



Land at Kings Pond, Alton

Reptile Presence/Likely Absence Survey

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LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

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

1.0 Introduction

Background

- 1.1 The Ecology Partnership was commissioned by Alton Town Council to undertake reptile presence/likely absence survey for the land at Kings Pond, Alton, GU34 2TA, hereafter referred to as 'site'.
- 1.2 This report presents the results of the reptile surveys on site in 2025, which aim specifically to provide a current understanding of the population of reptile species onsite, in order to inform on potential future enhancements to the pond.
- 1.3 This report comprises:
- Introduction, including the legislative and planning context (Section 1);
 - Assessment methodology (Section 2);
 - Results of reptile surveys (Section 3);
 - Discussion and recommendations (Section 4);
 - Conclusions (Section 5).

Site Context and Status

- 1.4 The site is located in the town of Alton, Hampshire (SU 72272 39356) and covers an area of approximately 3.98ha hectares consisting of grassland, buildings, woodland, and the River Wey. The river flows into the southern end of the site and then exits from an outflow to the north. The river is artificially widened across the majority of site, to form King's Pond, caused by the dammed outflow and is understood to have been constructed in connection to an old mill. The site is surrounded by a mix of residential and light industrial units, with a railway running along the eastern side of the site.
- 1.5 The aerial photograph overleaf (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.



Figure 1: The site red line boundary

Description of Proposed Development

- 1.6 Final plans for site have not yet been produced, however, works are understood to be focused on hydrological/ecological restoration of the River Wey. There are currently two proposed conceptual ideas for the site. The first focuses on extensive dredging of silt, to restore a more natural hydrological state to the aquatic habitats on site. The second focuses on realignment of the River Wey to a more natural course, removing the dammed outflow, and creation of ponds and wetlands adjacent to it.
- 1.7 Although the area of suitable reptile habitat identified on site, is likely to remain unaffected by proposals, it was considered as a precautionary approach a survey would be undertaken, in case impacts to this area are required at a future design stage. The survey also provides useful baseline information to establish the extent of any reptile population,

with the view of designing enhancements within proposals to raise the overall biodiversity of the site.

Legislation

- 1.8 In the UK, there are six native reptile species. The four widespread species are adder (*Vipera berus*), grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*). The two rare species are smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*).
- 1.9 The widespread reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) against intentional killing and injuring and the sale of a wild reptile or any part of such animal. The rare reptiles also receive legal protection under the Conservation of Habitats and Species Regulations 2010 against deliberate injury, killing, capture or disturbance of a rare reptile and damage or obstruction of any place used for shelter or protection.
- 1.10 All six reptile species are also listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, which means local authorities have a legal duty to take their conservation into account.

2.0 Methodology

- 2.1 A terrestrial survey of the site for reptiles was carried out over seven survey visits between 5th September to 29th September 2025, within the optimal survey window for reptiles. Prior to the commencement of the survey, the site was set up with artificial refugia (roofing felt) for reptiles on 13th August 2025, with a total of 15 mats placed in areas of suitable reptile habitat. The approximate mat locations are marked in yellow in Figure 2.

Reptile mats were placed within areas of suitable habitat, which was relatively limited across site, to primarily along the edge of the pond, adjacent to the railway embankment (Figure 2). The remaining areas of grassland, edging onto the ponds and woodland were deemed to offer only the most limited suitability for reptiles, given the high levels of

grazing/disturbance by waterfowl, disturbance by people and areas of heavy shading. These areas were not included within the scope of the survey.



*Figure 2: Approximate survey area, based on the location of suitable habitat on site
(yellow hashed area)*

- 2.2 The mats were left in place for a bedding-in period prior to the commencement of the reptile survey, meeting the required period as per standing advice from Natural England. The timing and number of surveys completed were based on guidelines produced by Froglife (1999) and Gent and Gibson (1998).
- 2.3 A total of seven survey visits were carried out to check the refugia for the presence of reptiles. Visits were only carried out if the weather conditions were suitable for locating reptiles. Visits were carried out at a variety of times during the day to take any potential

diurnal variation in activity into account. On each visit to the site, a minimum of one circuit to check all refugia was carried out.

