Landscape Architecture
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LAND TO THE NORTH EAST OF KING GEORGE V PLAYING FIELD

2020 REPTILE SURVEY REPORT

Prepared for Lands Improvement Holdings

by

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EXECUTIVE SUMMARY

This report describes an updated reptile survey carried out at approximately 4.89ha of land at Cuffley, Hertfordshire, hereinafter referred to as 'the Site'. The Site centre is located by National Grid Reference TL 3045 0210. The study was commissioned by Lands Improvement in May 2020.

No reptiles were recorded during the updated reptile survey carried out in 2020. This reflects the findings of the previous reptile survey work carried out in 2008 and 2013.

It is therefore considered that the Land to the North East of King George V Playing Field Site is extremely unlikely to support reptiles on a regular basis. This result is reinforced by the placing of a higher than recommended density of refugia which would have increased the likelihood of finding any reptiles present at the Site. No mitigation specific to reptiles is therefore recommended in relation to the proposed development of the Site.

1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes an updated reptile survey carried out at approximately 4.89ha of land at Cuffley, Hertfordshire, hereinafter referred to as 'the Site'. The Site centre is located by National Grid Reference TL 3045 0210. The study was commissioned by Lands Improvement Holdings in May 2020

1.1.2 The Site is located on the southern edge of Cuffley and is currently in agricultural use. It is bound by existing residential development to the north and north-west; the grounds of Cuffley Primary School also adjoin the Site along its northern boundary. The railway line and Northaw Road East (B156) form firm eastern and western boundaries, respectively. The southern boundary is defined by a mature hedgerow and tree belt lining the Hertfordshire Way footpath. Beyond the footpath to the south-west of the Site is the King George V Playing Fields, which contains three sports pavilions, a recreation area with hard-surfaced Multi-Use Games Areas (MUGA), sports pitches and a small area of formal play equipment.

1.1.3 The location and boundary of the Site are shown in *Appendix A*. A full description of the habitats within the Site is provided in the Ecological Appraisal report (HDA, 2021)

1.2 Background and legislative context

1.2.1 Four species of reptile are widespread in England: Grass Snake *Natrix natrix*, Slow-worm *Anguis fragilis*, Common Lizard *Zootoca vivipara* and Adder *Vipera berus*. The Sand Lizard *Lacerta agilis* and Smooth Snake *Coronella austriaca* are restricted to certain sand dune and heathland sites.

1.2.2 Reptiles can be found in a range of habitats and typically require a mosaic of vegetation types. Habitat interfaces are important with reptiles requiring woodland, scrub or hedgerow for shelter, with adjacent longer vegetation for hunting and patches of sheltered short turf, bare ground or log piles for basking. Areas which catch the sun (i.e. those with a southerly aspect) are preferred over those where direct sunlight is absent for most of the day. In addition, Grass Snakes favour damp habitats such as those associated with still and running water, grazing marshes, mires etc.

1.2.3 All species of reptile are protected through Sections 9(1) and 9(5) of the 1981 Wildlife and Countryside Act (as amended). It is an offence to:

- Intentionally kill or injure any reptile; and
- Sell, offer for sale, possess or transport for the purposes of sale or publish advertisements to buy or sell any reptile.

Due to their rarity, Sand Lizards and Smooth Snakes have additional protection.

1.2.4 Reptiles across the UK have undergone significant declines in recent years and all native reptile species are listed as priority species on the UKBAP and identified as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Section 40 of the Act requires that these species are a material consideration in the planning process.

1.3 Development proposals

1.3.1 Development proposals for the Site include the proposed construction of residential homes, areas of green space and associated hard and soft landscaping.

