Reptile Survey Report and Mitigation Method Plan

Land at Girders Bridge

Gay Street Lane

North Heath

Horsham

RH20 2HW

NGR: TQ 06909 21521

5th December 2025

Sylvatica Ecology Ltd

Company Registration Number: 07705793

https://se-planning.com

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In order to minimise the likelihood of adverse effects on protected animal species over time, it is accepted good practice, in accordance with Natural England (NE) (formerly English Nature) guidance for ecological surveys to be repeated should works be deferred for between 12 -18 months from the date of initial survey.

It is the duty of the landowner, developer and operations managers to act responsibly and to comply with current environmental legislation if protected species are suspected or found prior to, or during works.

The recommendations and information contained within this report are based on the information provided on the development works prior to the surveys being carried out. Should the development proposals change then the findings and recommendations contained within would potentially require revision.

The findings within this report do not constitute as legal advice. Should this be required, then a suitably qualified professional practitioner should be contacted.

Approved by	Signed	Contact
Richard Law BSc (Hons) MRes CEnv MCIEEM FLS		info@se-planning.com

1.0 SUMMARY

1.1 This report This report presented the results of reptile presence/likely absence and population assessment surveys undertaken in 2025 to inform a proposed development comprising static caravan plots at Land at Girders Bridge

1.2 An earlier preliminary ecological assessment work had identified suitable reptile habitat, and detailed survey effort confirmed that the site supported a mixed reptile assemblage. All native reptiles were protected under the Wildlife and Countryside Act 1981 and listed as species of principal importance under Section 41 of the NERC Act 2006, requiring mitigation to avoid harm during construction.

1.3 Surveys were undertaken between July and October 2025 following Froglife (2016) and CIEEM (2021) guidance, using 30 artificial refugia placed across unmanaged grassland. Seven presence/likely absence surveys and eight population-estimate surveys were conducted during suitable weather conditions. Three reptile species were recorded: slow worm *Anguis fragilis*, common lizard *Zootoca vivipara* and a single adult grass snake *Natrix helvetica*

1.4 Slow worm occurred in consistently high numbers, including males, females and juveniles, with a peak count of ten individuals, placing the population in the Froglife “Good” category. Common lizard and grass snake were present at lower levels, each falling within the “Low” population category. The assemblage demonstrated breeding and foraging use of the site, particularly by slow worms.

1.5 Given that the development footprint would adversely affect reptile habitat, a full mitigation and translocation strategy was required. The aims were to safeguard reptiles during works, maintain favourable conservation status, undertake a complete translocation from the construction zone and enhance the receptor site. Habitat manipulation preceded trapping, with vegetation reduced in stages to encourage reptiles into refugia. A minimum of 60 effective trapping days was implemented, with capture deemed complete after five consecutive zero-capture visits. Reptiles were transferred to a prepared receptor site containing hibernacula, refugia and managed grassland. Temporary herptile-exclusion fencing protected both donor and receptor areas during construction. Post-translocation destructive clearance of remaining vegetation occurred under ecological supervision to ensure no animals were harmed.

1.6 Monitoring was scheduled for Years 1 and 2 post-translocation, assessing habitat condition and reptile re-establishment, and long-term management of the receptor site was committed for at least 25 years

1.7 With these measures implemented, impacts on slow worm, common lizard and grass snake were assessed as negligible, with populations expected to remain viable within the wider landscape and capable of recolonising enhanced habitats after construction.

2.0 INTRODUCTION

Aims of this Study

2.1 This report presents the findings of a reptile survey at land north of Girders Bridge, Gay Street Lane, North Heath, Horsham, West Sussex, RH20 2HW, NGR: TQ 06909 21521. A preliminary ecological assessment[1]was conducted on this site. This report concluded that there was reptile potential habitat present within the site survey area. It was predicated that this habitat would potentially be advisory impacted by the proposed development of static caravan plots, at this location. Therefore, reptile presence/ likely absence and reptile population estimate surveys were then carried out.

2.2 ***Figure 1: Site Survey Location (Red Line Boundary)***

Legal Status of Reptiles

2.3 All reptile species are protected under the Wildlife and Countryside Act 1981 (as amended)[2], which make it an offence to deliberately or recklessly kill, injure or trade these animals. The common reptile species covered by this Act are slow worm *Anguis fragilis*, grass snake *Natrix helveticus*, common lizard *Zootoca vivipara* and adder *Vipera berus.* Other, rarer, native reptile species are offered greater levels of protection, but these are generally found in habitats that were not present within the Site or local surroundings.

