

# **Reptile Survey on Land Adjacent to Scalegill Road, Moor Row, Cumbria**

Survey to determine the presence of reptiles on site in relation to the proposed residential development

Report for: Mr Robert Greggain

October 2015

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To complete the objectives stated in this report, it was necessary for OpenSpace to base our conclusions on the best information available during the period of the project and within the limits prescribed by our client in the agreement.

No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. We therefore cannot guarantee that the investigations fully identified the degree or extent of e.g. species presence or habitat management efficacy described in this report.

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### Document Information

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### Report Revisions

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## CONTENTS

<b>REPTILE SURVEY ON LAND ADJACENT TO SCALEGILL ROAD, MOOR ROW, CUMBRIA</b> .....		<b>3</b>
<b>1</b>	<b>PROJECT BACKGROUND</b> .....	<b>3</b>
<b>2</b>	<b>SCOPE OF SURVEY</b> .....	<b>6</b>
<b>3</b>	<b>METHODOLOGY</b> .....	<b>7</b>
<b>4</b>	<b>RESULTS</b> .....	<b>9</b>
<b>4.1</b>	<b>Weather</b> .....	<b>9</b>
<b>4.2</b>	<b>Refugia Survey Results</b> .....	<b>9</b>
<b>5</b>	<b>DISCUSSION AND ASSESSMENT</b> .....	<b>10</b>
<b>6</b>	<b>REFERENCES/BIBLIOGRAPHY</b> .....	<b>11</b>
<b>7</b>	<b>APPENDIX ONE: Photos</b> .....	<b>12</b>

## FIGURES

<b>Figure 1.1.</b>	<b>Existing site plan showing plot proposed for development and survey area (in red).</b> .....	<b>5</b>
<b>Figure 2.1.</b>	<b>Aerial photograph of the site showing survey area</b> .....	<b>6</b>
<b>Figure 2.2.</b>	<b>Aerial photo showing survey area and surrounding land</b> .....	<b>7</b>
<b>Figure 3.1.</b>	<b>Distribution of reptile refugia</b> .....	<b>8</b>

## **Reptile Survey on Land adjacent to Scalegill Road, Moor Row, Cumbria**

### **1 PROJECT BACKGROUND**

A reptile survey has been commissioned by Mr Robert Greggain to support an outline planning application for proposed residential development on land adjacent Scalegill Road, Moor Row, Cumbria. Indicative plans (pers. comm. Mr Robert Greggain) are for nine residential dwellings within the southern section of the site (See Figure 1.1 for existing site layout).

The Phase 1 Habitat and Scoping survey undertaken by OpenSpace (OpenSpace, 2015) identified habitats on site suitable for use by locally present reptile species; these include scrub, hedgerow, rough, ruderal vegetation and sections of damp grassland. The proposed development may impact on the above habitats.

The survey employed the services of the local biological records centre (Cumbria Biodiversity Data Centre) to provide historical data within 2km of the development site. There was one record common lizard within 2km from site. OpenSpace have records for common lizard from the area south of Whitehaven (from the cycle path west of the A595) approximately 1km west from the proposed site. Trees and scrub along the cycle path connect to the northern boundary of the site. At the northwest, the cycle path connects to the railway line in Whitehaven. Both the current railway line and the old railway line (cycle path) are known to provide suitable conditions for commuting reptile populations in west Cumbria.

In the UK, native reptiles are protected by domestic legislation. In order to satisfy current environmental regulations and planning obligations a standard presence/absence reptile survey is required.

All British reptile species are listed on Schedule 5 of the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000 (England and Wales) and Nature Conservation (Scotland) Act, 2004. It is illegal to injure, capture, kill, keep, transport or sell these animals.

It is therefore important that the change of use within the site does not constitute an offence under the legislation. Common reptiles are also priority species under the UK Biodiversity Action Plan (UKBAP) and Species of Principal Importance in England. Furthermore, all species of reptiles in Cumbria are Cumbria Biodiversity Action Plan species (from 2010) for which a species statement has been prepared by Cumbria Biological Data Network.

**Figure 1.1. Existing site plan showing plot proposed for development and survey area (in red)**



## 2 SCOPE OF SURVEY

This survey aims to make a reasoned judgement as to the use by any reptile species of the proposed development site. To assess if reptiles are present or absent on site, a reptile refugia survey was undertaken in accordance with guidelines (NE, Froglife). This involved placing felt tiles across the proposed development site as shown by the red line in Figure 2.1.

This survey does not include a full ecological survey or aim to establish reptile populations. To provide this information other survey techniques would be required to provide data for an informed and balanced opinion.

See Figures 2.1, 2.2 and 3.1 for survey area, site location and refugia distribution.

**Figure 2.1. Aerial photograph of the site showing survey area**



**Figure 2.2. Aerial photo showing survey area and surrounding land**



### 3 METHODOLOGY

The reptile survey was conducted in accordance with Froglife's Advice Sheet 10 (Froglife, 1999), The Herpetofauna Workers' Manual (JNCC, 2003), Herpetofauna Groups of Britain and Ireland Guidelines (HBGI, 1998) and Natural England Reptile Mitigation Guidelines TIN102 (NE, 2011).

