# Greengage



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# 28 Redington Road - Reptile Survey Report

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#### 1.0 EXECUTIVE SUMMARY

- 1.1 Greengage Environmental Ltd was commissioned by the Linton Group to undertake a Reptile Presence/Likely-Absence Survey at 28 Redington Road, Hampstead.
- 1.1 This report has been produced in support of an application for planning permission which seeks for demolition of the existing building and redevelopment to provide a number of flats and communal garden.
- 1.2 Despite suitable habitat identified onsite during the Preliminary Ecological Appraisal (PEA), there were no reptiles recorded during the seven survey visits. Reptiles are therefore confirmed to be likely absent from the assessment area, in accordance with the survey guidelines.
- 1.3 As such, formal mitigation is not required to offset any disturbance to reptiles and the proposed development will have a negligible impact on reptiles both at the site and in the local area.
- 1.4 Nevertheless, with the proposed clearance of shrub beds and florally diverse areas of scrub to facilitate the development. Ecological enhancement recommendations are provided which will result in net gains in biodiversity for the site and local area, if included.



#### 2.0 INTRODUCTION

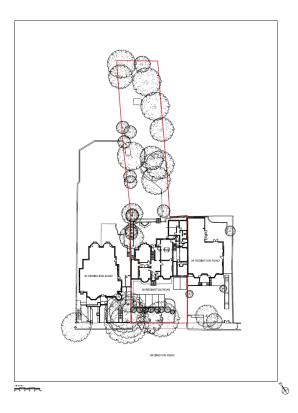
- 2.1 Greengage Environmental Ltd was commissioned by the Linton Group to undertake a Reptile Presence/Likely-Absence Survey at 28 Redington Road, Hampstead. The survey aims were to establish the presence or likely absence of reptiles and evaluate the population size of any reptiles recorded. This document is a report of that survey.
- 2.2 The overall assessment consisted of:
  - Site-specific biological information gained from statutory and non-statutory consultation; and
  - An on-site reptile survey.
- 2.3 The site-specific survey exercise, consisting of 7 visits, was undertaken throughout October 2016.
- 2.4 The findings, recommendations and opinions expressed in this report are based on the combination of information stated, site observations and feedback from the consultation exercise.



#### 3.0 SITE CONTEXT & STATUS

- 3.1 The site is approximately 0.2 hectares and is approximately centred on National Grid Reference TQ257858 and OS Co-ordinates 525798, 185861.
- 3.2 The site supports a three storey residential property with associated driveway and garden space. The building is a brick built structure with a pitched and tiled roof which links to a small annex block. The garden, that extends some distance to the rear of the property, supports a number of mature trees and includes a patchwork of overgrown improved grassland and shrub beds.

Figure 2.1 Site red line boundary



3.3 The site is set in the urbanised area of Hampstead Village. A very green part of north London, Hampstead is characterised by an abundance of large residential properties with gardens and tree lined streets, as well as the network of parks including Hampstead Heath (located just 350m from the site at its closest point); accordingly, there is an abundance of green space in the area, with well-defined green links to and from the site.

#### PROPOSED DEVELOPMENT

3.4 Proposals include demolition of the existing building and redevelopment to provide a new residential building comprising a number of flats with private terraces and a communal garden.



#### PRELIMINARY ECOLOGICAL APPRAISAL - REPTILES

- 3.5 The scoping survey was carried out on 5<sup>th</sup> July 2016, generally considered to be within the optimal time period for botanical identification (April-October).
- 3.6 In conjunction with the conclusions from the scoping survey, site-specific information was sourced through direct consultation with the Greenspace information for Greater London (the biological records centre for the study area) in relation to the presence of protected species, designated sites or areas of particular regional, national or international importance.
- 3.7 The potential for reptile species on site was assessed during the walkover survey with likely possible species including grass snake (*Natrix natrix*), adder (*Vipera berus*), common lizard (*Lacerta vivipara*) and the slow worm (*Anguis fragilis*). These native reptile species generally require open areas with low, mixed-height vegetation, such as heathland, rough grassland, and open scrub or, in the case of grass snake, waterbody margins. Suitable well drained and frost free areas are needed so they can survive the winter.
- 3.8 During the site walkover the patches of dense and scattered scrub predominantly toward the north east and the mixed-height herbaceous/shrub species associated with the edges of the garden, were identified as having potential to support reptiles. There was lower potential identified within the semi-unmanaged amenity grassland. There is negligible potential for reptiles to be present across the hardstanding of the patio.
- 3.9 With suitable reptile habitat having been identified on-site it was recommended that reptile presence/likely-absence surveys, sufficient to detect species such as slow worm, common lizard, adder and grass snake, should be carried out in accordance with Natural England guidelines. Where habitat was not suitable for reptiles within the application site, no further surveys have been deemed necessary.

