REPTILE SURVEY
at
St Christopher Trust
Redcourt/Hollin Cross Lane
Glossop
Derbyshire
SK13 8JH

Client:
Savills

Client Address:
Ground Floor
City Point
29 King Street
Leeds
LS1 2HL

Client Contact:
0113 2201274 (Tel)

JCA Ref:
10626e/DR

JCA Limited

Arboricultural Consultants

Contents

1. Introduction

1.1 Purpose of the Report

1.1.1 A report is required at **St Christopher Trust, Hollin Cross Lane,** in order to investigate the presence/absence of any reptile species within the site.

1.1.2 The aim of the report is to determine how reptiles are using the site (breeding/foraging habitat) and thus inform how the proposed development may impact the local amphibian population.

1.2 Terms of Reference

1.2.1 I am instructed by **Savills** to visit the site and prepare my findings in a report.

1.3 Scope of the Report

1.3.1 All reptile surveys and reports are compiled in line with Natural England (NE) survey guidelines in accordance with the Joint Nature Conservation Committee (JNCC) (2004) Common Standards Monitoring Guidance for Reptiles and Amphibians.

1.4 Site Description

1.4.1 **St Christopher Trust, Redcourt/Hollin Cross Lane** is situated is situated approximately 750m South-West of Glossop Town at grid reference SK030935.

1.4.2 The site is located within a residential setting, characterised by a mix of terrace and semi-detached housing with moderate sized garden plots. The surrounding gardens and streets support a large number of mature broadleaved trees, often forming strong linear features. A linear band of woodland extends from the site in a south-easterly direction for approximately 1.5km. The woodland ends at the western boundary of the Pennines, potentially acting as a green corridor from the survey site to this habitat. In the wider landscape, Glossop is surrounded by a mosaic of agricultural land, woodland copses, residential land, moorland and reservoirs.

1.5 Details of Proposed Development

1.5.1 The development proposed on this site is the demolition of the existing buildings to be replaced with residential dwellings and a dedicated care home facility.

2. Desktop Study

2.1 Methodology

2.1.1 A desktop study has been undertaken in order to obtain all relevant records of reptiles within a 1-2 km radius of the site. For this the Derbyshire Wildlife Trust were contacted.

2.1.2 The National Biodiversity Network (NBN) Gateway website was also used to determine which reptile species may be present in the local area, viewing records from within the last 10 years. The NBN gateway website holds ecological records collected across the UK from a variety of sources and is available for public use. The website operates by dividing the country into a series of 10 km square grids, and so the records held for the 10 km grid containing the survey site (Grid Reference: SK 031935) has been reviewed.

2.1.3 The Multi-Agency Geographic Information for the Countryside (MAGIC website was used to locate any designated sites, such as; Local Nature Reserves (LNR), Special Area of Conservation (SAC) or Sites of Special Scientific Interest (SSSI), that may be present within 1 km of the survey site.

2.2 Results

2.2.1 NBN Gateway: A summary of the NBN Gateway records can be seen in **Table 1** below.

Table 1: NBN Gateway data summary

Common Name	Latin Name	Number of Records	Most Recent Record
Grass snake	*Natrix natrix*	1	2000
Common lizard	*Zootoca vivipara*	6	2009

2.2.2 Derbyshire Wildlife Trust: A summary of the Derbyshire Wildlife Trust data search can be seen in **Table 2** below.

Table 2: Derbyshire Wildlife Trust's data summary

Common Name	Latin Name	Number of Records	Most Recent Record
Grass snake	*Natrix natrix*	1	2000
Slow worm	*Anguis fragilis*	1	1998

2.2.3 Designations:

The following designated sites have been highlighted as present within a 2km radius of the site. **None of these designated sites are within influencing distance of the survey site.**

Local Wildlife Sites (LWS): 8 LWS are present within a 2km radius of the site. These include:

