

Land at Lower Green, Little Whelnetham

Reptile Survey Report

On Behalf of Durrants

September 2022



Typical view of the Site with Grassland and Scattered Trees.

Document Control

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This report does not purport to provide legal advice. This report provides baseline ecological conditions for the aforementioned site and is considered relevant for a period of no more than 12 months from the date of survey (September 2022).



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Executive Summary

In July 2022 Practical Ecology Ltd undertook a Preliminary Ecological Appraisal (PEA) reportⁱ at Land at Lower Green, Little Whelnetham. The Site is predominantly grassland, with at the time of the Site visit, a section of grassland cleared and made into an access road from the Site's entrance to the west and wooden sheds to be converted within the north of the Site. The development proposes the conversion of the sheds to an office/workshop and the installation of log cabins and 'hobbit hole' style accommodation units around the Site.

The PEA survey adjudged the Site to have suitability to support a significant number of reptiles. This consideration was made based on an assessment of the habitat on and surrounding the Site, and the return of records of reptiles from the local area within the data search (obtained from Suffolk Biological Records Centre). As such reptile surveys were recommended.

The survey was set up on 19th August 2022, which consisted of 33 artificial cover objects, 30 felts mats and three corrugated metal sheets, being placed around the Site in areas likely used by reptiles. These were left to settle in place, allowing reptiles to become accustomed to them. Seven survey visits were then undertaken between 30th August 2022 and 16th September 2022 in suitable weather conditions.

The results of the survey have confirmed that slow worms (*Anguis fragilis*) are present on the Site, with a peak count of two noted. This is suggestive that a low population is present onsite. Therefore, if no mitigation is put in place there is a chance for slow worms to be killed or injured during the construction phase of the development.

Given the size of the population of slow worm and the total area of the Site which will be impacted as a result of the development, it is considered most appropriate to mitigate for the presence of slow worm during works and provide compensatory habitat on the Site; this will seek to protect slow worm during works and improve the value of the habitat onsite.

Therefore, it is recommended within this report that a non-licenced method statement should be produced and followed to specify timings and methods of works.

A Biodiversity Enhancement Plan (BEP) should also be produced to enhance the remaining habitats onsite for slow worms.



1. Introduction and Background

Practical Ecology Ltd was commissioned by Durrants to undertake reptile surveys of the proposed development site at Land at Lower Green, Little Whelnetham, IP30 0DR, hereafter referred to as the 'Site'.

These reptile surveys follow on from the completion of a Preliminary Ecological Appraisal (PEA) survey undertaken by Practical Ecology in July 2022, which highlighted the suitability of the Site for reptiles, with two records for slow worm noted within the data search, which was commissioned from Suffolk Biological Record Centreⁱⁱ. No reptiles were seen during the Site visit for the PEA but the mown pathways' within the long unmown grass provides basking and foraging opportunity, with log/brash piles present around the Site provide potential refugia. Further to this, the Little Whelnetham Railway Walk CWS <1m north of the Site provides good connectivity for reptiles through the landscape.

This report presents ecological information gathered during reptile surveys undertaken by Practical Ecology Ltd between August and September 2022. The purpose of this report is to provide ecological baseline information pertaining to the site along with recommendations for further surveys, mitigation and enhancement as deemed appropriate with regards to reptiles.

1.1 The Site

The Site is approximately 1ha (central OS grid reference TL 89427 59142, postcode IP30 0DR) and is located in Little Whelnetham, Suffolk, c.8km southeast of Bury St. Edmunds. The Site comprises of grassland and tress with two wooden shed buildings. Surrounding the Site are arable fields, hedgerows, scattered trees, and the village of Little Whelnetham. A Site boundary (red line) is provided in Figure 1 below.



Figure 1: Site Boundary

1.2 **Proposals**

The proposals include clearance of some sections of grassland and two trees to develop a holiday cabin complex with a mix of log cabins, straw bale huts and 'hobbit hole' style cabins, a gravel driveway and parking area. A proposed site plan has been included in Appendix 1 (Drawing number: 30-005).



