



MKA
ECOLOGY

Reptile Survey

Land East of Walnut Tree Road, Pirton,
Hertfordshire

Site	Land East of Walnut Tree Road, Pirton, Hertfordshire
Project number	163024
Client name / Address	Ollie Doyle, Land & Development, Blakeney Estates Ltd Unit 4, Water End Barns, Eversholt, Bedfordshire, MK17 9EA

Version number	Date of issue	Revisions
1.0	5 June 2025	Original
1.1	8 August 2025	Amendment to Site name

Author(s)	Carolina Fakas	<i>C Fakas</i>
Surveyor(s)	Eleanor Richards Alfie Bunting Joe Gillis Carolina Fakas	<i>Eleanor Richards Alfie Bunting J. Gillis C Fakas</i>
Reviewed by	Felix Bird	<i>Felix Bird</i>

Declaration of compliance

The information which we have provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.



MKA Ecology Ltd is a CIEEM Registered Practice. This means that MKA Ecology Ltd are formally recognised for high professional standards, working at the forefront of our profession.

Validity of data

Unless stated otherwise the information provided within this report is valid for a maximum period of 24 months from the date of survey. If works at the site have not progressed by this time an updated site visit may be required in order to determine any changes in site composition and ecological constraints.

CONTENTS

1. EXECUTIVE SUMMARY	4
2. INTRODUCTION	5
2.1. Aims and scope of reptile survey.....	5
2.2. Site description	5
2.3. Summary of previous survey effort	5
2.4. Proposed development.....	6
2.5. Legislation and planning policy.....	6
3. METHODOLOGIES	7
3.1. Reptile Survey	7
3.2. Surveyors.....	8
3.3. Constraints.....	8
4. RESULTS	10
4.1. Reptile survey	10
5. EVALUATION AND RECOMMENDATIONS	11
5.1. Evaluation	11
5.2. Recommendations	11
6. CONCLUSIONS	12
7. REFERENCES	13
8. APPENDICES.....	14
Appendix 1: Legislation and planning policy	14

1. EXECUTIVE SUMMARY

In March 2025 MKA Ecology Ltd was commissioned to undertake reptile surveys at Land East of Walnut Tree Road, Pirton, in order to establish the presence or likely absence of this species group as recommended in the Preliminary Ecological Appraisal (MKA Ecology, 2025). The surveys involved the deployment of Artificial Cover Objects (ACOs) at the Site followed by seven survey visits to search the ACOs for reptiles in suitable weather conditions. The survey visits were undertaken between 14 April 2025 and 13 May 2025.

The Site is located in Pirton, Hertfordshire. Within this report the area is referred to as the Site or Land East of Walnut Tree Road. The Site comprises 3.11 ha of modified grassland, bramble scrub, species-rich native hedgerow, hardstanding, a single building, and both lines of trees and individual rural trees. The proposed development involves the construction of up to 50 residential units with associated access roads and landscaping.

The Preliminary Ecological Appraisal, undertaken on 17 September 2024, identified the Site as having moderate potential to support reptiles. Onsite habitats, including areas of grassland, and species-rich native hedgerows with trees, provide suitable refuge and foraging opportunities, as well as basking and hibernation habitat in features such as log piles, pallets, and rubble piles. These features were present within the northern field, measuring approximately 1.79 hectares, and scoped into the reptile survey. The southern field was scoped out of the reptile survey as it did not comprises habitats or features considered suitable to support reptiles.

The ACOs were deployed on 27 March 2025, with a total of 100 0.5m² mats of roofing felt deployed in areas of suitable reptile habitat. No reptiles were recorded during the seven survey visits. The surveys were carried out in optimal conditions and therefore reptiles can be considered likely absent from the Site at the time of survey. No further survey work or mitigation for reptiles is required to support the proposed development.

Although no reptiles were recorded, recommendations are made to protect the retained habitats through the use of Heras fencing. It is also recommended that additional habitat for reptiles is included within the design scheme of the Site, this should include the creation of species rich grassland, scrub and log and rock piles.