- Dinting Vale Reservoirs and Brook (HP046): This site is approximately 5.3ha and roughly 0.7km northwest of the survey site. Its key ecological features are; standing open water, Flowing water rivers and streams and Invertebrate assemblage – *odonata*.
- Dinting Wood (HP143): This site is approximately 6.8ha and roughly 1.5km northwest of the survey site. Its key ecological features are; Ancient semi-natural oak woodland, Ancient semi-natural wet woodland and Bat roost.
- Dinting Nature Reserve (HP144): This site is approximately 4.4ha and roughly 1.65km northwest of the survey site. Its key ecological features are; Ancient semi-natural Ash woodland, Ancient semi-natural Oak woodland and Unimproved acid grassland.
- Dinting Junction Pond (HP146): This site is approximately 0.04ha and roughly 1.3km northwest of the survey site. Its key ecological features are; Standing open water, Water-margin vegetation and Reptile/amphibian assemblage.
- Lees Hall (HP147): This site is approximately 6.9ha and roughly 0.8km south of the survey site. Its key ecological features are; unimproved acid grassland, Secondary broad-leaved wet woodland and flowing water rivers and streams.
- Gamesley Sidings (HP149): This site is approximately 31.1ha and roughly 1.4km northwest of the survey site. Its key ecological features are; Habitat mosaic, Secondary broad-leaved wet woodland and Wet grassland.
- North Road Ponds (HP154): This site is approximately 1.7ha and roughly 1.6km north of the survey site. Its key ecological features are; Standing open water, Water-margin vegetation and unimproved neutral grassland.
- Dinting Lodge Grassland (HP186): This site is approximately 4.6ha and roughly 1.65km northwest of the survey site. Its key ecological features are; Unimproved neutral grassland, Standing open water and Rush-pasture.

Nature Reserve (NR): 1 LWS is present within a 2km radius of the site. This is:

- Long Clough: This site is approximately 16.8ha and roughly 0.8km south of the survey site.

UK BAP Habitats: 3 UK BAP Habitat types are located within a 2km radius of the site. These are: Veteran trees (Numerous veteran trees within the Long Clough NR), Ponds, Ancient & semi-natural woodland (3 within 2km radius) and Semi-natural grasslands (10 including Semi-improved neutral grassland, Unimproved neutral grassland/Rush-pasture, Acid Grassland/Lowland Mire and Unimproved neutral grassland).

3. Field Survey

3.1 Methodology

3.1.1 A detailed reptile survey was undertaken by David Ryder, Ecologist.

3.1.2 To maintain a scientific constant, the survey method duplicated the previous survey in relation to the material used, the density and location of the artificial refugia.

3.1.3 In total **20** sections of dark felt measuring 0.5 x 0.5m² were placed around the site in appropriate locations (**Appendix 1**). These refugia were numbered, bedded down and left for 14 days, as to allow reptiles to find and use these new basking areas.

3.1.4 Following this, the site was visited twice during suitable weather conditions and time of day. During each site visit all artificial refugia (and any natural refugia present on site) were searched for signs of reptiles. Whilst travelling between refugia, the site was visually searched for basking reptiles. Any sightings or signs of reptiles are documented.

3.1.5 Weather conditions were recorded at the start of each site visit utilising data obtained from the Met Office.

3.1.6 There are no perceived limitations to this survey.

3.2 Results

3.2.1 **Summary**: The site was visited **2** times. During which **No** reptiles were observed.

Visit 1: 30/05/2013 Start Time 14:45 End Time 15:30
Temperature: 13°C Precipitation: None Cloud cover 40%
Wind: 4mph West Humidity 68%

Visit 2: 26/06/2013 Start Time 13:30 End Time 14:15
Temperature: 17°C Precipitation: None Cloud cover 20%
Wind: 2mph North-West Humidity 57%

3.2.2 Several species of common garden dwelling fauna were discovered under the artificial refugia. The species encountered were:

- Common Garden Slug
- Netted Slug
- Large Red Slug
- Leopard Slug
- Common Woodlouse
- Centipede

3.2.3 During four site visits, for reptile and bat species surveys, domestic cats were encountered on site, twice they were observed hunting.

4. Conclusions and Recommendations

4.1 Following a survey in September 2012, a repeat survey has been conducted in early summer 2013 to ascertain how or if reptiles use the habitat within the site.