[1] Sylvatica Ecology Ltd (2025) Preliminary Ecological Assessment: Land at Girders Bridge Gay Street Lane, North Heath.

[2] [2]HMSO (1981) The Wildlife and Countryside Act (1981) as amended.

2.4 All native reptiles are listed as rare under Section 41 of the Natural Environment and Rural Communities Act (2006)[3].

3.0 SURVEY METHODOLOGY

Reptile Survey

3.1 The survey methodology followed the guidance outlined in the Surveying for Reptiles (Froglife 2016)[4] and CIEEM (2021)[5]. The surveys were carried out between July to October, with the survey set up carried out in early July 2023. The weather conditions during this time were extremely changeable, with periods of rain persisting, followed by very hot spells.

3.2 30 artificial refugia in the form of roof felt and metal tins were placed within the unmanaged grassland. The refugia was 100cm by 50cm in size. The recommended concentration is 10 per hectare, so the number used was above this minimum number. The refugia were installed and left *in situ* for two weeks prior to the first survey visit. This was to give a period of time between installation and surveys, which would enable any reptiles that may be present, time to locate the refugia.

3.3 ***Figure 2: Location of Reptile Refugia***

[3] HMSO (2006) Natural Environment and Rural Communities Act 2006
[4] Froglife (2016) Surveying for Reptiles 1st Edition
[5] CIEEM (2021) Competency Standard for Reptile Survey, Mitigation and Management

3.4 Surveys were carried out within suitable weather conditions at a suitable time of year, normally April to May, avoiding the heat of Jun, July and early August. Late August, September and October normally have suitable weather conditions for reptile surveys but November to early March is normally outside of optimum conditions.

Lead Surveyor

3.5 The survey work and reporting has been led by Richard Law BSc MRes CEnv MCIEEM FLS. Richard has been undertaking ecological survey work within the last 20 years on a number of differing locations throughout the United Kingdom for a variety of protected species, including bats (Class 2 2015-12576-CLS-CLS) reptiles, amphibians including great crested newt *Triturus cristatus* (Class 1 2016-20290-CLS-CLS) and terrestrial mammals including dormice *Muscardinus avallanaria* (2015-13188-CLS-CLS) and birds including barn owl licence *Tyto alba* (CL29/00236).

4.0 SURVEY RESULTS

4.1 This section provides an account of the results from the survey carried out on the buildings and provide the justification for any further recommendations outlined within this report.

Reptile Presence/ Likely Absence Survey Results

4.2 ***Table 1: Presence/ Likely Absence Survey Data***

Survey Number	Date	Temp	Cloud Cover	Conditions	Wind strength (Beaufort)	Reptile Numbers and Species
1	26/07/2025	19°C	Patchy cloud with sunny intervals	Dry	1	1x Common Lizard 6 x Female Slow Worms 1 x Male Slow Worm 2 x Juvenile Slow Worms
2	03/08/2025	21°C	Overcast	Dry	Still	1 x Common Lizard 5 x Female Slow Worms 3 x Juvenile Slow Worms
3	08/08/2025	20°C	Patchy cloud with sunny intervals	Dry	1	2 x Female Slow Worms 1 x Juvenile Slow Worm
4	11/08/2025	21°C	Clear sky	Dry	Still	1 x Female Slow Worm 1 x Male Slow Worm 1 x Adult Grass Snake
5	15/08/2025	19°C	Clear sky	Dry	3	1 x Common Lizard 1 x Male Slow Worm 1 x Female Slow Worm 1 x Juvenile Slow Worm
6	17/08/2025	21°C	Clear sky	Dry	2	1 x Female Slow Worm 2 x Male Slow Worm

7	24/08/2025	18°C	Light rain then sunny intervals	Damp	2	1 x Female Slow Worm

4.3 Reptile surveys were carried out across seven visits between 26 July and 24 August 2025 under suitable weather conditions for detecting active reptiles. The first survey on 26 July 2025 was undertaken in 19°C with patchy cloud and sunny intervals, dry conditions and a light breeze (Beaufort 1). This visit recorded one common lizard *Zootoca vivipara*, six female slow worms *Anguis fragilis*, one male slow worm and two juvenile slow worms. On 3 August 2025, surveys were completed in overcast but dry conditions at 21°C with still air, confirming one common lizard, five female slow worms and three juvenile slow worms. The third visit on 8 August 2025 was undertaken in 20°C with patchy cloud and sunny intervals, light winds (Beaufort 1) and dry conditions, during which two female slow worms and one juvenile were recorded.