The Site maintains connectivity with the wider landscape via strong linear features, including hedgerows, individual trees, and lines of trees, which link into a broader network of similar habitats in the surrounding area. The recommended enhancements will encourage the colonisation of the Site by reptiles post-development, and will increase the Site's biodiversity as a whole.

2. INTRODUCTION

2.1. Aims and scope of reptile survey

In March 2025 MKA Ecology Ltd was commissioned to undertake reptile surveys at Land East of Walnut Tree Road, Pirton, in light of recommendations made in the Preliminary Ecological Appraisal (MKA Ecology, 2025), to support a planning application for the development of up to 50 residential dwellings. The aims of the surveys were to:

- Determine the presence or likely absence of native British reptiles at the Site;
- Estimate population size class estimates for any reptiles recorded at the Site;
- Detail recommendations for mitigation where required; and
- Detail recommendations for biodiversity enhancements with regards to native British reptiles where appropriate.

2.2. Site description

The survey area is shown on the map in Figure 1. Within this report this area is referred to as the Site or Land East of Walnut Tree Road, Pirton. The 3.11 ha site is located north west of Hitchin (centred around grid reference TL 15110 31550) and is under the authority of North Herts District Council. Habitats present include modified grassland, hardstanding, buildings, species-rich native hedgerows with trees, bramble scrub and individual trees and a line of trees.

2.3. Summary of previous survey effort

The Preliminary Ecological Appraisal (MKA Ecology Ltd, 2025) documented the Site to comprise suitable habitat for reptiles in the forms of the mosaic of rough grassland with areas of bare ground and log and rubble piles and pallets and deadwood which could act as hibernacula.

Land East of Walnut Tree Road is well connected to the wider landscape, the boundary species-rich native hedgerows with trees connect to arable fields which are interspersed with small stands of woodland, so any reptiles within the wider landscape could easily disperse onto the Site.

The data search returned several records of reptile species within 2km of the Site, four records of adder *Vipera berus*, two of common lizard *Zootoca vivipara*, two of grass snake *Natrix helvetica helvetica* and three of slow-worm *Anguis fragilis*. The overall likelihood of reptiles being present on Site was considered to be **moderate**.

2.4. Proposed development

The proposed development involves the erection of up to 50 new residential dwellings at the Site.

2.5. Legislation and planning policy

The four most commonly encountered species of reptile; common lizard, slow-worm, adder and grass snake are listed under Schedule 5 of the Wildlife & Countryside Act 1981 as amended by the CROW Act 2000, and are subject to part of Section 9(1) and all of Section 9(5) which makes it illegal to:

- Intentionally kill or injure (Section 9(1))
- Selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisements to buy or sell a protected species (Section 9(5))

Smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis* are afforded further protection within the UK, however their presence within Hertfordshire is considered to be highly unlikely.

In addition to obligations under wildlife legislation, the revised National Planning Policy Framework (NPPF) updated on 07 February 2025 requires planning decisions to contribute to conserving and enhancing the local environment. Further details are provided in Appendix 1.

Furthermore, all reptile species are designated as Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities Act 2006. This sets out a duty for decision makers, including local planning authorities, to contribute towards maintaining, and where possible enhancing the conservation status of any Section 41 Species of Principal Importance found on a site.

3. METHODOLOGIES

3.1. Reptile Survey

A presence / likely absence survey was undertaken in accordance with survey guidance from Froglife (1999) and Gent & Gibson (2003).

The survey involved the placement of Artificial Cover Objects (ACOs) together with direct observation to determine whether reptiles were present or likely absent. The ACOs were placed in rows spread evenly across all habitats considered suitable for reptiles, 100 mats were placed in total, on 27 March 2025. The location of ACO in relation to UKHabs habitats, and the number of ACO within each row, is shown in Figure 1.

Only the northern field of modified grassland, measuring approximately 1.79 hectares, was surveyed as it was considered the only part of the Site to contain suitable habitat to support reptiles. Specifically, the southern field was scoped out as unsuitable for reptiles due to its predominantly ruderal vegetation and the absence of key habitat features which were present in the northern field, such as longer grass, bramble scrub, rubble piles, log piles or other refugia, which are important for providing opportunities for foraging, thermoregulation and shelter.