- 2.4 In the event that reptiles were found on site, the size of the reptile population can be estimated using the Froglife (1999) scoring system. This assumes a density of 10 refugia per hectare of suitable habitat. A population size class assessment, which is based on the number of adults recorded in one survey visit, can be made using Table 1.

Table 1: Population class assessment categories (Froglife 1999)

	Low Population	Good Population	Exceptional Population
Adder	<5	5-10	>10
Common lizard	<5	5-20	>20
Grass snake	<5	5-10	>10
Slow worm	<5	5-20	>20

3.0 Results

- 3.1 Table 2 below documents the timings, weather conditions, and results of the reptile survey visits.

Table 2: Reptile survey results

Visit number	Date	Conditions	Results
1	05/09/2025	15-16°, cloud cover 1-2 Oktas, windspeed 2 Beau., dry	No reptiles. One juvenile common toad.
2	09/09/2025	15-15°, cloud cover 1 Oktas, windspeed 1 Beau., dry	No reptiles. One juvenile common frog.
3	12/09/2025	13-14°, cloud cover 1 Oktas, windspeed 1 Beau., dry	No reptiles.
4	15/09/2025	15-15°, cloud cover 4 Oktas, windspeed 2 Beau., dry	No reptiles.
5	19/09/2025	16-17°, cloud cover 1 Oktas, windspeed 2-3 Beau., dry	No reptiles. Two adult common toads.
6	25/09/2025	17-17°, cloud cover 1 Oktas, windspeed 1 Beau., dry	No reptiles.
7	29/09/2025	11-12°, cloud cover 1 Oktas, windspeed 1 Beau., dry	No reptiles.
			Total: No reptiles found.

- 3.2 There were no reptiles identified on site during the survey. It is, however, noted that a single adult slow worm was been identified on site, during a separate survey visit on the 25th of June 2025 (Figure 3).



Figure 3. Adult slow worm identified on site during a survey visit which was unrelated to the planned reptile surveys

- 3.3 Although this identification comes from a source outside of a refugia survey, it is still considered to represent the presence of a **'low' population of slow worms** on site.
- 3.4 Figure 4 displays the locations of the slow worm identified on site, as well as the amphibians which were also found.



Figure 4: Results of the reptile survey, and anecdotal evidence gathered on site.

4.0 Discussion

- 4.1 A reptile presence/likely absence survey was undertaken within areas of suitable habitat within the red-line boundary of the site between 5th September to 29th September 2025.
- 4.2 The size of the reptile population can be assessed using the Froglife (1999) scoring system. This system assumes a density of 10 refugia per hectare of suitable habitat. Although the site comprised a total of c. 3.98ha, a large portion was made up of the river/pond, or unsuitable hardstanding and over-grazed grassland. Therefore, it was considered that 15 reptile mats was sufficient to cover the area identified as suitable, of approximately 0.33ha. Refugia were established along the western site boundaries where vegetation suitable, and therefore it is considered that the survey effort is sufficient to inform on any required mitigation or indeed potential future enhancement options. It is not anticipated that the survey area would currently be impacted by proposals.
- 4.3 Peak counts are taken from adult individuals present, with juveniles discounted from final counts. There were no reptiles identified during the seven survey visits to site, however, a

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- single adult slow worm was found along the western footpath, on a separate visit. Although not officially counted during the survey, it is considered that the anecdotal evidence is sufficient to assert there is a **'low' population of slow worm** on site.
- 4.4 It is noted that the slow worm was found adjacent to an offsite garden and close to the extensive railway embankment that runs along the western boundary, which would likely provide additional offsite habitat for the slow worm population identified.
- 4.5 For a site to be classified as a 'key reptile site', the site must meet one of the following criteria outlined by Froglife (1999):
- Supports three or more reptile species.
 - Supports two snake species.
 - Supports an exceptional population of one species (Table 1)
 - Supports an assemblage of species scoring at least four (Table 1)
 - Does not satisfy the above but is of particular importance due to local rarity (e.g. in the East Midlands of England, adders are very rare so even "low" populations should be designated as Key Sites).
- 4.6 Evidence indicates that a **'low' population of slow worms** is present on site, meaning the site does not meet the criteria of a 'key reptile site'.
- 4.7 It is considered that under both the proposed options, the works will be focused almost entirely within footprint of Kings Pond/the River Wey, with only limited areas of the bank top potentially to be cleared for access. Mitigation should be finalised once proposals have been agreed, however if impacts on terrestrial habitat is limited in size and focused largely within areas of unsuitable habitat, as anticipated then the following Reasonable Avoidance Measures (RAMs) are deemed appropriate:
- 4.8 This system of measures should include the following:
- A toolbox talk should be given on site during the first day of vegetation clearance, regarding the legality surrounding reptiles, habitat requirement, basic identifying features and procedure if they are found.
 - Any suitable refugia piles i.e., manure piles, aggregate, logs, building materials, etc existing onsite must be gently dismantled onsite under the direct supervision of an

