St Gabriel's Convent, Woolton, Liverpool.

Protected Species Surveys for Reptiles.

Compiled by Ecology Services Ltd.

Members of the Chartered Institute of Ecology and Environmental Management.

on behalf of

St. Gabriel's (Liverpool) Limited

September 2015

1 Church Row Chambers
Longton
Preston
Lancashire PR4 5PN.

tel: 01772 614932
fax: 01772 614930
email: info@ecologyservices.co.uk
web: www.ecologyservices.co.uk

Written by: **BW**
Checked: **SB**
Approved: **SB**

Contents Page No

1.0 Introduction 2

2.0 Regulatory & Planning Framework 2

3.0 Methodology 3

4.0 Results 4

5.0 Conclusion & Recommendations 5

6.0 References 5

Tables

Tables 1: Survey Dates
Tables 2: Survey Results

Drawings

Drawing 1: Location of Reptile Refugia
Drawing 2: Proposed Development Plan

1.0 Introduction

1.1 Ecology Services Limited was commissioned by St. Gabriel's (Liverpool) Ltd in June 2015 to undertake Ecological Survey Works in the form of a Reptile survey for the site on land off Beaconsfield Road, Woolton, Liverpool, National Grid Reference (NGR) 341844, 387560 at centre. See Map 1 showing the Location of Reptile Refugia.

1.2 This report presents the results of the reptile surveys, which were undertaken between June and August 2015.

1.3 The proposed development is for the construction of 48 residential dwellings to include; the erection of 14 terraced villas with garages, private gardens and roof terraces; 4 detached houses with garages and private gardens; 2 bespoke houses; and the repair, refurbishment, change of use and four storey extension of St. Gabriel's House to create 28 apartments in total (7 in the existing listed building and 21 new build).

1.4 The aims of the reptile survey were to:

- Undertake a reptile presence/absence survey of habitats considered suitable to support such species.
- Record/map any locations of reptiles.
- If evidence is found within the proposed development site, provide advice to protect reptiles and their habitat.

1.6 All survey works were undertaken by experienced Ecologists during suitable weather conditions and at an appropriate time of year.

2.0 Regulatory & Planning Framework

2.1 All terrestrial native reptiles are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are protected under Section 9 of the Act.

2.2 Common reptile species comprise of Adder (*Vipera berus*), Slow worm (*Anguis fragilis*), Grass snake (*Natrix natrix*) and Common lizard (*Lacerta vivipara*) which are protected under Section 9 (parts 1 and 5) of the Act, against intentionally killing, injury and taking The Act also prohibits selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisement to buy or sell.

2.3 Where any works affect the common reptile species, appropriate mitigation measures would be required to prevent intentional killing or injury.

2.4 Rarer reptiles are afforded additional protection; the species include Smooth snake (*Coronella austriaca*) and Sand lizard (*Lacerta agilis*). These are afforded additional protection under the Conservation of Habitat and Species Regulation 2010 (as amended). Collectively the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 (as amended) make it an offence to:

- Intentionally or deliberately kill, injure or capture.
- Deliberately disturb.
- Damage or destroy breeding or resting places or places used for shelter or protection.
- Possess, or any part of a smooth snake or sand lizard, unless acquired legally.
- Sell, barter, exchange or transport for sale, etc., smooth snake and sand lizards or any part of them.

2.5 The legislation covers all life stages. Eggs, juvenile and adults are covered equally by the legislation.

2.6 Where any works affect Smooth snake or Sand lizard, licences can be issued to allow otherwise prohibited acts (e.g. capturing or handling sand lizards). Licences for scientific study and conservation, education and photography are issued by the statutory nature conservation organisations. Smooth snake and Sand lizard are not present at this site.

2.7 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes all reptiles species) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact With in the Planning System, provide additional advice to support the NPPF.

2.8 In England and Wales the Natural Environment and Rural Communities (NERC) Act 2006 imposes a duty on all public bodies, including the Local Planning Authority (LPA) and statutory bodies in exercising their functions "to have due regard, so far as is consistent with proper exercise of those functions, to the purpose of conserving biodiversity" which includes 'restoring or enhancing a population or habitat' (S.40(3)).

2.9 The NERC lists UK Species of Principal Importance that are capable of being a material consideration in the making of planning decisions. All reptile species are listed as species of Principal Importance.

3.0 Methodology

3.1 The reptile survey followed the standard best practice methodology set out in the Herpetofauna Workers' Manual 2010.

3.2 Being cold blooded, reptiles are known to utilise artificial refugia for basking in order to raise their body temperature high enough to enable them to become active and hunt. These refugia are usually made from corrugated metal sheeting or roofing felt and placed in suitable areas of the survey site.

3.3 Suitable areas are those that are exposed to the sun but hidden away in vegetation, for example areas exposed to the sun with good vegetative structure provided by grassland, scrub/heath mosaic. Areas of rough grassland on the edge of dense scrub are considered ideal habitat for reptiles as this provides vegetative structure, which is both at and just above ground level. Areas with rabbit warrens and holes are also favored as they provide ideal opportunities for shelter and hibernation. The density of refugia will affect the chances of identifying reptiles (the more refugia there are, the higher the chances of recording reptiles).