4.4 The fourth survey on 11 August 2025 was carried out in clear, dry conditions at 21°C with still air and produced records of a female slow worm, a male slow worm and one adult grass snake *Natrix helvetica*. The fifth survey on 15 August 2025 occurred under clear skies at 19°C with a Beaufort 3 breeze, recording one common lizard, a male slow worm, a female slow worm and a juvenile slow worm. The subsequent visit on 17 August 2025 took place in 21°C, clear dry weather with a Beaufort 2 breeze, and confirmed one female slow worm and two male slow worms. The final survey on 24 August 2025 recorded one female slow worm in 18°C, damp conditions following light rain, with intermittent sunny intervals and a Beaufort 2 breeze.

Population Size Estimate

4.5 ***Table 2: Populations Estimate Survey Data***

Survey Number	Date	Temp	Cloud Cover	Conditions	Wind strength	Reptile Numbers and Species
1	28/08/2025	18	Sunny intervals	Occasional showers	2	1x Juvenile Common Lizard 4x Female Slow Worm 1x Male Slow Worn 1 x Juvenile Slow Worm
2	31/08/2025	19	Hazy sunshine	Dry	3	1x Female Common Lizard 3x Juvenile Common Lizard 3x Female Slow Worms
3	06/09/2025	18	Sunny internals	Dry	3	3x Juvenile Slow Worms 1x Male Slow Worm
4	08/09/2025	23	Sunny intervals	Dry	1	1x Female Common Lizard 2x Male Common Lizard
5	12/09/2025	15	Showers prior to survey, then sunny intervals.	Wet	1	None Found
6	14/09/2025	15	Showers prior to survey, then sunny intervals.	Wet	1	1x Juvenile Common Lizard 3x Female Common Lizards 2x Juvenile Slow Worms

						3x Male Slow Worms 5x Female Slow Worms
7	21/09/2025	16	Sunny intervals	Dry	1	3x Juvenile Common Lizards 2x Female Common Lizard
8	24/09/2025	16	Sunny intervals	Dry	1	2x Juvenile Common Lizards 1x Female Common Lizard 2x Male Slow Worms 2x Female Slow Worms

4.6 Reptile surveys were continued between 28 August and 24 September 2025, with eight survey visits undertaken during suitable weather windows. The first survey on 28 August 2025 was completed in 18°C with sunny intervals and occasional showers, and a Beaufort 2 breeze. This visit recorded one juvenile common lizard *Zootoca vivipara*, four female slow worms *Anguis fragilis*, one male slow worm and one juvenile slow worm. On 31 August 2025, surveys were undertaken in 19°C with hazy sunshine, dry conditions and a Beaufort 3 wind, confirming one female common lizard, three juvenile common lizards and three female slow worms.

4.7 The third visit on 6 September 2025 was completed in 18°C, sunny intervals and dry conditions with a Beaufort 3 wind. Records comprised three juvenile slow worms and one male slow worm. On 8 September 2025, surveys were carried out in 23°C with sunny intervals, dry conditions and a light breeze (Beaufort 1), producing one female common lizard and two male common lizards. The fifth survey on 12 September 2025 followed earlier showers and took place in 15°C with wet ground and sunny intervals; no reptiles were recorded on this visit.

4.8 The survey on 14 September 2025, also following prior rainfall, was completed in 15°C with wet conditions and intermittent sunshine and recorded notable reptile activity, including one juvenile common lizard, three female common lizards, two juvenile slow worms, three male slow worms and five female slow worms. The penultimate survey on 21 September 2025 recorded three juvenile common lizards and two female common lizards under 16°C, dry conditions with sunny intervals and a Beaufort 1 wind. The final survey on 24 September 2025, undertaken in similar conditions (16°C, dry, sunny intervals), confirmed two juvenile common lizards, one female common lizard, two male slow worms and two female slow worms.

4.9 Across this late-season survey period, common lizard remained consistently present with a mixture of adult and juvenile individuals, while slow worm continued to be recorded regularly, including males, females and juveniles. The assemblage, spread across multiple survey events and weather conditions, demonstrated that the site supported a widespread and breeding reptile population reliant on the grassland, scrub and edge habitats present.

5.0 DISCUSSION AND MITIGATION METHOD STATEMENT

Reptile Survey Results

5.1 The Survey results indicated that the site supported a mixed reptile assemblage comprising slow worm *Anguis fragilis*, common lizard *Zootoca vivipara* and grass snake *Natrix helvetica*. Slow worm was recorded in consistently high numbers across the survey period, with a peak count of ten individuals during a single visit, including males, females and juveniles. Under the Froglife population assessment criteria, this placed the slow-worm population within the **Good** population class, reflecting a well-established and breeding community.