4.2 During all surveys **No** reptiles were encountered on site.

4.3 Records of **3** reptile species were uncovered in the data search covering a 10km grid in which the site is located. This 10km grid includes areas void of development and of minimal agricultural disturbance. These records include the following species: Common Lizard *(Zootoca vivipara)*, Grass Snake *(Natrix natrix)* and Slow worm (*Anguis fragilis).*

4.4 The cumulative results of two surveys strongly support the conclusion that reptiles are unlikely to be present within this site. This is likely due to the developed nature of the area and the disturbance caused by human occupation is a significant deterrent to reptile life.

4.5 The domestic cats encountered are known to prey on all reptiles including Adders.

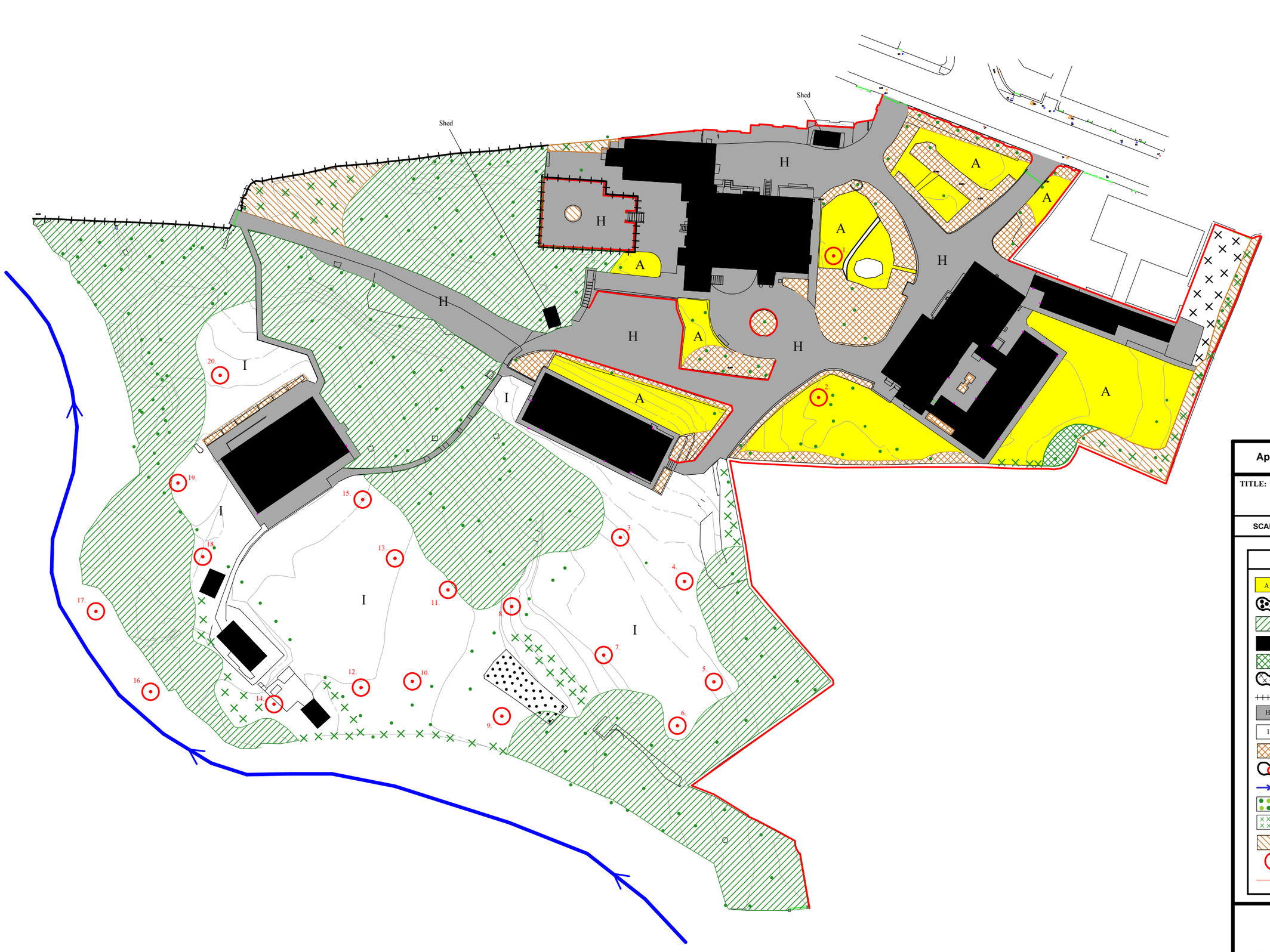
4.6 The seasonal variations that occur within this site limit the potential this site has to offer reptile species. Our recent analysis during prime summer season, and the observation of predatory mammals have caused us to downgrade the sites potential to support reptiles to low.

