



**REPTILE SURVEY
REPORT**

PROPERTY SPHERE LIMITED

LAND ADJACENT TO LAKE LANE
BARNHAM, BOGNOR REGIS
WEST SUSSEX

02ND OCTOBER 2024

REF: 23057

CT Ecology Limited (Registered Office), 2 Hillside Crescent, Angmering, West Sussex, BN16 4AA

Registered in England and Wales No.: 10836632

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EXECUTIVE SUMMARY

CT Ecology Ltd. was commissioned to undertake a reptile survey in order to ascertain the presence or likely absence of this species group across land adjacent to Lake Lane, in Barnham, West Sussex. The assessment was required in order to identify whether this species group could pose constraints to the proposed development at the site and to enable suitable mitigation to be devised. The site measures approximately 0.4 hectares (ha).

The main findings of the surveys are as follows:

- ✧ The site is within a semi-rural location within the northern extent of Barnham. The application site is dominated by grazed horse fields together with scattered trees and boundary scrub. A drainage channel bounds the site to the east.
- ✧ A **Low** breeding population of grass snake was identified during the course of the seven survey visits. Individuals were predominantly associated with the site margins with adult grass snakes being largely located along the western boundary. The site is assessed as being of value for small numbers of reptiles **within the zone of influence of the site.**
- ✧ Proposals will result in the loss of grassland together with ruderal vegetation and areas of scrub, as well as a large manure pile which provides suitable conditions for grass snakes to breed. The proposed works will include removal of habitats where reptiles were encountered during the survey, with grass snakes assumed to be passing throughout the site due to their mobile nature, therefore site preparation works required as part of the proposals to include the clearance of vegetation and the tracking of machinery has the potential to impact negatively on reptiles. This is through both habitat loss and the killing or injury of individuals. Mitigation is therefore required in order to safeguard this species group.
- ✧ Based on the low population of reptiles present, the mobile nature of grass snakes, and the current distribution of individuals, a formal translocation to move reptiles from the site is not considered necessary. Instead, adopting a precautionary approach to deter animals from the working area is considered sufficient to fully safeguard this species group and is considered to be the most suitable and appropriate approach in this situation.
- ✧ This approach will include phased habitat removal to discourage reptiles from the footprint of the development area. Retained habitats in the north and east of the site together with retained habitats along the western site boundary are sufficient to provide connectivity and cover for grass snakes to continue to pass between sites in the wider area for the duration of the works. Newly created garden areas will provide connectivity through the site post development.

- ✧ Suitable fencing (Herras™ or similar) will be installed around the footprint of the working area in order to stop machinery and materials encroaching into retained habitats. Any vegetation within the working area will then be maintained at ground level for the duration of the construction phase in order to protect the adjacent reptile population throughout construction activities. Due to the mobile nature of grass snakes, trenches will also be covered at night
- ✧ Providing a precautionary approach for reptiles is followed, the effects of the proposed works on reptiles are **not likely to be significant** in the long-term.
- ✧ Retained grassland and scrub associated with the northern site extent together with the creation of an attenuation pond, compost piles and hibernaculum within this part of the site will serve to provide foraging, breeding and overwintering opportunities for grass snake in the future.

1. INTRODUCTION

Background

- 1.1 CT Ecology Limited was commissioned by Property Sphere Limited to carry out a reptile survey throughout land adjacent to Lake Lane in Barnham, West Sussex. This assessment follows on from a Preliminary Ecological Appraisal (PEA) which identified potentially suitable features for this species group within the site (CT Ecology, 2023).
- 1.2 This report provides an assessment of the status of reptiles at the site, providing information on their presence/absence and distribution. Potential impacts of the proposed works are identified and measures to mitigate the effects of the development on this species group are discussed.
- 1.3 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013; CIEEM, 2013 & 2016; English Nature, 2004; Froglife, 1999; and HGBI, 1998).

Development Proposals

- 1.4 Proposals are to construct seven new residential dwellings with associated parking and landscaping however design proposals had not been finalised at the time of the survey. Boundary features, including trees, will be largely retained as part of the proposals.