#### LOCAL REPTILE RECORDS

3.10 Consultation with the Greenspace information for Great London (GiGL) identified records no records of reptiles within 1km of the assessment site boundary.



#### 4.0 METHODOLOGY

- 4.1 A presence/absence survey and a population estimate survey for reptiles was completed throughout early and mid October 2016 with the survey sufficient to detect all species of reptiles including those most likely to be present, particularly slow worm, common lizard, adder and grass snake. This was carried out in accordance with Natural England and Froglife 1999 Guidelines<sup>1</sup>.
- 4.2 Refugia ('mats') were constructed of approximately 0.5m x 0.5m square felt sheeting as recommended by Froglife and the HGBI² for reptile surveys. Froglife guidelines recommend between 5 10 mats per hectare¹. The site in total is approximately 0.2 ha containing approximately 0.06 ha of land potentially suitable for reptiles. Whilst only a small area was deemed suitable, to ensure that any reptiles were recorded, mats were laid across much of the site. A total of 22 mats were placed across the site, locally sited in the most appropriate position for use by basking/sheltering reptiles. Figure 1.0 shows the placement of these mats across the site.
- 4.3 The density of refuge mats varied depending on the suitability of the area of habitat being surveyed. Reptiles are poikilothermic and are therefore dependent upon ambient temperatures to regulate their own body temperature. As such they will hide under the mats and use the heat generated from them to raise their own body temperature to a level where they become more active for foraging and other activities.
- 4.4 Seven survey visits were carried out, subsequent to the mats being distributed, to determine the presence/absence of reptile species on site and establish a population size from the data mats were allowed to 'bed in' for five days following distribution.

  Typically, up-to 7 visits are deemed necessary for presence/absence surveys.
- 4.5 During each visit, the mats were checked visually from a distance to determine whether reptiles were basking on their surface. The mats are then carefully approached and lifted to check for reptiles sheltering beneath them.
- 4.6 Between mats the site was also walked carefully and slowly in an attempt to detect reptiles that may be basking away from the artificial refugia supplied. Other potential refugia/basking sites present within the site were visually checked in addition to the mats during the walkovers.

#### **TIMING**

4.7 Seven survey visits were conducted between the 10<sup>th</sup> October and 18<sup>th</sup> October 2016. Visits to the site were made between 11:00am and 5:30pm when weather conditions were favourable, in accordance with good practice.



#### WEATHER CONDITIONS

4.8 Weather during the survey visits was conducive for surveying for reptiles, being dry and warm or mild, although some days were overcast. Froglife guidelines<sup>1</sup> recommend that ideal temperatures for reptile surveys are between 9°C and 18°C. Temperatures ranged from approximately 11°C to 15°C during the survey period.

#### **LIMITATIONS TO SURVEY**

- 4.9 The survey was conducted towards the end of the survey season, as dictated by the survey guidelines. At the time when the survey was conducted, in the early autumn, reptiles begin to become less active and find sites to take refuge and overwinter. For this reason, it is possible that reptile surveys undertaken at this time in the year provide 'false negative' results, or indicate a smaller population than is present.
- 4.10 Given the little time before reptiles are due to take refuge for winter the reptile survey was done on consecutive days. Despite their shy nature, reptiles will return to the mats despite minor disturbance therefore, this limitation is not considered to form a major constraint over the assessment or conclusions made within this report.
- 4.11 Although the night temperature fell below 9°C at night on one occasion within the survey period, the surveys were undertaken within suitable weather conditions; there had been no frost, temperature and conditions during the survey visits were conducive for surveying for reptiles, as such, it is not thought that the timing of the survey was a significant caveat.
- 4.12 Reptiles are generally secretive animals and are often difficult to locate by virtue of their behaviour and habitat selection; it is therefore often difficult to prove absence<sup>1</sup>. During surveys it is possible to unsettle basking reptiles by walking through nearby habitat. Therefore, binoculars were used to search for basking animals from a safe distance as well as the artificial refuge search to increase confidence in the survey.