4.7 As **No** reptile species were found at the **St Christopher's Trust** site during any of the surveys, no further work or mitigation is required.

4.8 JCA Limited recommends that work proceed with care and vigilance and should reptile species be discovered at any point during the proposed development, work must stop immediately and either JCA Limited or Natural England contacted.

4.9 Please contact JCA Limited for further advice or information on how to enhance the sites value for reptiles.

Appendices



Appendix 1: Reptile Survey

TITLE: St Christopher Trust, Redcourt, Hollin Cross Lane, Glossop, Derbyshire, SK13 8JH. JCA Ref: 10626a/KS.

SCALE : 1:500	PAPER SIZE : A4

KEY

- A — Amenity grassland
- Bare ground
- Broad-leaved woodland (Plantation)
- Buildings
- Dense/continuous scrub
- Ephemeral/short perennial
- Fence
- H — Hard standing
- I — Improved grassland
- Introduced shrub
- Other habitat
- Running water
- Scattered mixed trees
- Scattered scrub
- Tall ruderal
- Target note
- Wall

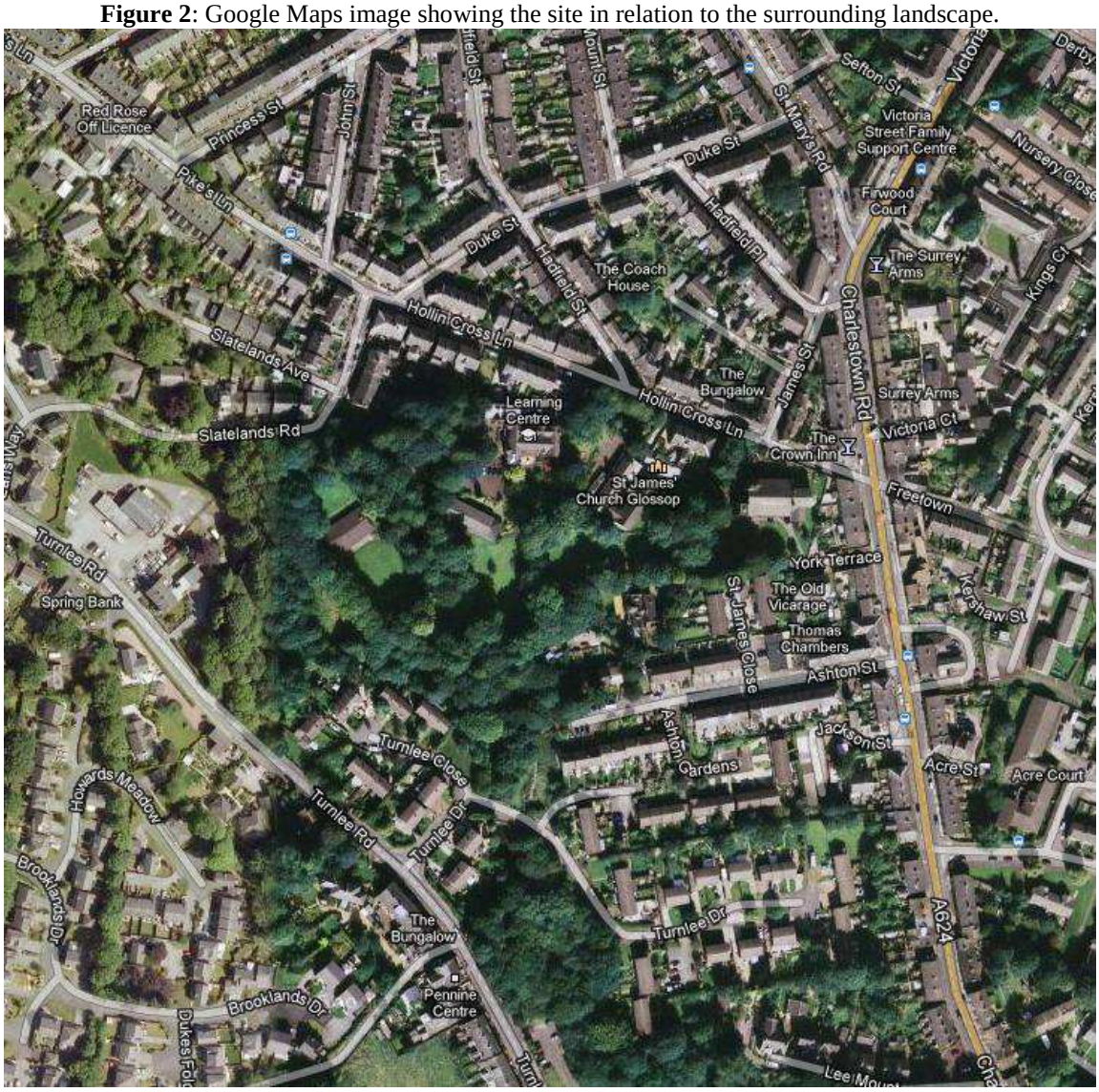
JCA Limited
Arboricultural & Forestry Consultants