ecologist, any reptiles found must be gently caught and removed to safe areas of habitat away from the works area.

- All vegetation clearance should be conducted under the direct supervision of an ecologist. Clearance should be done moving outwards to allow reptiles to move towards suitable retained habitat onsite and offsite.
- Any suitable reptile habitat should be cleared in a staged cut, in suitable conditions (dry of 9°C or above).
 - An initial cut to 30cm should be undertaken, post hand search by an ecologist.
 - A subsequent cut to ground level can then be undertaken, again, post hand search by an ecologist.
- All significant materials generated by vegetation clearance should not be left on the ground. They should ideally be removed from site within 24 hours, but if this is not possible, then they should be stored within a skip or similar or within an area of unsuitable habitat such as hardstanding.
- All building materials brought on to site should be stored, raised off the ground, to limit their availability as refugia piles.
- All excavations such as trenches should either be covered overnight or have an egress ramp placed within them, to prevent any reptiles or other small mammals from becoming trapped. Although considered unlikely to be part of works, all fitted pipes should be blocked until the plumbing/drainage system is complete, to prevent any reptiles or small mammals/amphibians from becoming trapped.

Enhancement Recommendations

- 4.9 Whilst reptiles have been identified on site, they were there in low numbers, and evidence suggests restricted to slow worms. Steps could therefore be taken, as part of any proposed works, to encourage higher usage of the site by reptiles.
- 4.10 Both design options for the proposed scheme are understood to have the potential for new habitat creation. It is recommended that where possible, shallow water wetland habitat or reedbeds are incorporated to provide additional opportunities for reptiles, particularly grass snakes (*Natrix helvetica*), to forage. Pond edge planting could also be enhanced, to provide a varied habitat structure and foraging opportunities for reptile species.

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- Additional reptiles may populate the site through connectivity to the railway embankment which can act as green corridors for species such as slow worm and grass snake.
- 4.11 Hibernacula/refugia could be installed across site, to increase opportunities for reptiles to seek refuge and safely bask. These could be created from soil/turf, and logs or rocks/aggregate, and placed in suitable areas for reptiles on site. Suitable areas identified currently include in open canopy areas of the railway adjacent woodland, or along the western/northern ends of the pond.
- 4.12 Option two, focusing on river realignment, could involve an element of existing bank reprofiling, and creating of new embankments for the river. It is recommended that, where possible, embankments are shaped/re-shaped with varied topography. These areas should be planted up with suitable native species mixes and have refugia piles installed on them. This would create valuable sheltered basking spots, which are adjacent to foraging habitat, for a range of reptiles to utilise. Created areas of open wildflower grassland with low management would also create new valuable habitat on site.

5.0 Conclusions

- 5.1 A reptile presence/likely absence survey was undertaken within areas of suitable habitat on site between 5th September to 29th September 2025.
- 5.2 The reptile survey identified no reptiles on site, however, a single adult slow worm was identified during a separate visit on 25th June 2025. This was considered to constitute a 'low' population of slow worm onsite. Current plans indicate the potential for only minimal disturbance to reptile habitats. To ensure no reptiles are harmed by the development, works should be conducted under a system of Reasonable Avoidance Measures (RAMs) initially laid out within this report. However, final mitigation should be agreed once proposals have been finalised.
- 5.3 Enhancement recommendations have been made, within this report.

6.0 References

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

Gent, T. & Gibson, S. eds. (1998) *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.

Herpetofauna Groups of Britain and Ireland (1998) *Evaluating local mitigation/translocation programmes: maintaining best practice and lawful standards*. HGBI advisory notes for local reptile groups (ARGs).

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Date: 03/11/2025