#### **SURVEYORS**

- 4.13 Survey visits were carried out by Laura Thomas.
- 4.14 Mitch Cooke, who reviewed this report, has a degree in Ecology (Hons), an MSc in Environmental Assessment and Management, and is a full member of CIEEM with over 20 years' experience in ecological survey and assessment. Mitch has set up and developed ecological and environmental teams for over 10 years and has undertaken and managed numerous ecological surveys and assessments. He is the Partner at Greengage and manages the team.
- 4.15 Laura Thomas, who prepared this report, has an undergraduate degree in Biology (BSc Hons) and a Master's degree in Evolutionary and Behavioural Ecology. Laura has



extensive experience in surveying reptiles throughout her experience in the commercial sector.



#### 5.0 RESULTS

#### PRESENCE/LIKELY-ABSENCE SURVEY

- 5.1 No reptile species were identified during the presence/likely-absence survey. As such, it is considered that reptiles are likely-absent from the assessment site.
- 5.2 The reptile survey was carried out at an appropriate, though sub-optimal, time of year to survey for reptiles, and, for the majority of the survey visits, within ideal conditions for observing reptiles. The density of refuges was high, relative to the amount of habitat potentially suitable for reptiles to bask on site. The survey conditions and measures undertaken were considered sufficient to detect any population of reptiles existing on site at that time.
- 5.3 As reptiles were confirmed as likely absent, there are no formal mitigation measures required relating to the protection of reptiles.



#### **6.0 MITIGATION & ENHANCEMENT**

- 6.1 With no reptiles identified at the site, there are no mitigation measures required to ensure the protection of these species.
- As reptiles are potentially present in the wider area, it would also be prudent to enhance the remaining or newly created habitat on-site to target reptile species. Ecological enhancements would follow guidance in the *Amphibian and Reptile Conservation: Reptile Habitat Management Handbook*<sup>3</sup> and would likely be through the installation of brash and log piles and hibernacula.
- 6.3 The installation of these would create valuable refuge resources. Log piles can be incorporated into the soft landscaping, using vegetation as a screening tool if desired. If included, these enhancements would provide net gains in biodiversity at the site and for the local area.

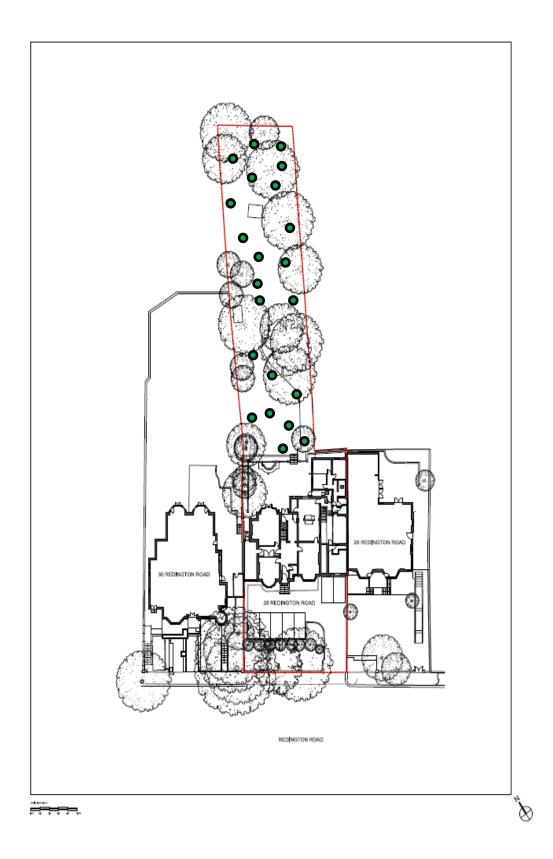


#### 7.0 SUMMARY AND CONCLUSIONS

- 7.1 Greengage Environmental Ltd was commissioned by the Linton Group to undertake a Reptile Survey at 28 Redington Road, Hampstead to determine the extent of reptile populations on site. Data from these surveys was used to inform potential mitigation and enhancement measures to be implemented in light of the proposed development of the site.
- 7.2 Suitable habitat exists on site for reptiles to be present and a number of surveys were carried out between the 10<sup>th</sup> October and 18<sup>th</sup> October 2016. These confirmed the likely absence of reptiles at the site.
- 7.3 As such, no formal mitigation measures are required in relation to the protection of reptiles. However, ecological enhancements in the form or log piles have been recommended to provide net gains in biodiversity.



