment of Impacts

- 10.1 The proposed redevelopment of the site is not deemed to have an impact on reptiles.
- 10.2 No amphibians were recorded throughout the survey period and no impacts are predicted.
- 10.3 No formal mitigation is recommended in this instance other than the following best practice:
- Should reptiles, or field sign evidence to indicate the presence of reptiles, be recorded on site then all works should cease, and a suitably qualified ecologist be consulted.

References

Froglife's Advice Sheet 10 'Reptile Survey'

Gent t, Gibson S, JNCC "Herpetofauna Workers Manual" (2003)

HGBI Advisory Note entitled "Evaluating Local Mitigation / Translocation Programmes: Maintaining Best Practice and Lawful Standards" 1998.



Appendix One: Artificial refugia located throughout the site.