Site Description

- 1.5 The application site is within a semi-rural location within the northern extent of Barnham in the Arun District of West Sussex at National Grid Reference SU969 047. The site comprised horse grazed fields with areas of bare ground and semi-improved grassland dominating the site. A single building was present in the south-east extent together with areas of boundary scrub, tall ruderal vegetation and scattered trees. A stream extended part way along the eastern site boundary.
- 1.6 The site is bounded to the north by a commercial plant nursery with residential properties and associated gardens bounding the site in all other directions. Access was via an access track, shared with residential properties, extending to Lake Lane to the south. A railway line (the south coast main line) is located beyond Lake Lane, approximately 360m to the south.
- 1.7 In the wider surrounds, commercial nurseries and agricultural fields dominate the landscape together with residential properties. The centre of Bognor Regis is approximately 6km to the south-west and the A27 is approximately 2km to the north.

2. METHODOLOGY

Data Search

- 2.1 Records for reptiles were obtained from the Sussex Biodiversity Record Centre (SxBRC 2023) as part of the PEA process.

Reptile Presence / Absence Survey

- 2.2 The survey protocol followed accepted standards for reptile surveys as set out in Froglife (1999), Hill et al (2005) and English Nature (2004).
- 2.3 The survey involved a combination of visually searching for reptiles (direct observation) and the use of artificial refugia.
- 2.4 On the 23rd April 2024 artificial refugia were placed around the site throughout areas of suitable reptile habitat. Refugia comprised individual 0.5m² (approximately) sections of roofing felt as well as a series of corrugated metal sheeting. These were laid out at approximately 5m intervals around the site.
- 2.5 Potentially suitable reptile habitat within the survey area consisted of areas of grassland which dominated the site together with ruderal edge habitats and marginal scrub. Horse grazing had recently ceased at the site, resulting in a taller grassland sward developing throughout the central site extents, within the former horse fields. Overall, at the time of the survey, potentially suitable reptile habitat equated to approximately 0.4ha.
- 2.6 In total of 53 refugia were used, equating to a density of approximately 132 per ha.
- 2.7 A total of seven survey visits were undertaken in May, June and July 2024. Refugia was checked during appropriate weather conditions, that is, where temperatures ranged between 11°C and 19°C, with little rain or wind. Visits were carried out, where possible, between the hours of 08.30-11.00 or 16.00-18.30, which are the optimum times for recording reptiles, although the time of day varied slightly according to weather conditions.

Population Size Estimate

- 2.8 An assessment of the reptile population size is based on Froglife (1999) guidance which requires a minimum of 20 repeat survey visits. Population sizes are then assigned to one of three categories (Low, Good or Exceptional) based on the peak count of individuals for each species across all the visits.

- 2.9 It should be noted that only seven visits were carried out and that the population assessment for the proposed development site is only an estimate based on the current guidance (see Table 2.1). Population assessments are however typically based on a relatively low survey effort with a maximum of 10 refuge sheets per ha, in contrast to a density of 132 refuge sheets per ha as employed at the site, and therefore it is considered likely that the survey data is more robust and sufficient to enable a population estimate to be made.

Table 2.1: Population score (Froglife, 1999).

| Species | Low Population | Good Population | Exceptional Population |
|----------------------|----------------|-----------------|------------------------|
| Adder | <5 | 5-10 | >10 |
| Grass Snake | <5 | 5-10 | >10 |
| Common Lizard | <5 | 5-20 | >20 |
| Slow Worm | <5 | 5-20 | >20 |

Caveat

Reptile Survey

- 2.10 Reptile surveys can be undertaken throughout March to October, in the active period for reptiles, in suitable weather conditions. The optimum months for survey are April, May and September (Froglife 1999).
- 2.11 All survey visits were carried out within the recommended survey period with four of the survey visits carried out within the optimal survey time. However due to the cold and wet weather conditions experienced throughout April and with higher levels of rainfall within some of June, these conditions are likely to have effected reptile cycles and are likely to have in turn delayed activity and potential breeding by reptiles. It is therefore considered that June, July and August were more optimal months to detect reptile activity in the 2024 survey season, where suitable weather conditions occurred.
- 2.12 All surveys were carried out in suitable weather conditions, and it the survey was considered sufficiently rigorous to determine the presence/likely absence and distribution of reptiles within the proposed development site at that time.