## FIGURE 1.0 - REPTILE MAT DISTRIBUTION





#### **APPENDIX 1: LEGISLATION AND PLANNING POLICY**

#### **LEGISLATION**

All species of reptile native to the UK are protected to some degree under national and/or international legislation, which provides mechanisms to protect the species, their habitats and sites occupied by the species.

Sand lizards and smooth snakes are European protected species and are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981<sup>4</sup> and Regulation 39 of the Habitats Regulations 1994<sup>5</sup> (and 2010)<sup>6</sup>. However, these species are rare and highly localised. Their occurrence is not considered as relevant in this instance, as the ranges and specialist habitats of these species do not occur at this site.

The remaining widespread species of native reptiles (adder, grass snake, slow worm and viviparous lizard) are protected under part of Section 9(1) and all of Section 9(5) of the Wildlife and Countryside Act 1981<sup>4</sup>. They are protected against intentional killing and injury and against sale, transporting for sale etc. The habitat of these species is not protected. However, in terms of development, disturbing or destroying reptile habitat during the course of development activities while reptiles are present is likely to lead to an offence under the Wildlife and Countryside Act 1981<sup>4</sup>. It is therefore important to identify the presence of these species within a potential development site. If any of these species are confirmed, all reasonable measures must then be taken to ensure the species are removed to avoid the threat of injury or death associated with development activities.

Each species of native reptile has specific habitat requirements but general shared features include a structurally diverse habitat that provides for shelter, basking, foraging and hibernating.

#### **PLANNING POLICY**

Guidance on nature conservation within planning is issued by the Government in the form of the National Planning Policy Framework<sup>7</sup>. This Framework document acts as guidance for local planning authorities on the content of their Local Plans, but is also a material consideration in determining planning applications.

The NPPF has replaced, among other planning guidance documents, Planning Policy Statement 9: Biological and Geological Conservation. However, the accompaniment to PPS9, government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, remains valid. The prevention of harm to biodiversity through prudent planning decisions is the key principle in the NPPF when considering planning and the natural environment; set out in section 11.

Within the NPPF the Government's vision for conserving and enhancing biological diversity in England within the planning system is set out. The Governments objectives



for planning from an ecological perspective are, among others, to recognise the wider benefits of ecosystem services, minimise the impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, which will include the establishment of coherent ecological networks that are more resilient to current and future pressures.

Of particular note is paragraph 152 of the Plan-Making Section which states,

"Local planning authorities should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gains across all three. Significant adverse impacts on any of these dimensions should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where adverse impacts are unavoidable, measures to mitigate the impact should be considered. Where adequate mitigation measures are not possible, compensatory measures may be appropriate".

All six reptiles are now listed as priority species in the UK Biodiversity Action Plan (BAP). Action plans have been produced for all of them. All BAP species have been included in Section 41 and 42 lists produced by the Secretary of State of England and the Welsh Assembly. These are lists of species that, as specified under the Natural Environment and Rural Communities Act 2006, are of principal importance for the purpose of conserving biodiversity. As such, all reptile species are of material consideration in the planning process due to the NPPF.



## **APPENDIX 2 SURVEY DATA5**

Survey Visit	Date	T2:ime	Conditions	Reptiles
Visit 1	10/10/16	13:30	12ºC Sunny	No
Visit 2	11/10/16	11:00	13°C, sunny	No
Visit 3	12/10/16	12:10	13°C, sunny/ partial cloud	No
Visit 4	13/10/16	13:20	11°C sunny/partial cloud, had rained earlier	No
Visit 5	14/10/16	10:15	12°C sunny/partial	No
Visit 6	17/10/16	17:10	15°C sunny, started raining heavily shortly after survey finished.	No
Visit 7	18/10/16	15:15	12ºC Sunny	No



#### **REFERENCES**

- 1 Froglife, (1999); Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.
- 2 Herpetofauna Groups of Britain and Ireland.
- <sup>3</sup> Edgar, P., Foster, J. and Baker, J. (2010). Reptile Habitat Management Handbook.

  Amphibian and Reptile Conservation, Bournemouth.
- 4 UK Government, (1981); Wildlife and Countryside Act 1981. TSO, London.
- 5 UK Government, (1994); The Conservation (Natural Habitats, &c.) Regulations1994 No. 2716. TSO, London.
- 6 UK Government, (2010); The Conservation of Habitats and Species Regulations 2010 No. 490. TSO, London.
- 7 Department for Communities and Local Government (2012), National Planning Policy Framework, NPPF