2. UK Reptiles

2.1 Species

There are six native species of reptile within the UK, with four species considered to be widespread and two species considered rare. The six species comprise of three snakes and three lizards. The widespread species are common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*), grass snake (*Natrix helvetica*), and adder (*Vipera berus*). The rarer species are smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*), which have a range generally restricted to the south of England.

2.2 Legislation

All six species are protected under the Wildlife and Countryside Act 1981 (as amended), making it illegal to intentionally kill or injure a common reptile. Smooth snake and sand lizard are also protected under the Conservation of Habitats and Species Regulations 2010.

It is illegal to deliberately injure, kill, capture, or disturb a rare reptile, or obstruct any place used for shelter or protection. Rare reptiles can only be handled by those with an appropriate license.

All reptile species are of principle importance under the Natural Environment Rural Communities (NERC) Act 2006, and for this reason, they are heavily considered within the planning process.

3. Methodology

3.1 Reptile Survey Methods

Reptile surveys can be conducted anytime between April and October, with the optimum months being April, May, and September. Surveys consist of placing a range of artificial cover object (ACOs) around a site in locations likely to be used by basking reptiles. Best practice states that the refugia should consist of a mixture of materials, traditionally roofing felt (>0.5m²) and corrugated tin (>0.25m²). These should be placed onsite at a density of >10p/ha, with a minimum of 30 refugia placed onsite. Once placed these should be left to "bed-in" for two weeks, giving reptiles time to acclimatise to the refugia and use them for basking and shelter^{iiiiv}.

Once bedded in standard practice is for seven survey visits to be undertaken over two to three weeks, spaced over 24 hours apart. However, additional visits can be considered suitable outside of the optimum months for surveying, or in long spells of unsuitable weather. If a notable population is present, then a population assessment is required, consisting of an additional five visits.

Guidance^v states that surveys should be conducted in mornings or evenings, between 08:30-11:00 and 16:00-18:30. However this can vary depending on the weather and time of year. Survey visits should be undertaken when the temperature is suitable for basking reptiles, generally 9-18°C. Bright sunshine is suitable, while hazy or intermittent sun gives the best results in warmer weather. Rainy or windy conditions are usually unsuitable. The sequence of weather conditions is significant; a hot spell after several days of cold weather can increase basking activity.

When reptiles are seen the species, age, and sex can be recorded (if possible), and photos used to differentiate between individuals of some species. Additional signs of reptiles, such as skin sloughs, are also counted if discovered.



The results of the survey are interpreted using the Survey Assessment: Key Reptile Sites Table, which is seen below. It is noted that any site containing a rare reptile is considered important.

	Low Population	Good Population	Exceptional Population				
	Score 1	Score 2	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				
To qualify	as a Key Reptile Site the Site	in question must meet one	of the following:				
Supports three or more reptile species							
Supports two snake species							
 Supports an exceptional population of one species (see table) 							
 Suppor 	ts and assemblage of species	scoring at least 4 (see table)				

Table 1: Survey Assessment: Key Reptile Sites (Froglife, 1999^{vi})

- Supports and assemblage of species scoring at least 4 (see table)
- Does not satisfy the above, but is of particular regional importance due to local rarity

3.2 Site Survey

The reptile survey was set up on 19th August 2022 by Sammi Smith, an Assistant Ecologist with over one years' experience. The surveys were undertaken by Sammi Smith and Josh Samuels MSc, a field surveyor with over six years' experience.

Given the size of the Site it was adjudged that 30 refugia would provide suitable coverage. Figure 2 shows the rough location of refugia placed on the Site.



Figure 2: Refugia Locations

Survey visits were undertaken in suitable weather conditions and at appropriate times. The details of which are listed below in Table 2.