Appendix 2: Photographic Evidence

Figure 1: Roofing felt cut into 50cm squares and used as refugia by various reptiles.

Appendix 3: Map of Surrounding Landscape

Figure 2: Google Maps image showing the site in relation to the surrounding landscape.



Appendix 4: Background Information

Reptile Ecology

The UK is home to a total of six reptile species; three snakes (Adder, Grass Snake and Smooth Snake) and three lizards (Common Lizard, Sand Lizard and Slow Worm). All reptiles are cold blooded, i.e. they control their body temperature through their surrounding environment, which influences where they will be found.

Almost all reptile species in the UK have experiences extensive declines in numbers and distribution over the past decades.

Reptiles will be found where there is a warm environment (south facing slopes are ideal), as well as good habitat, which is well connected to the surrounding landscape.

Good reptile habitat varies from species to species;

Adders prefer habitats on chalk and sandy soils, such as; heathland, moorland, dense grassland allotments, cliffs, quarries and woodland clearings, rides and edges. Adders mostly eat small mammals, but will also take lizards, birds and amphibians.

Common Lizard can be found in a wide range of habitat types, including; wet and dry heathland, moorland, mountain scree slopes, most grassland types, woodland glades, coastal dunes, hedgerows, allotments, railways and canal embankments. Common lizards have a diet of primarily invertebrate life and small soft bodied prey.

Grass Snake *(Natrix natrix):* Are when fully grown the United Kingdoms largest and longest reptile. The grass snake is non-venomous and largely leads an amphibious lifestyle, with wetlands being the species primary lifestyle. In the spring aquatic sites such as ponds and lakes and marshes are preferred due to their presence of amphibians, the Grass snakes primary diet. In contrast however dry terrestrial ground is fundamental to the species due to their need to bask, lay eggs and acquire nocturnal refugia. In the winter months however the species hibernates and must seek suitable refuge. The species is abundant and widespread particularly throughout lowland southern England. Their distribution becomes less frequent in areas of Wales and northern England. Grass snakes are not present in Scotland or Ireland. Mating of the species occurs in the spring and eggs are laid in July in the range of 5-20 eggs in a clutch. The preferred laying location is a chamber in the middle of a mound of decaying vegetation. The eggs are leathery, whitish and round, approximately 20-25mm across. Juveniles hatch a couple of months after being laid. When in an extreme state of distress, a grass snake will "play dead" with the combination of producing a "deeply unpleasant smell". The species is easiest to observe during the spring months.