1.4 Scope and purpose of the report

1.4.1 This report and corresponding surveys provide an update of reptile survey work carried out at the Site by HDA in 2008 (HDA, 2009) and 2013 (HDA, 2014). No reptiles were recorded during either the 2008 or 2013 surveys, and it was concluded that locally significant numbers of reptiles were extremely unlikely to be present. Although an updated Phase 1 Habitat Survey carried out on 1st July 2020, found no significant changes in the extent or character of suitable reptile habitat at the Site since the 2008 and 2013 reptile surveys were carried out, in view of the time that had elapsed since the 2008 and 2013 survey, the reptile survey was updated in 2020 to confirm the extent of any current constraints to the proposed development of the Site for residential use.

1.4.2 A reptile survey was subsequently undertaken to inform an assessment of the likely effects of the proposed development of the Site on reptiles, and this is the subject of this report. The aims of this study are:

i. To establish the presence/ probable absence of reptiles at the Site;
ii. To assess the relative importance of different parts of the Site for reptiles; and
iii. To predict likely impacts potentially arising from the proposed development of the Site on reptiles and give recommendations for impact avoidance, minimisation and mitigation.

2 METHODOLOGY

2.1 The methodology has been devised to accord with the requirements of all relevant legislation and good practice guidance, including the Herpetofauna Worker's Manual (JNCC, 1999) and Reptile Survey guidance (Froglife, 1999).

2.2 The site was surveyed on a total of seven occasions by Anna Potter of HDA. Surveys were generally carried out during optimum temperature and weather conditions (intermittent or hazy sunshine, mild temperature and low winds). Dates of survey visits, with survey timings and weather conditions, are shown in *Table 1* below:

Table 1: Survey times and weather conditions

Survey visit	Date	Time of Visit	Weather conditions	Temp (°C)
1	05.08.2020	15.40– 16.00	Humid, Sunny with a light breeze	21
2	11.08.2020	12.00 – 12.30	Humid, Overcast with a light breeze	19
3	20.08.2020	17.30 - 18.00	Dull, dry, Overcast and still	22
4	02.09.2020	10.30 – 11.00	Sunny, dry and still	20
5	07.09.2020	09.30 – 10.30	Sunny, clear, dry and still	17
6	09.09.2020	15.30 – 16.00	Warm, dry, 30% cloud cover, light breeze	21
7	14.09.2020	10.00 – 10.30	Warm, 40% cloud cover and still	22

2.3 Two methods of surveying were used. Firstly, artificial refugia (squares of roofing felt 0.5m x 0.5m) were placed, in advance of the survey commencing, at potential basking areas throughout the Site. A total of 40 refugia were placed across the Site, giving a total density of 8.17 refugia per hectare. As potential reptile habitat constitutes only a very small proportion of the Site the recommended density of 5 to 10 refugia per hectare of suitable habitat was substantially exceeded. This exceedance was intended to increase the chance of encountering reptiles and, if present, provide a more accurate indication of their distribution within the Site. Locations of refugia are shown on the map in *Appendix A*.

2.4 During each of the seven subsequent visits, each refugium was inspected for any reptiles basking on the upper side, then lifted and checked for sheltering animals before being carefully replaced.

2.5 The second survey method involved transect searches across suitable habitats within the Site. This ensured that all areas were represented in the survey and that the survey was not biased towards those reptiles more likely to use refugia. Transect searches involve walking slowly around the Site, visually searching potential basking areas and marking the locations of any reptiles observed on a map. Potential reptile refuges already present on the Site such as logs were also lifted to check for the presence of reptiles.

2.6 The following information was recorded for each reptile survey: species seen, number of animals seen, location (refugium number), date, start and finish times, temperature and weather.

2.7 Limitations

2.7.1 On several occasions, temperatures exceeded 20°C, but it has been HDA's experience that minor exceedances do not significantly change rates of detection, and in some instances may improve detection of reptiles. It is therefore considered that no significant limitations were encountered during the surveys and that the survey findings allow a robust assessment of the likely effects of the proposed development on reptiles.