The ACO's are composed of approximately 0.5m² sheets of corrugated metal or roof felt. Reptiles often use ground objects as a place to shelter from predation or disturbance and for absorbing heat. They are ectothermic, which is to say that they gain their body heat from the sun. Reptiles within the immediate vicinity are attracted to the ACOs in order to gain heat at appropriate times of day, because of the materials ability to absorb heat and provide a warmer micro-habitat than the surrounding vegetation.

During placement of refugia, the surveyor conducted a slow walkover of the site, searching for any reptiles as they walked, being careful to be quiet and to minimise vegetation disturbance where possible.

The ACO were left for 17 days to allow any reptiles present to habituate to them. Seven survey visits were then carried out in suitable weather conditions between 14 April to 13 May. Visits were timed to the period of the day when reptiles are most likely to be seeking a means of gaining additional heat, i.e. early morning, late afternoon, post-showers and cooler times of day. Details of timings and weather conditions for each survey can be found in Table 1.

Table 1: Summary of weather conditions

Visit	Date	Time of survey	Weather conditions*	
1	14/04/2025	10:30	Wind: 2 Cloud: 0/8	Temp: 14°C Rain: None
2	17/04/2025	12:28	Wind: 2 Cloud: 1/8	Temp: 14°C Rain: None
3	23/04/2025	16:15	Wind: 3 Cloud: 6/8	Temp: 13°C Rain: None
4	30/04/2025	09:16	Wind: 2 Cloud: 1/8	Temp: 15°C Rain: None
5	02/05/2025	08:31	Wind: 3 Cloud: 4/8	Temp: 14°C Rain: None
6	07/05/2025	10:04	Wind: 1 Cloud: 0/8	Temp: 13°C Rain: None
7	13/05/2025	09:00	Wind: 0 Cloud: 0/8	Temp: 16°C Rain: None

*Wind as per Beaufort Scale / Cloud cover given in Oktas.

3.2. Surveyors

The reptile survey site visits were undertaken by:

- Eleanor Richards, Ecologist at MKA Ecology Ltd. Eleanor has over two years' experience undertaking reptile surveys.
- Alfie Bunting, Ecologist at MKA Ecology Ltd. Alfie has over five years' experience undertaking reptile surveys.
- Joe Gillis, Graduate Ecologist at MKA Ecology Ltd. Joe has over one years' experience undertaking reptile surveys.
- Carolina Fakas, Graduate Ecologist at MKA Ecology Ltd. Carolina is in her first year as a professional ecologist.

