



REPTILE SURVEY REPORT

LAND ADJACENT TO WAGTAILS, SOUTHAMPTON ROAD, ALDERBURY SP5 3AF

FINAL REPORT

April 2023

Report conditions

<i>Report title</i>	Reptile Survey Report – Land Adjacent to Wagtails, Alderbury		
<i>Client</i>	1215 Heritage Homes		
<i>Report status</i>	Final		
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Executive Summary

- This reptile survey report has been prepared in order to support a planning application for the proposed residential development of the land adjacent to Wagtails, Alderbury (central grid reference: SU 1907 2702).
- An extended phase 1 ecological assessment of the application site was undertaken during February 2022 by FPCR.
- The survey comprised the entire site within the redline boundary. A data search was also undertaken primarily using various geographic and conservation based web-based databases. The data search extended to a 5km radius for statutory designated sites and priority habitats and protected species.
- The site was considered to support opportunities for reptiles due to the mosaic of habitats present which together provide areas suitable for shelter, basking and foraging. The report states that the history of disturbance, clearance and then recolonisation of the habitats on site limits the site's suitability for reptiles such that only low populations were expected.
- Further survey work in accordance with Natural England's standing advice was required to confirm the presence/absence of reptiles to ascertain the potential impact of the proposal and finalise any necessary mitigation.
- A reptile refugia survey was carried out during April 2023 by Phillips Ecology. The survey confirmed that the site supports a low population of slow-worm.
- The proposed development will result in the loss of reptile habitat. As such, a mitigation strategy has been designed to ensure that reptiles are not killed or injured as a result of the construction and operational phases of the development.
- Provided the recommendations set out in section 6 are followed, the planning authority can be confident that the development would accord with relevant planning policy, legislation and caselaw.

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1. Introduction

1.1 Report purpose

This report has been prepared in order to present the phase 2 reptile surveys undertaken on the land adjacent to Wagtails, Southampton Road, Alderbury.

1.2 Description of proposal

The current proposals comprise the construction of up to 30 dwellings, including parking and landscaping.

1.3 Report context

A planning application has been prepared for the residential development of the land adjacent to Wagtails. Various ecological surveys have been conducted at the site since 2015. Phillips Ecology have been instructed by the applicant to undertake this phase 2 reptile assessment.

1.4 Scope of assessment

An extended phase 1 ecological assessment was carried out during February 2022 by FPCR. The survey comprised a field survey and desktop study in order to identify notable or protected sites, habitats or species potentially affected by the proposal under consideration. This survey was followed by further species-specific surveys carried out by Phillips Ecology in the form of reptile presence/absence surveys.

1.5 Survey area

The survey area comprised the entire site within the redline boundary.

1.6 Limitations

Limitations which are specific to each phase of the assessment are given in the relevant sections, below.

2. Reptiles

2.1 Methodology

An assessment was made of the site's suitability to support reptile populations. Key habitat features for reptiles include: tussocky/patchy grassland; scrub edge; linear watercourses; ponds; compost heaps; brash piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the potential for reptiles to occur, although populations can occur within isolated/fragmented habitats even within urban areas.

The phase 2 reptile surveys involved the distribution of reptile refugia across the site in suitable areas of habitat – both corrugated tin sheets (50cm x 50cm) and roofing felt (50cm x 100cm) were utilised to provide suitable refugia for all species likely to be encountered. A total of 20 refugia were distributed through the site to confirm the presence/absence, numbers, and distribution of reptile species on site. Refugia were distributed throughout the survey area with a higher concentration of refugia deployed along the western boundary where the ground slopes upwards and creates an east facing bank. This area was considered to support the highest suitability for reptiles within the site due to its position which receives early morning sun, and the combination of shelter and basking habitat features in this location. The refugia were then inspected on seven occasions in suitable weather conditions during April 2023. The refugia warm more rapidly than the surrounding environment and reptiles use them to thermoregulate. Inspection of refugia is most effectively carried out in marginal weather conditions such as cold but sunny weather or hazy and somewhat overcast conditions, as this will maximise the thermal value of the refugia for basking reptiles. Inspections are generally ineffective in cold, wet conditions or in very hot sunny weather. Whilst on site, surveyors slowly and quietly walked around the site in order to visually search for animals basking in the open. The dates and weather conditions of the reptile refugia surveys are given in table 1, below.