Felt tiles were placed around the site with each tile being made of roofing felt and cut about 50cm square. The total area of the site was 1.5ha, but 0.6ha of the site was considered unsuitable for reptiles (bare ground, mowed amenity grassland). This resulted in 0.9Ha of suitable habitat and in line with guidelines, the density of refugia was based on approximately 54 artificial refugia per hectare. In total, 49 refugia (felt tiles) were laid across the site. Each refugia was placed in areas on the ground considered most suitable for use by reptiles. The refugia were placed on-site 18 days prior to the start of the survey to 'bed in' and increase the likelihood of use by reptiles. See Figure 3.1 for refugia distribution.



The survey period was conducted on seven individual days between 25<sup>th</sup> of August and 18<sup>th</sup> of September 2015. The survey was undertaken in suitable dry weather. The surveyors walked slowly across the site to inspect each refugia. During the walkover, the ground ahead was scanned to observe basking reptiles and observe other reptile signs (e.g. reptile skins).

All refugia were observed from a distance with the aid of binoculars to help see any animals basking on the refugia. If no reptiles were observed the refugia was carefully turned over to inspect what was underneath.

Data was recorded daily and any raw data was entered into an excel spreadsheet.

All survey work was undertaken by Patryk Gruba and Andrew Mills, with over 8 years combined reptile survey experience.

**Figure 3.1. Distribution of reptile refugia**



## 4 RESULTS

### 4.1 Weather

The weather conditions throughout the survey were suitable for reptiles and the survey visits were undertaken on warm dry days, with sunshine and some cloud.

The time of day of the survey visits was varied to expand the efficiency of the surveys, but also took into account the weather on that particular day. The majority of survey effort was conducted at temperatures between 11°C – 20 °C and in optimal conditions for reptiles.

### 4.2 Refugia Survey Results

The survey did not record any reptile species during the refugia checks or field evidence to indicate the presence of reptiles on site. No reptiles were observed under the refugia. Several amphibian species were recorded; these included common frog *Rana temporaria* and common toad *Bufo bufo* and juvenile palmate / smooth newt *Lissotriton helveticus* / *Lissotriton vulgaris*. Other species included bank vole *Myodes glareolus* and common shrew *Sorex araneus*.

**Table 4.1. Reptile survey results**

Date (Time)	Visit number	Surveyor	Weather Data	Total Reptile Count	Other Species
25/08/15 (10:00– 11:00)	1	PG	Sunny, 20% clouds, wind 2, 17-19°C, no precipitation	NIL	Juv. common toad, common frog. Juv. palmate/smooth newt
28/08/15 (10:40 – 11:20)	2	PG	Sunny, 50% clouds, wind 1-2, 15-16°C, no precipitation	NIL	Juv. and adult common toad, Juv. common frog.
01/09/15 (09:10 – 10:00)	3	PG	Sunny, 50% clouds, no wind, 15-16°C, no precipitation	NIL	Juv. common toad Juv. palmate/smooth newt
04/09/15 (10:20 – 11:00)	4	PG	Sunny, 40% clouds, wind 0-1, 14-15°C, no precipitation	NIL	Juv. and adult common toad,
08/09/15 (09:30 – 10.20)	5	PG	Sunny, no clouds , no wind, 18-20°C, no precipitation	NIL	Juv. and adult common toad, Juv. palmate/smooth newt, common shrew
11/09/15 (09:20 – 10:00)	6	PG	Sunny, clouds 10%, wind 1-2, 15-16°C, no precipitation	NIL	Bank vole
18/09/15 (9:45 – 10.45)	7	AM	Sunny, 70% clouds, wind 0, 11-14°C, no precipitation	NIL	Juv. common toad, Juv. palmate/smooth newt
<b>OVERALL COUNT</b>				<b>NIL</b>	<b>N/A</b>

## 5 DISCUSSION AND ASSESSMENT

The refugia survey results provide strong evidence the proposed development site is not being used by reptiles. During the survey, other field signs (e.g. sightings, snake skin etc) were also not observed. The survey effort was thorough, using a recommended density of artificial refugia (over 30/ha). The survey was conducted during an optimum time of year and in suitable weather conditions. Therefore, the survey was robust to provide the above conclusion.

Connectivity with surrounding suitable habitat (e.g. the old railway line, the cycle path adjoining the site from the north) indicates potential for reptiles on site. The scrub and ruderal vegetation on and surrounding the site provided some potential for reptiles to shelter and commute. Some of the open areas were adequate for foraging and basking. However, the frequently mowed amenity grassland and bare ground, covering more than third of the site, lacks the mosaic vegetation structure that is preferred by most reptile species.

**The survey results indicate there are no reptile populations currently using the site proposed for development. Therefore, it is considered the proposed works will have no significant impact on local reptile populations, with no mitigation measures required.**

This report recommends that during development, the works employ general awareness measures and this would be suitable to manage any incidental occurrence of an individual reptile. Should any reptile species be observed or encountered, then all works must stop and the acting consultant contacted immediately.

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## 7 APPENDIX ONE: Photos



Photo 1. Mowed grassland and bare ground covering more than third of the site



Photo 2. Reptile mat on the edge of ruderal vegetation – centre of the site



Photo 3. Reptile mat on the bund with ruderal vegetation and scrub – north of the site



Photo 4. Juvenile palmate / smooth newt found under the refugia on site