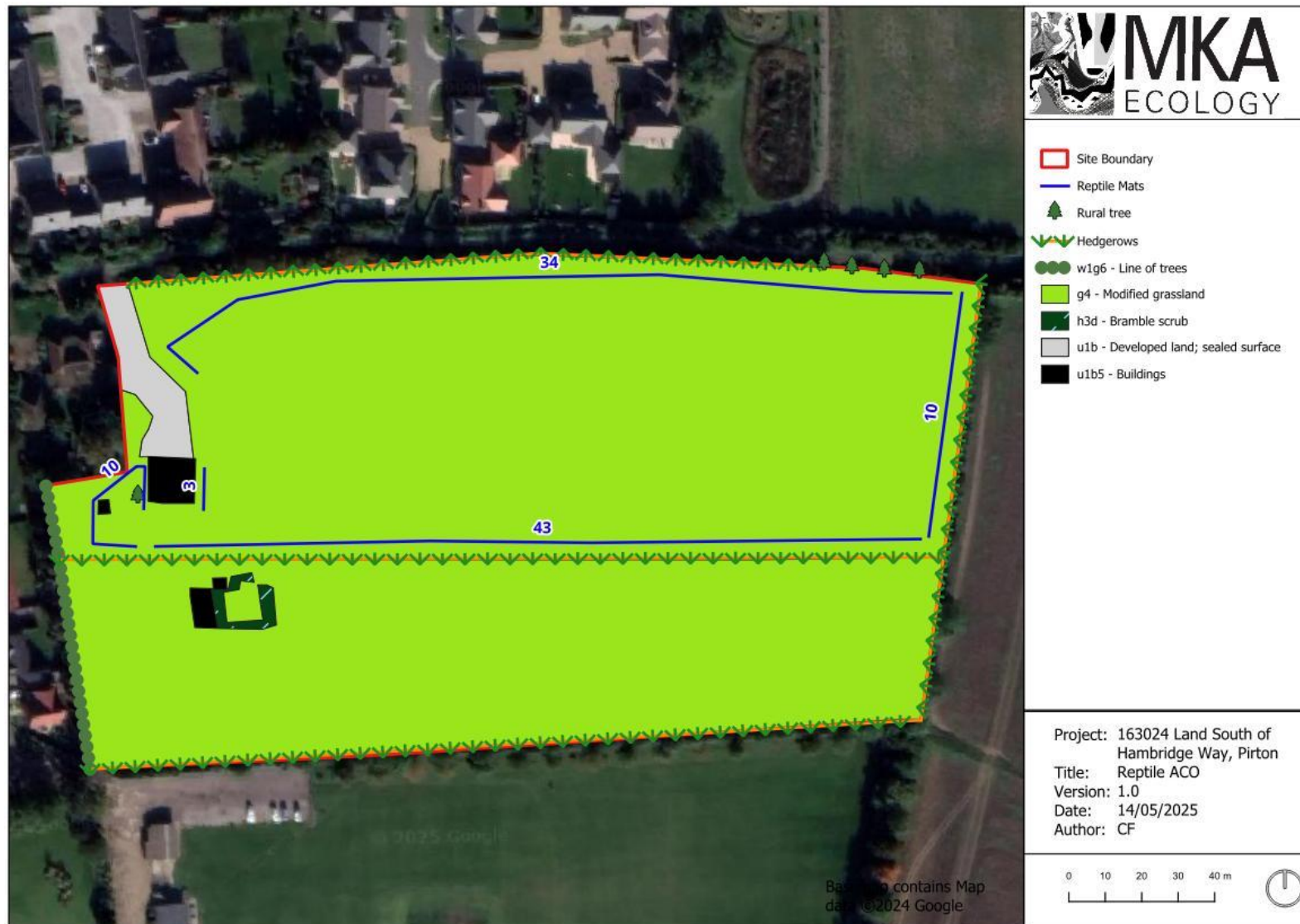
The report was written by Carolina Fakas and reviewed and authorised by Felix Bird, Senior Ecologist at MKA Ecology Ltd. Felix has six years' experience as a consultant ecologist.

3.3. Constraints

All surveys were undertaken during optimal weather conditions. The number of common lizards may be under-recorded during optimal weather conditions because of their rapid movement and sensitivity

to disturbance (JNCC, 2003). However, the use of incidental visual inspections during the survey limits the risk of bias. Further to this, a greater density of ACOs were used than stated in the guidelines (minimum 10 per ha) in order to compensate for this.

Figure 1: Location of reptile ACO at Land East of Walnut Tree Road, Pirton.



4. RESULTS

4.1. Reptile survey

No reptiles were recorded during any of the surveys. The surveys were carried out in optimal conditions and therefore reptiles can be considered likely absent from the Site at the time of survey.

5. EVALUATION AND RECOMMENDATIONS

The following section contains an evaluation of the reptile survey results for Land East of Walnut Tree Road, Pirton, along with recommendations for further work where required.

5.1. Evaluation

No reptiles were recorded during any of the survey visits and, therefore, the Site is not considered to support a population of reptiles at present. Reptiles do not pose a constraint to the proposed development and no further survey work or mitigation for reptiles is deemed necessary.

5.2. Recommendations

Although the Site does not currently support a reptile population, it does offer some suitable habitat for this species group due to the presence of areas of long grassland, hedgerows, log piles, rubble piles and standing deadwood.

The modified grassland, species-rich native hedgerows with trees, log piles, pallets and rubble piles onsite offer suitable habitat for basking, hibernating and foraging reptiles. It is recommended that where these habitats are retained, they should be protected using Heras fencing where appropriate during building works.