Table 1 Reptile survey dates and weather conditions

Survey	Date	Precipitation	Temperature	Wind	Cloud Cover
Refugia deployment (tin)	17/03/2023	N/A	N/A	N/A	N/A
Refugia deployment (roofing felt)	07/04/2023	N/A	N/A	N/A	N/A
Refugia inspection 1 (tin)	07/04/2023	Nil	12.0°C	7mph	30%

Survey	Date	Precipitation	Temperature	Wind	Cloud Cover
Refugia inspection 2 (all)	15/04/2023	Nil	13.0°C	0mph	90%
Refugia inspection 3 (all)	17/04/2023	Nil	14.0°C	0 mph	100%
Refugia inspection 4 (all)	19/04/2023	Nil	10.0°C	2 mph	80%
Refugia inspection 5 (all)	22/04/2023	Nil	12.0°C	2mph	50%
Refugia inspection 6 (all)	23/04/2023	Nil	13.0°C	2 mph	100%
Refugia inspection 7 (all)	24/04/2023	Nil	11.0°C	0 mph	90%

2.2 Limitations

Survey refugia were distributed at the site in two stages. The corrugated tin refugia were deployed on the 17th March 2023 in accordance with Froglife Advice Sheet 10 survey guidelines (i.e. between five and 10 refuges per hectare). A further 11 refuges were deployed on the 7th April 2023 to improve opportunities for recording reptiles on site. Visits commenced before the second stage of refugia had bedded in for two weeks. However, on each check it was considered that there was a sufficient number of refugia in locations throughout the site to provide valid results given that nine corrugated tin refugia were already in place. No other limitations were encountered during the course of the survey period.

2.3 Results

Table 2 presents the total counts of the phase 2 reptile refugia survey visits undertaken during April 2023.

Table 2 Reptile survey summary of results (A= Adult, J = juvenile)

Survey	Date	Slow-worm	Common Lizard	Grass snake
Refugia deployment	17/03/2023	N/A	N/A	N/A

Survey	Date	Slow-worm	Common Lizard	Grass snake
Refugia inspection 1	07/04/2023	0	0	0
Refugia inspection 2	15/04/2023	1 x A	0	0
		2 x J		
Refugia inspection 3	17/04/2023	3 x A	0	0
		5 x J		
Refugia inspection 4	19/04/2023	3 x A	0	0
		6 x J		
Refugia inspection 5	22/04/2023	2 x A	0	0
		1 x J		
Refugia inspection 6	23/04/2023	2 x A	0	0
		4 x J		
Refugia inspection 7	24/04/2023	2 x A	0	0
		4 x J		
Adult Peak Counts		3	0	0

2.4 Assessment

A peak count of three adult slow-worm was recorded during the surveys. The number of recorded reptiles was consistent throughout the survey period. In accordance with Froglife Advice Sheet 10 survey guidelines, a low population of slow-worm is represented by a peak count of fewer than five adults during surveys. It should also be noted that refugia were deployed at a higher density per hectare than the density used to inform the Froglife population assessment guidelines and so this will have inflated the size of the population assessment for the site.

Reptiles were recorded primarily along the western site boundary with one individual recorded towards the eastern area of the site.

Reptiles do not persist well in disturbed settings and so it is considered that the history of disturbance and clearance at the site has minimised its suitability for sustaining reptile populations. It is likely that the recorded reptiles have colonised the site from more stable habitats within the surrounding mature gardens.

3. Discussion and Assessment of Impacts

3.1 Relevant legislation and policy

NPPF Policy 15 and specifically, Circular 06/2005 (footnote 56, NPPF) identifies that applicants should not be required to provide information on protected species unless there is a reasonable likelihood that they will be present and affected by the proposed development. The site is considered to support habitats with suitability and potential for protected species and these may be affected by the proposed development. Therefore, the proposal triggers 'reasonable likelihood' under the Circular.

Circular 06/2005 states that "It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision".

The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (commonly referred to as the Habitats Regulations) may apply should protected species be confirmed on site.

In the case that a European protected species is found to be present and impacted by the proposal, the local planning authority will be required to engage with the Habitat Regulations. Permission will be granted unless:

- a) the development is likely to result in a breach of the Habitats Regulations, and
- b) is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law (under licence).

