



Reptile Survey Report

14/09/2023

Report Ref. ER-6517-04-A

Report reference	ER-6517-04-A - Reptile Survey Report
Author	Victoria Baker BSc (Hons), MSc, MCIEEM Senior Ecologist
Technical Review	Sam Kitching BSc (Hons) MCIEEM Principal Ecologist
QA	Jon Roberts MSci (Hons) Biodiversity Technician
Authorised	Sam Kitching BSc (Hons) MCIEEM Principal Ecologist
Date	14/09/2023
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.

Summary Statement

A full suite of dedicated reptile surveys has been completed on Site; this has recorded no evidence of reptile activity anywhere on the Site. The likely absence of reptiles can therefore be reasonably concluded.

Introduction

1. Subsequent to recommendations set out in the Preliminary Ecological Appraisal Report (ER-6517-01A), Brooks Ecological was commissioned to carry out a detailed Reptile Survey at the proposed development Site at Land off Darton Lane, Mapplewell (grid ref. SE 3197 0985).
2. The survey covered all land within the red line boundary, as shown in Figure 1 opposite.

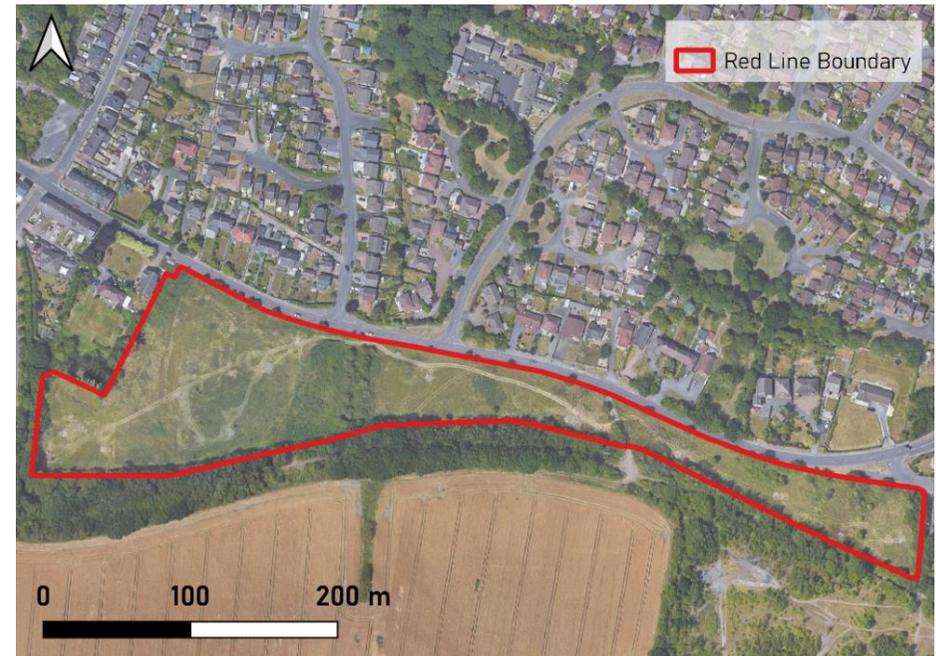
Legislation & Guidance

3. The Site lies within the natural range of four widespread species of reptile (common lizard, slow worm, adder, and grass snake). These all receive limited protection under part of subsection 9(1) and all of subsection 9(5) of the Wildlife and Countryside Act 1981 (as amended). This affords protection against intentional and reckless killing or injuring, and trade.
4. Destruction of known habitats whilst reptiles are present may therefore lead to an offence of killing or injury.
5. Destruction of known habitat without provision for the safe escape of animals into further suitable habitat able to support them can lead to offences under the Abandonment of Animals Act 1960 (as amended).
6. The Natural Environment and Rural Communities Act 2006 sets out the responsibility of public authorities to Biodiversity. This Act provides lists of habitats and species to which the LPA's consideration must be given when exercising their functions (e.g. considering planning permission). All reptile species are listed under Section 41 of the Act, making them and their habitats a consideration of planning.

Records

7. As part of the desk study for the initial Preliminary Ecological Appraisal Report, a data search was undertaken with Barnsley Metropolitan Borough Council, which returned three records of common lizard >1.5km north.
8. Previous survey by another consultancy in 2018 encountered a single grass snake within the Site boundary.

Figure 1 The Site boundary - red line.