Recommendation 1

Protect retained features which provide suitable reptile habitat during the construction phase of the development, using Heras fencing where appropriate.

Much of the suitable grassland habitat will be removed to facilitate the proposed development. It is recommended that reptile-focused enhancements are included within the Site's design post-development, so that it continues to provide suitable habitat for local reptile populations and could encourage potential future colonisation. This should include areas of species-rich grassland and scattered scrub. Log and rock piles could be provisioned within any proposed grassland, which provide valuable basking, hibernating and refuge habitat for reptiles. This will create a complex variety of microhabitats and will increase the chance of reptiles colonising the Site in the future.

Recommendation 2

Incorporate suitable habitat provisions for reptiles into the landscape design scheme of the proposed development. This should include creation of species-rich grassland and log piles to increase the likelihood of reptile colonisation.

6. CONCLUSIONS

Between April and May 2025 MKA Ecology Ltd undertook a seven-visit reptile survey at Land East of Walnut Tree Road, Pirton. The aim of the survey was to assess the presence or likely absence of reptile species on Site. The surveys were conducted under best practice guidelines, in suitable weather conditions, and suggest that the Site does not currently support any reptile populations. As such, reptiles do not pose a constraint to the proposed development and no further survey work or mitigation for reptiles is required.

The existing grassland habitats, along with the species-rich native hedgerows with trees onsite, could provide suitable refuge and foraging opportunities for reptiles, as well as basking and hibernation sites in features such as log piles, pallets, and rubble piles. It is therefore recommended that any habitats to be retained on Site are protected throughout the construction phase of the development.

To provide enhancements to support reptiles post-development, it is recommended the site design includes the creation of species-rich grassland, scattered scrub and log and rock piles. These features will provide valuable habitat not only for reptiles but also for a variety of other wildlife, and will increase the likelihood of future reptile colonisation of the Site.

7. 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., and Gibson, S. (2003) *Herpetofauna Workers Manual*. JNCC: Peterborough

Herpetofauna Groups of Britain and Ireland (HGBI) (1998) *Evaluating Local and Mitigation / Translocation Programmes: Maintaining best practice and lawful standards*. HGBI: Halesworth

MKA Ecology Ltd. (2025) *Preliminary Ecological Appraisal, Land, South of Hambridge Way, Pirton*. MKA Ecology Ltd: Cambridge

8. APPENDICES

Appendix 1: Legislation and planning policy

Conservation of Habitats and Species Regulations 2017 (as amended)

Full legislation text available at: <http://www.legislation.gov.uk/uksi/2017/1012/contents/made>

The Wildlife and Countryside Act 1981 (as amended)

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/1981/69>

Section 41 of Natural Environments and Rural Communities (NERC) Act 2006

Full legislation text available at: <http://www.legislation.gov.uk/ukpga/2006/16/contents>

National Planning Policy Framework (NPPF)

Full text is available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>.

The revised NPPF was updated on 07 February 2025 setting out the Government's planning policies for England and the process by which these should be applied. The policies within the NPPF are a material consideration in the planning process. The key principle of the NPPF is a presumption in favour of sustainable development, with sustainable development defined as a balance between economic, social and environmental needs.

Policies 187 to 201 of the NPPF address conserving and enhancing the natural environment, stating that the planning system should:

- Contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes;
- Recognise the wider benefits of ecosystem services; and
- Minimise impacts on and provide net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.

Furthermore, there is a focus on re-use of existing brownfield sites or sites of low environmental value as a priority, and discouraging development in and around National Parks, Sites of Specific Scientific Interest, the Broads, and National Landscapes other than in exceptional circumstances.

Where possible, planning policies should also:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.



MKA
ECOLOGY

MKA Ecology Limited, New Cambridge House, Bassingbourn Road, Litlington, Cambridgeshire SG8 0SS

01763 262 211 | info@mkaecology.co.uk | www.mkaecology.co.uk

Company registration no 5858121 | VAT no. 825137440