When considering whether Natural England would not be unlikely to grant a licence for the identified impact, the local planning authority must consider the three tests which are set out in the Habitat Regulations:

1. the consented operation must be for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'; (Regulation 53(2)(e))
2. there must be 'no satisfactory alternative' (Regulation 53(9)(a)); and
3. the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).

Case-law (Morge vs. Hampshire County Council) has clarified that planning authorities are able to grant permission for developments that would cause a breach of the Regulations is likely (i.e. in the case of this proposal, destruction of a bat roost), provided that sufficient information is provided to give the planning authority assurance that the

relevant EPSM licence is not unlikely to be granted - i.e. planning authorities also have a duty to assess planning applications against these tests.

3.2 **Assessment of population and potential impacts**

The proposal will result in the loss of areas of existing habitat which support a low population of slow-worm. Therefore, the construction phase of the proposed development has the potential to result in killing or injury of reptiles which would be an offence under the Wildlife and Countryside Act 1981 (as amended).

The proposals include areas of ecological mitigation within the east, centre and west of the site and throughout the site boundary. Whilst the majority of slow-worm were recorded in these locations, overall, there will be a net loss in suitable reptile habitat area within the site.

4. Requirement for further surveys

Further surveys are required where there is a reasonable likelihood that a protected species will be present and impacted by the proposed development. An assessment into the requirement for further surveys is presented below, however in summary, all further surveys considered necessary have been undertaken.

4.1 Reptiles

In order to provide robust confirmation of the status of reptiles and the extent that they may be affected by the proposed development as required by Circular 06/2005, further survey work in accordance with Natural England standing advice was required.

In accordance with these guidelines, further survey effort took the form of a presence / absence survey comprising seven visits undertaken during the reptile active season. No further surveys in respect of reptiles are considered necessary.

5. Mitigation recommendations

5.1 Reptiles

This section describes the proposed mitigation measures for common reptiles which occur within suitable habitat along the margins of the application site. The strategy comprises the persuasion of reptiles from the construction footprint through habitat manipulation and the creation of new terrestrial habitat within the application site. Given the small numbers of slow-worm recorded during the survey and the ephemeral presence of the majority of suitable terrestrial habitat on site for reptiles as a result of frequent historical disturbance which has likely resulted in reptiles expanding and contracting in and out of the site from surrounding habitats, the persuasion of reptiles from the site through habitat manipulation is considered to be the most appropriate option for ensuring that reptiles are not killed or injured during the development.

5.1.1 *Habitat creation*

The application site currently supports extensive areas of either bare, disturbed or recently formed habitat and as such, supports limited hibernation and permanent shelter opportunities for reptiles. In order to provide hibernation and shelter opportunities within the site, two hibernation features and three shelter opportunities will be constructed within the retained margins and proposed ecological mitigation areas during the habitat manipulation works detailed below. The creation of these features will create cover, provide additional structure and enhance prey availability within the site. Three brash piles will be constructed from native woody species cuttings. The centre of the brash pile will be compacted whilst the outer layers will be laid loosely. The hibernation features will be constructed in a similar manner to the brash pile, however, inert brick rubble and logs will be used within the centre of each pile instead of compacted brash. Loose brash will be laid on top of the rubble and log pile and grassland turves from the construction footprint will be lifted and placed on top of this. The hibernation feature will be dug into the site to a depth of 30cm.

In addition, the proposed ecological mitigation areas within the eastern and western areas of the site will be sown with a native wildflower mix. This will improve the vegetation species diversity in the seeded locations and provide a seed source to improve the diversity of adjacent grassland areas. An Emorsgate wildflower mixture will be utilised and will be sown onto the surface of a prepared fine seedbed during either August-September or March-April. In the first year following sowing, when the new grassland grows to a height of 10-15 cm, it should be mown to a height of 5 cm, and the grass cuttings removed. Following this, the grassland can be mown once a year in late summer/early autumn once the seed has dropped.