3.4 Artificial refugia consisting of 0.5 metre squares of roofing felt were deployed at suitable locations at a density of at least 10-20 refugia per hectare. Each refugia was then given a number so that results could be analysed. The refugia were then left for up to 7 days to bed-in to allow animals to find and become accustomed to them. The refugia were checked on seven occasions of suitable weather over the survey period (successive days are acceptable). Following completion of the survey, all refugia were removed off site.

Personnel

3.5 All survey works were undertaken by experienced Ecologists; Mr. P. Bonney BSc (Hons) and Ecologist Miss C. Wood MSc, BSc (Hons).

Constraints

3.6 Temperatures were high on survey rounds 1 and 6.

4.0 Results

Desktop Study Results

4.1 The desktop study completed within the initial scoping works found no records of reptiles in the local area, up to 1km from the proposed development site.

Evidence of Reptile

4.2 The refugia were located around the site, mainly in areas of a southern aspect, which possessed the suitable vegetative structure and exposure to the sun where reptiles would most likely bask. Drawing 1 identifies the locations of the refugia.

4.3 The surveys were undertaken between the 5th June 2015 and the 24th August 2015; see Table 1 below for survey dates and temperatures.

Table 1: Survey Dates & Temperatures

Survey Dates	Surveys Rounds	Temperatures (ºC)
5th June 2015	**Refugia laid**	
12th June 2015	**Survey 1**	**20ºC**
18th June 2015	**Survey 2**	**13ºC**
23rd June 2015	**Survey 3**	**15ºC**
16th July 2015	**Survey 4**	**18ºC**
7th August 2015	**Survey 5**	**16ºC**
21st August 2015	**Survey 6**	**19ºC**
24th August 2015	**Survey 7**	**17ºC**

4.4 A total of 30 refugia were initially laid and checked and no reptiles were recorded during any of the surveys, see Table 2 below for the survey results.

Table 2: Survey Results

Survey Date	Reptile Results
12th June 2015	None
18th June 2015	None
23rd June 2015	None
16th July 2015	None
7th August 2015	None
21st August 2015	None
24th August 2015	None

4.5 During these visits, visual and terrestrial searches were also carried out.

Timing

4.6 The optimal survey period for reptiles is from April to May and during September when temperatures throughout the day are relatively low and reptiles are forced to bask more frequently. However, reptiles surveys can be undertake at sub-optimal times providing they are within the active reptile season (March to October) and undertaken when temperatures are within the optimum basking range, between 10ºc and 18ºc. With the exception of the survey round 1 and round 6, all other surveys were undertaken in optimal conditions.

Weather Conditions

4.7 Survey visits were not carried out during rain or when it was windy as reptiles do not emerge or bask in such conditions. The temperature should ideally be between 10° and 18°C. If temperatures are over 18°C then reptiles are less likely to use refuges as they will be warm enough and have no need to bask. The ambient air temperature will ensure that they remain warm. Visits were therefore more commonly made in the mid morning period before temperatures had risen too high.

4.8 Weather conditions prior to and during the reptile surveys were dry and conditions were suitable to undertake such a survey.

5.0 Conclusion & Recommendations

5.1 The desktop study found no records of reptiles within 1km of the proposed development site.

5.2 Consideration has been given to the survey findings and the high survey temperatures during survey rounds 1 and 6. It is concluded that as no reptiles were found during the desktop searches and no evidence of reptiles was found on the remaining five surveys rounds. Therefore, it can be concluded with some level of confidence that reptiles are unlikely to be present at the site.

5.3 It is recommended that all works can proceed but contractors should be made aware of the potential for discovering reptiles on site via a toolbox talk. If at any time a reptile is found or suspected during the works, all works must cease and the acting consultant notified for advice. A reptile protection scheme may need to be implemented.

6.0 References

Beebee, T. C, & Griffiths, R A. (2000). Amphibians and Reptiles. A Natural History of the British Herpetofauna.

Bennett, D. (1999). Reptiles and Amphibians. Expedition Field Techniques.

Gent.T & Gibson, S. (2010) Herpetofauna Worker's Manual. Joint Nature Conservation Committee. Peterborough.

Government Circular: Biodiversity & Geological Conservation – Statutory Obligations and their impact within the Planning System. ODPM Circular 0/2005, Defra Circular 01/2005 downloadable at http://www.communitied.gov.uk/publications/planningandbuilding/circularbiodiversity

Herpetofauna Groups of Britain and Ireland. Evaluating Local Mitigation/Translocation Programmes: Maintaining best practice and lawful standards.

Langton, T. (1989). Snakes and lizards. Whittet Books. London.

Stafford, P. (1987). The Adder.

The Conservation of Habitats and Species Regulations 2010 (as amended)

The Wildlife & Countryside Act 1981 (As amended)

The National Planning Policy Framework, 2012 (NPPF)

UK Biodiversity Steering Group (1995) Biodiversity – the UK Steering Group Report. Volume 2: Action Plans. P89 SAP for Pipistrelle. London, HMSO.

Drawing 1:
Location of Reptile Refugia

Drawing 2:
Proposed Development Plan

St Gabriels Convent, Liverpool.
Map Ref: NGR 341844 387560.

Drawing 1: Location of Reptile Refugia

Key:

Site boundary

★ Reptile refugia

N

ecology services
Environmental Consultants

St Gabriels Convent, Woolton.

Drawing 2: Proposed Development Plan

Map Ref: (NGR) 341844, 387560

Proposed Site Plan

0m 10m 25m 50m 100m

N

ecology services
Environmental Consultants