3 RESULTS

3.1 Habitat assessment

3.1.1 The majority of the Site is dominated by a single arable field which is considered unsuitable for reptiles. Field margins in the form of rough grassland with scattered scrub and hedgerow bases have potential to support common and widespread reptiles. However, the field margins were generally very narrow to non-existent in many places, providing very limited areas of reptile habitat including rough grassland, ruderals and scrub. Additional suitable habitat is provided by the tree belt along southern Site margin. Scrub areas beyond the Site boundary to the east on the railway embankment provide good quality habitat for common and widespread reptile species but adjacent suitable habitat on the Site margins is generally very limited.

3.2 Refugia and visual searches

3.2.1 Despite the presence of suitable habitat for reptiles within the Site, no reptiles were recorded during the reptile survey.

4 SITE EVALUATION

4.1 A number of guidelines are used to evaluate the importance of a site for reptiles, based on both the population density and number of species present, in addition to historical factors.

4.2 The Guidelines for Biological Selection of SSSIs (JNCC, 1989) gives a scoring system for the evaluation of sites on the basis of their reptile population. It suggests that for the commoner species of reptile, the best localities in which three or more species occur should be selected as potential SSSIs.

4.3 The Herpetofauna Workers' Manual (JNCC, 1998) suggests that sites falling outside of the SSSI selection criteria should be designated as Sites of Importance for Nature Conservation (SINCs) if they meet the following criteria:

- Any site with a large population of a single species;
- Any site with a moderate population of two species;
- Any site at the edge of the geographical range of a species; and
- Any site with a long documented history.

4.4 The Key Reptile Site register is a mechanism designed to promote the safeguard of important reptile sites. To qualify for the register, the Site in question 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 at least one species (*Table 2*);
- Supports an assemblage of species scoring at least 4 (*Table 2*); and
- Does not satisfy the above criteria but is of particular regional importance due to local rarity (e.g. in the East Midlands, Adders are very rare so even "low" populations should be designated as Key Sites).

4.5 The criteria for scoring populations of the four common reptile species for the purposes of the Key Reptile Register are given in *Table 2* below.

Table 2: Population parameters for the Key Reptile Sites register

Reptile 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 the maximum number of adults seen by observation and/or under tins (placed at a density of up to 10 per hectare) by one person in one day.

4.6 Despite the presence of suitable habitat within the Site, no reptiles were recorded during the reptile survey. The Site is therefore extremely unlikely to qualify for consideration as a SSSI, SINC or Key Reptile Site either wholly or in part, and is considered to be of negligible importance for reptiles in a local context.

5 CONCLUSION AND RECOMMENDATIONS

5.1 No reptiles were recorded during the 2020 reptile survey. This reflects the findings of precious reptile surveys carried out at the Site in 2008 and 2013. It is therefore considered that the Site does not support reptiles on a regular basis and that where areas of suitable reptile habitat are affected by the proposed development, reptiles are unlikely to be present. No mitigation specific to reptiles is therefore currently recommended in relation to the proposed works.

5.2 It is recommended however that any need for mitigation is reviewed at an appropriate stage prior to works commencing in order to allow consideration of any changes to the management of habitats at the Site which may have affected their ability to support reptiles

since this report was produced, or time that has passed since the 2020 survey was undertaken.

5.3 Notwithstanding the apparent absence of reptiles at the Site, consideration should also be given to the inclusion of areas of suitable reptile habitat within the wider landscape scheme of the proposed development, such as meadow grassland, enhancement of woodland edge habitats, scrub and hedgerow planting. The value of these habitats could be further enhanced through the provision of refuge and hibernation opportunities such as log piles and purpose-built hibernacula. Subject to the provision of these measures, the future value of the Site for reptiles could be protected and potentially enhanced. This would be in keeping with planning policy and guidance and Section 40 of the 2006 NERC Act.

6 REFERENCES

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APPENDIX A

Reptile Survey Summary Plan

KEY

Site boundary

1 Reptile refugia

*No reptiles recorded

CLIENT:
Lands Improvement Holdings

PROJECT:
Northaw Road

TITLE:
Reptile Survey Summary Plan

SCALE AT A3:
1:1250

DATE:
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