Sand Lizards are extremely rare and found in only a handful of sites in the south of England. They are confined to two habitat types; lowland heathland and sand dunes. Sand lizards prey on a variety of invertebrate life.

Slow Worms can be seen in a wide range of habitats including; heathland, moorland, grassland, woodland glades, hedgerows, quarries, brown field sites, and road, railway and canal embankments. They prey on soft bodied invertebrates such as slugs and worms.

Smooth Snake is again a very rare species in the UK, restricted to the south of England. This species is confined to lowland heathland and preys prominently on other reptiles.

Reptiles and the Law

All UK reptile species are protected under the Wildlife and Countryside Act 2010, which makes it an offence to kill, injure or trade any native UK reptile.

In addition to this the **Sand Lizard** and **Smooth Snake** are European protected species, protected under the Conservation of Habitats and Species Regulations (Habitats Directive) 2010. This additional protections means it is an offence to capture, posses, disturb, kill, injure or trade these two species.

Appendix 4: Glossary

Artificial refugia: This is a 50cm square of material generally black roofing felt or corrugated iron. This is placed in a position likely to be utilised by reptiles for basking (during the summer months to increase body heat) or hiding.

Basking: When a cold blooded organism lies in the sunlight or on a hot surface (warmed by the suns energy) to increase body heat and regulate its body temperature.

Cold Blooded: See Ectothermic.

Ectothermic: When an animal regulates it body temperature through its surrounding environment as it can not do this independently. It will generally bask in the morning to warm up and later seek shade to cool down.

Natural refugia: This is can be any natural feature present on site that acts as a basking surface such as a warm rock or dead bracken which has provided shelter from above.

Appendix 5: References

- Google (2013). [Online] Available from: http://www.google.co.uk/.
- Joint Nature Conservation Committee (JNCC) (2004). Common Standards Monitoring Guidance for Reptiles and Amphibians.
- National Biodiversity Network (2013). [Online] Available from: http://www.nbn.org.uk/
- Natural England (2013). [Online] Available from: http://www.naturalengland.org.uk/.
- Wildlife and Countryside Act 1981 (2013). [Online] Available from: http://www.legislation.gov.uk/ukpga/1981/69.

I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

.....

David Ryder, Ecologist

26/06/2013

For and on behalf of ***JCA Ltd***

Registered Office:

Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 OAD

Tel. 01422 376335
Fax. 01422 376232
Email: jon@jcaac.com

www.jcaac.com

Report printed on recycled paper

JCA Ltd. Arboricultural Consultants
Professional Tree Advice • Nationwide Service

Tree Advice for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Studies
- Arboricultural Method Statements
- TPO/Planning advice/project management

Tree Advice for Engineers, Loss Adjusters and Insurers

- Tree surveys for subsidence
- Heave assessment
- Tree root identification

Tree Advice for Landowners, Homeowners, and Homebuyers

- Tree Safety/health surveys
- Tree surveys for mortgage purposes
- Planting advice/scheme design
- Garden tree and shrub maintenance plans

Tree Advice for Local Authorities and Estate Managers

- Tree Inventories and Risk Assessments
- TPO re-surveys
- Trees in Historic Parks and Gardens
- Veteran trees
- Woodland Management Plans
- Ancient woodland
- Tree planting schemes

Tree Advice for the Legal Profession

- Litigating subsidence claims
- Personal Injury cases
- Expert witness for planning inquiries and appeals

Registered Office:
Unit 80 Bowers Mill Branch Road Barkisland Halifax HX4 0AD
Tel: 01422 376335 Fax: 01422 376232 Mobile: 07778 391986
Email: jon@jcaac.com Website: www.jcaac.com
Company Reg No. 05005041 VAT No. 686 4674 78

Directors:

Jonathan Cocking
F. R. E. S., Tech. Cert. (Arbor A), P. Dip. Arb.
(R. F. S.), F. Arbor. A., CBiol, MIBiol

Catherine Cocking
RGN RM

Photo front cover: Sluice at Bowers Mill

Printed on recycled paper

Arboricultural Association