5.1.2 *Habitat manipulation*

Any currently bare ground within the site will be maintained in this condition until construction works commence at the site. Any tall grassland and scrub within the application site will be cut to ground level in a two-stage process. These habitats will be strimmed to 15cm and then cut to ground level the next day. Cutting the vegetation in this manner working from the middle of the site to the outer margins which will be retained will

ensure that any reptiles are persuaded into retained and adjacent habitats prior to commencement of the development. Following the two-stage grassland management, the topsoil will be scraped back by an excavator under the supervision of an ecological clerk of works. Several turves will be lifted and placed over the proposed hibernation features during this work. If a reptile is unexpectedly encountered, it will be removed to the new shelter features within the site. The construction site will be maintained as bare ground until construction commences.

5.1.3 *Construction site maintenance*

The following measures will be implemented during the construction phase of the development:

- All waste shall be placed directly into a skip so that rubble piles and therefore potential hibernation areas are not created in areas which will subsequently be disturbed by site works.
- Piles of loose sand or other granular materials into which reptiles could bury are not to be left around the site. All such materials will ideally be delivered in bags and kept in such bags until required for use. Bags should be stored on pallets. If it is essential that they are delivered loose, they should only be dug into by hand.
- All trenches will be left covered at night. They must be checked in the morning before they are filled in.
- Vegetation must not be allowed to become established within the construction footprint.

5.2 **Other protected species**

The mitigation for other protected species has been specified within the Ecological Appraisal (FPCR, April 2022).

6. Conclusion

The Ecological Appraisal (FPCR, April 2022) confirmed that the site supports opportunities for reptiles. Therefore, further survey work in accordance with Natural England standing advice was required in order to provide robust confirmation of the status of reptiles at the site and the extent that they may be affected by the proposed development as required by Circular 06/2005. The phase 2 surveys conducted by Phillips Ecology have confirmed the site supports a low population of slow-worm.

The proposed development has the potential to result in the killing and injury of common species of reptile. A mitigation strategy has been designed for these animals to be removed from the proposed works areas prior to works commencing. The mitigation strategy sets out recommended timings and methods.

Provided the recommendations set out in section 6 are followed, the planning authority can be confident that the development would accord with relevant planning policy, legislation and caselaw in respect of reptiles.

7. References

- **Altringham J D, 2003**, British Bats, Collins New Naturalist
- **Anon, 2001**, *Great Crested Newt Mitigation Guidelines*, English Nature, Peterborough.
- **Bat Conservation Trust, 2016**, BCT Bat Survey Guidelines Third edition.
- **Barn Owl Trust, 2012**, *Barn Owl Conservation Handbook*. Pelagic Publishing, Exeter.
- **Chartered Institute of Ecology and Environmental Management, 2017**. *Guidelines for Preliminary Ecological Appraisal*. CIEEM, Winchester
- **Clark, M. 2017**, *Badgers*. Whittet Books Ltd, Essex
- **English Nature, 2002**, Barn owls on site – A guide for developers and planners
- **Gent T and Gibson S 1998** *Herpetofauna Workers Manual JNCC*
- **Joint Nature Conservation Committee. 1993**. *A Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit*. Peterborough: Joint Nature Conservation Committee.
- **Mitchell Jones AJ, 2004**, *Bat Mitigation guidelines*, English Nature
- **Mitchell Jones AJ and McLeish A P, The Bat Workers Manual, JNCC**
- **Morris, P. A. (2006)** The New Hedgehog Book. London, Whittet Books.
- **Natural Environment and Rural Communities Act 2006**, Ch 3, s. 40
- **Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. 2000**. *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10 (4), 143 - 155.
- **Pearce G. E., 2011**, *Badger Behaviour, Conservation & Rehabilitation*. Pelagic Publishing, Exeter.

Appendix 1 – Detailed Reptile Survey Results

Refugia reference	Survey date						
	07/04/2023	15/04/2023	17/04/2023	19/04/2023	22/04/2023	23/04/2023	24/04/2023
1	0	1 x M SW	1 x M SW	1 x M SW	1 x M SW	1 x M SW	0
2	0	0	0	1 x J SW	1 x J SW	1 x J SW	0
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0
5	0	2 x J SW	5 x J SW	5 x J SW	0	3 x J SW	3 x J SW
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
11	0	0	1 x F SW	1 x F SW	0	0	0
12	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0
17	0	0	1 x F SW	1 x F SW	1 x F SW	1 x F SW	1 x F SW
18	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
SW – slow-worm, F – adult female, M – adult male, J - juvenile							

Appendix 2 – Proposed Site Plan





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