5.2 Common lizard was recorded less frequently and in lower numbers, with a peak count of four individuals during one survey visit. This fell within the **Low** population class, indicating that the species was present but at a modest and localised level. Grass snake was represented by only a single adult record across all surveys, placing this species firmly within the **Low** population class and suggesting infrequent or transient use of the site.

5.3 Overall, the reptile assemblage was defined by a **Good-class** slow-worm population supported by smaller Low-class populations of common lizard and grass snake, confirming that the site held ecological value for reptiles and functioned as a breeding and foraging area, particularly for slow worms.

Mitigation Strategy Aims and Objectives

5.4 The objectives of this Reptile Translocation Plan are:

- *To safeguard reptiles from harm during development,*
- *To maintain the favourable conservation status of all recorded reptile species,*
- *To relocate all reptiles from the construction zone to a secure receptor site,*
- *To enhance the receptor land to improve long-term reptile carrying capacity.*

Translocation Methods

Timing of Works

5.5 Translocation works were timed between April and October, avoiding unsuitable weather conditions such as cold, persistent rain or excessive heat. Vegetation reduction proceeded only when night-time temperatures exceeded 7°C.

Pre-Capture Habitat Manipulation

5.6 Vegetation within the donor site was reduced in stages to make the habitat unfavourable and encourage reptiles to seek artificial refugia. Grassland was reduced to approximately 150 mm, followed

48–72 hours later by a lower cut to approximately 50 mm. Arisings were removed to avoid creating shelter that could inhibit reptile movement.

Installation of Artificial Refugia

5.7 A minimum of 30 refugia comprising roofing felt and corrugated tins were deployed across the donor site. These were installed two weeks prior to trapping to allow settlement and maximise detection probabilities.

Capture Effort

5.8 Trapping employed daily checks of all refugia under favourable weather conditions. Hand searches of logs, debris, scrub bases and tussock margins were undertaken in addition to artificial refuge checks. Given the Good slow worm population, a minimum of 60 effective trapping days were applied. Capture completion was defined when five consecutive visits produced zero captures following the minimum trapping threshold.

Translocation Process

5.9 Captured reptiles were transported immediately to the receptor site and released into suitable microhabitats such as sunny vegetation margins, pre-installed hibernacula and scrub edges. Slow worms were placed gently into shaded vegetation mats, common lizards near basking edges and grass snakes near dense vegetation and compost-like piles.

Receptor Site Preparation

5.10 Prior to the release of reptiles, the receptor site was enhanced to increase ecological capacity. Enhancements included construction of hibernacula using logs, rubble and turf; installation of artificial refugia; scrub management to prevent shading; and grassland management to create a structural mosaic beneficial to reptiles. Suitable fencing would be installed to both protect this area during construction works and to ensure reptiles that are translocated to these locations are not then able to migrate back to the clearance area. This would normally take the form of herptile fencing, which would also be protected by Heras fencing preventing damage during the construction phase. Once the construction phase has been completed, the fencing would then be removed to enable reptile movement to the wider environment. The location of this fencing and the receptor sites are depicted by the red dash lines within the plan in Section 7.0.

Vegetation Clearance Post-Translocation

5.11 Once trapping had been confirmed complete, remaining vegetation in the construction footprint was removed under ecological supervision following a destructive search methodology. Clearance

proceeded directionally towards escape routes, with hand tools used to check debris, root plates and refuges before machinery was permitted.

Post Translocation Monitoring

5.12 Monitoring surveys were scheduled for Year 1 and Year 2 following translocation. These involved refugia checks, walk-over surveys and habitat condition assessments. Monitoring aimed to confirm reptile presence, distribution and the effectiveness of habitat enhancements.

Long-Term Management

5.13 The receptor site was committed to long-term management for a minimum of 25 years. Management actions included rotational grass cutting, maintenance of refugia and hibernacula, scrub control and avoidance of pesticide use within sensitive zones.

Conclusion

5.14 This Reptile Translocation Plan ensured that all reptiles were safeguarded during development at Land at Girders Bridge. The mitigation strategy reflected best practice guidance and ensured compliance with relevant legislation while maintaining the favourable conservation status of slow worm, common lizard and grass snake.

Impact Assessment with Mitigation

5.15 With the implementation of these mitigation measures, the impact on the local population of slow worm, grass snake and great crested newt is predicted to be ***negligible***. This would ensure that the local population of these species remained viable within the wider environment. Once the development phase has been completed, it is expected that reptile species can migrate back into areas where they had been moved from.

6.0 LOCATION OF REPTILE RECEPTOR SITES