3. RESULTS

Reptile Survey

Data Search

- 3.1 The data search returned recent (post 2011) records for slow worm (*Anguis fragilis*), grass snake (*Natrix helvetica*) adder (*Vipera berus*) and common lizard (*Zootoca vivipara*) within 2km of the site. The closest record was from 2016 for grass snake, located approximately 300m to the south-east of the site.

Presence / Absence

- 3.2 The survey was carried out through May, June and July 2024 by Carly Teague (lead surveyor) and Aidan Bird. Both surveyors have extensive experience of undertaking surveys for reptiles. Carly has been involved in compiling and undertaking reptile mitigation, including formal reptile translocation projects, from small scale development projects through to large scale, multi phased developments.
- 3.3 The survey found a small number of grass snakes within the site, with a peak (adult) count of two individuals recorded on the second and fourth survey visits on 19th May 2024 and 29th May 2024.
- 3.4 Grass snakes were predominantly associated with the site margins with adult grass snakes being largely located along the western boundary, although an adult grass snakes were also located in the southern site extent on one occasion. Juveniles were also predominantly associated with the western boundary with a small number of individuals in the southern site extent.
- 3.5 Juvenile grass snakes were recorded during every survey visit which indicates that grass snakes are likely to be breeding within the site. As some juveniles were found adjacent to the manure pile present at the site, it can be assumed that grass snakes are using this feature for incubating their eggs.
- 3.6 The location of reptiles is presented in the survey map in Appendix A and a summary of the results is displayed in the table below. Full survey results are presented in Appendix C.

Table 3.1: Summary of reptile survey results (with peak counts (adults) in red).

| Date | Grass Snake | |
|------------|-----------------|----------|
| | Adult/Sub-Adult | Juvenile |
| 14/05/2024 | 0 | 2 |

| Date | Grass Snake | |
|------------|-----------------|----------|
| | Adult/Sub-Adult | Juvenile |
| 19/05/2024 | 2 | 2 |
| 24/05/2024 | 1 | 1 |
| 29/05/2024 | 2 | 3 |
| 05/06/2024 | 0 | 2 |
| 13/06/2024 | 1 | 3 |
| 23/07/2024 | 0 | 2 |

Population Size Assessment

- 3.7 The peak count of two (adult) grass snakes within the site equates to a low population for this species based on current guidance (Froglife, 1999).
- 3.8 The true population size is more difficult to estimate, although guidance from Froglife (1999) suggests that peak counts from refuge surveys encounter only c.10% of individuals, albeit with a much lower sampling effort than employed here. A true estimate for grass snakes is however more difficult to make compared to other reptiles as there is an added complexity due to their transient nature and large home ranges, with individuals likely to pass through a network of habitats, using water bodies in the wider area for foraging. On this basis, a true population estimate for grass snakes cannot be usefully made for the site.
- 3.9 Full results are included in Appendix C.

4. EVALUATION AND IMPACTS

Evaluation

Reptiles

- 4.1 All species of reptile are protected from killing or injury under the Wildlife and Countryside Act 1981 (as amended).