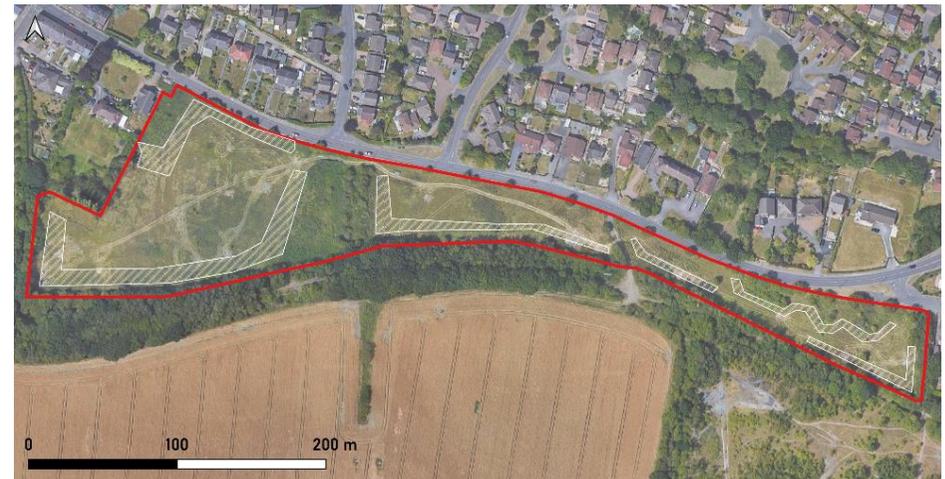
Method

9. Reference is made to The Herpetofauna Worker's Manual (Gent and Gibson, 2003) for the survey methodology, with seven official reptile survey visits being carried out.
10. Survey was scheduled for the main active season, with visits spread across the period of April and September 2023 and undertaken during suitable weather conditions and time of day. Seven visits have been completed during this period.
11. Each visit comprised a walked transect looking for reptiles that may be basking or foraging, and a hand search of refugia. An appraisal of the Site by the surveyor allowed an assessment of the location of target habitat features such as potential hibernacula, refuges, and foraging grounds. This allowed surveys of the Site to be targeted, depending on season and conditions - a strategy which will considerably increase the potential of surveyors encountering reptiles.
12. The Site contains limited potential refugia. In order to increase the chance of finding any reptiles present, artificial refuges were placed in strategic locations across the Site, in locations most likely to support reptiles. A total of 60 corrugated bitumen and metal sheets were deployed - this exceeds the recommended guideline of using a minimum of 5-10 refuges/ha set out in the Froglife Advice Sheet 10 (the Site is c. 3.5ha).
13. Refuges were placed on the Site in April 2023 and left undisturbed for a short period prior to the commencement of surveys.
14. Walked transects were carried out carefully with the surveyor walking slowly and looking well forward to attempt to spot reptiles at a distance. This technique is necessary because reptiles have very good eyesight and sense of vibration, and generally are aware of surveyors at short distances, rapidly taking cover to avoid detection.
15. Any existing and new artificial refugia were approached quietly to observe any basking reptiles. These were then lifted to reveal any reptiles that may be sheltering beneath.
16. In addition to physical sightings, reptiles can also leave evidence of their presence in the form of shed skin and holes in the ground (e.g. from lizard burrows or grass snake egg laying pits). This form of evidence was also searched for during the survey.

Constraints

17. Each survey visit was undertaken during suitable weather conditions, at an appropriate time of day and year.
18. The Site is currently unmanaged and has been for over a year. As such, as the season progressed, vegetation on-Site became very tall and dense, and obscured some of the reptile mats. Additional mats were deployed to compensate for this.

Figure 2 Approximate location of refuge sheets (white hatch).



Results

19. Seven surveys visits have been completed, with surveys undertaken across April, May, June and September 2023.
20. No reptiles or evidence thereof have been identified on-Site during these surveys. A summary of the survey conditions and results is presented in Table 1 below.

Table 1 Summary of survey results.

Survey	Date	Conditions	Results/ Notes
-	20 th April 2023	Temperature 7-8°C. Clear skies. Light breeze (B1). Dry.	Reptile mats deployed. No reptiles found.
1	25 th April 2023	Temperature 9-10°C. Clear skies. Light breeze (B1). Dry.	No reptiles found
2	3 rd May 2023	Temperature 15-14°C. Initially sun / cloud, clearing to full sunshine. Gentle breeze (B2). Dry.	No reptiles found
3	10 th May 2023	Temperature 9-12°C. Clear skies. Gentle breeze (B2). Dry.	No reptiles found
4	25 th May 2023	Temperature 12-14°C. Intermittent cloud and sunshine. Light breeze (B1). Dry.	No reptiles found
5	23 rd June 2023	Temperature 17-22°C. Light cloud at first, clearing to intermittent sunshine. Gentle breeze (B2). Dry.	No reptiles found.
6	29 th June 2023	Temperature 18-18°C. Cloud initially, but soon clearing to full sunshine. Gentle breeze (B2). Dry.	No reptiles found.
7	14 th September 2023	Temperature 16-18°C. Intermittent cloud and sunshine. Light breeze (B1). Dry..	No reptiles found

21. The Site has also be subject to numerous *ad hoc* survey visits as part of other ecological survey work in 2023. No evidence of reptiles has been found during any of these visits.

Conclusions & Recommendations

22. Following a full suite of dedicated survey visits, no evidence of reptile activity has been recorded anywhere within the Site. Likewise, no evidence of reptiles has been identified during any of the other faunal studies undertaken throughout the 2023 season, which have included badger, bats, breeding birds and invertebrates.
23. A single grass snake was previously recorded on Site in 2018. However, since then, a lack of on-site management has led to vegetation growing up, restricting basking habitat and resulting in waterbodies terrestrialising and thus reducing foraging opportunities. It is likely that grass snake are still present in the area, but the Site is currently assessed as being of limited value to this species, and the development and subsequent management of habitats present an opportunity to benefit grass snake in the long term.

Ecological enhancement

24. The requirement for development to make a positive contribution to biodiversity is clearly set out in guidance such as the NPPF and BS:42020 - over and above mitigating or compensating for any potential impacts.
25. The Site has been ecologically designed, with input from Brooks Ecological. The western grassland is to be retained and brought into a sensitive low-level management regime.
26. An attenuation basin is also proposed which alongside new gardens will provide a mosaic of habitats for reptiles to make use of.
27. Log/grass piles created in strategic locations, such as around the pond and beneath hedgerows on south facing aspects, will be of benefit to reptiles and wildlife in general.

References

- CIEEM (2019) Advice Note - On the Lifespan of Ecological Reports and Surveys
- Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.
- Gent T and Gibson S, 2003, Herpetofauna Workers' Manual, JNCC
- Hill et al. 2005, Handbook of Biodiversity Methods. Cambridge.