Date	Time	Weather	Temperature
30/08/2022	09:00	10% cloud cover, 0-1 bft, dry	17°C
01/09/2022	09:30	<5% cc, 0-1 bft, dry	18°C
02/09/2022	09:15	70% cc, 2 bft, dry	17.5°C
05/09/2022	10:00	40% cc, 1 bft, dry	17°C
08/09/2022	09:15	25% cc, 3 bft, dry	18°C
12/09/2022	10:25	60% cc, 1 bft, dry	18°C
16/09/2022	10:30	60% cc, 2 bft, dry	14°C

Table 2: Survey Date and Time

3.3 Limitations to Survey

Reptiles are notoriously difficult to confirm as absent from a site, however the greater number of visits can increase confidence in an assessment. It is frequently expressed that reptiles are "likely absent" from a site.

An adult slow-worm was found dead on-site during Survey Visit 1, with the individual likely to have been killed by a domestic cat or a bird.



4. Results

Grass snake		Adder		Slow-Worm		Common lizard	
Adult	Juv.	Adult	Juv.	Adult	Juv.	Adult	Juv.
0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	1	1	0	0
0	0	0	0	0	0	0	0
	Adult 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Grass snake Adult Juv. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Grass snake Adult Adult Juv. Adult 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Grass snake Adult Juv. Adult Juv. Adult Juv. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Grass snake Adult Slow- Adult Juv. Adult Juv. Adult 0 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1	Grass snake Adder Slow-Worm Adult Juv. Adult Juv. Adult Juv. 0 0 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1	Grass snake $Ad d \in r$ Slow-Worm Common Adult Juv. Adult Juv. Adult Juv. Adult Juv. Adult O Adult Adult

Table 3: Results of Reptile Survey

The results of the survey are included in Table 3, below.

The results show that slow worms were recorded onsite, seeing a peak count of 2.

Slow worm were observed at felt mats 2, 6, 24 and 28 (as seen in Figure 2 above).

Based on the survey results, it is concluded that slow worms are present onsite. Grass snake, adder or common lizard were not recorded onsite and therefore it is concluded that they are likely absent from the Site.

When the survey results are interpreted using Table 1, it shows that the Site supports a low population of slow worms. Therefore, in the absence of mitigation, the development risks killing and injuring slow worms during the construction phase.

The population on-site are considered likely to be part of a wider population, with the Little Whelnetham Railway Walk CWS adjacent to the Site providing good connectivity to the wider landscape.

5. **Recommendations**

The results of the survey suggest the Site has a low population of slow worms and therefore mitigation should be tailed towards slow worm to avoid killing or injuring of individuals during the construction phase. It is not considered that the development proposal will have a significant impact on the Sites ability to support slow worms, particularly if appropriate mitigation and enhancement of onsite remaining habitats is implemented.

Due to this, it is recommended that a method statement should be produced and followed which will specify timings and methods for works, including sensitive clearance of habitats with suitability for slow worms.

Current proposal plans show that areas of grassland will be cleared throughout the Site to develop multiple holiday units to include log cabins, 'hobbit hole' style accommodations with an area for parking located near the Site entrance. A portion of grassland was already cleared at the time of the PEA to create a gravel track from the Sites entrance at the east boundary to the existing wooden sheds being converted within the north of the Site. The method statement should be followed during the rest of the vegetation clearance and removal of any potential refugia onsite.

To compensate for the loss of habitat onsite a Biodiversity Enhancement Plan (BEP) should also be produced, with input into the landscaping proposals to enhance the remaining habitats onsite for slow worms.



6. References

ⁱ Practical Ecology Ltd., 2022, Land at Lower Green, Little Whelnetham, Preliminary Ecological Appraisal.

" http://www.suffolkbis.org.uk/

ⁱⁱⁱ Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

^{iv} Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

^v Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

^{vi} Froglife (1999) Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.





Appendix 1 – Site plans