Site

- 4.2 The site in its entirety covered an area of approximately 0.4ha with potentially suitable reptile habitat present throughout the site since the cessation of grazing earlier in the year. Suitable reptile habitat comprised grassland, ruderal vegetation and scrub together with the manure pile in the south of the site. At the time of the survey, the on-site habitats supported suitable foraging, basking, sheltering and breeding opportunities, and although areas of continuous grassland provide less optimal conditions due to heavy shading at ground level, resulting in an absence of basking features due to the dense sward, the interface between scrub and grassland edge habitats are extensive enough to support a viable population of reptiles. The site provided some connectivity to grassland and scrub habitats to the north, east and west.
- 4.3 It is likely that on-going grazing throughout the field until recent months have served to restrict the presence of other reptiles such as slow worm and common lizard, however due the transient nature of grass snakes, this species has been able to exploit the on-site features despite the horse grazing, with features such as manure piles providing potentially suitable breeding habitat for this species.
- 4.4 The reptile survey confirmed the presence of a **Low** population of grass snake based on guidance from Froglife (1999). Individuals were recorded throughout the site although the majority of sightings were along the western margins.
- 4.5 Overall, the site is assessed as being of value for small numbers of reptiles **within the zone of influence of the site** based on the results of the current survey. The on-site habitats provide a supporting function as a foraging, breeding, basking and sheltering resource for grass snake but due to the transient nature of this species, individuals are likely to be passing over large distances in the wider environs for foraging.
- 4.6 The site provides connectivity for this species to off-site habitats although more optimal communing and sheltering habitat is present in the wider area, the site itself provides potentially suitable breeding habitat. When considered in combination with the wider landscape, based on the low numbers recorded and the transient nature of this species, the site is of low value to local reptile populations.

Impact Assessment

Reptiles

- 4.7 Proposals will result in the permanent loss of areas of grassland habitat, together with scrub and ruderal edge habitat which provide suitable sheltering, foraging and basking habitat for grass snake. Proposals will also result in the removal of the mulch pile which may provide a breeding resource for this species. A small number of grass snake were recorded during the survey and individuals were predominantly associated with the site margins, with the highest number of sightings associated with the western site margin. Based on the current site layout, grassland within the west of the site will become residential gardens as a result of the development and these areas are likely to be removed to facilitate construction and then re-landscaped. Trees around the site boundaries will however be retained with associated root protection areas implemented as part of the development. Areas of scrub associated with the northern site margins and habitats adjacent to the drainage channel along the eastern site extent will also be retained and incorporated into the scheme.
- 4.8 Based on the species recorded and the associated distribution of individuals around the site, and due to their transient and mobile nature, based on the currently proposed layout, the removal of on-site habitats to facilitate the development will not result in the loss of a reptile site, or significantly isolate the existing reptile population present, with grass snakes able to move through retained on-site habitats including site boundaries and continue to move off-site to the north, east and west during works. Once the development is complete, individuals will also be able to pass through newly created gardens and continue to access off-site habitats to north, east and west. The works will result in the removal of a potential breeding feature in the form of a manure pile.
- 4.9 Although reptiles were absent from the centre of the proposed working footprint during the survey, for the purposes of the impact assessment, the movement of reptiles throughout the site must be assumed.
- 4.10 Based on the results of the assessment, the **construction phase** of the works will result in a **permanent negative impact** upon **low** numbers of individual widespread reptiles, **significant within the zone of influence of the site**.
- 4.11 Unmitigated, site preparation works required as part of the proposals to include the clearance of vegetation and the tracking of machinery has the potential to impact negatively on reptiles. This is through both habitat loss and the killing or injury of individuals. Mitigation is therefore required in order to safeguard this species group.

- 4.12 Based on the ecology of grass snakes and distribution of individuals at the site, adopting a precautionary approach to include phased habitat removal, which will serve to deter animals from the working area and displace individuals into retained habitats to the north and around retained boundary features to the east and west, is considered sufficient to safeguard this species group, enabling individuals to continue to pass between off-site habitats to the north, east and west during the construction phase. Suitable fencing (Herras™ or similar) must be installed around the working footprint to ensure retained habitats, particularly in the south, are protected. The fencing will serve to restrict machinery and materials encroaching into retained habitats.
- 4.13 Any vegetation within the working area must then be maintained at ground level for the duration of the construction phase in order to ensure the site remains unsuitable for colonisation by reptiles. Materials must also be stored away from fences to avoid the potential for reptiles using the stored materials as refugia. These measures will serve to protect the adjacent reptile population throughout the construction phase. Due to the mobile nature of grass snakes, trenches must also be covered at night or where this is not possible, scaffold planks should be placed into the excavations overnight to enable animals, including grass snake, to escape.
- 4.14 Habitat connectivity will be maintained post works, with individuals being able to extend their range around newly created garden areas. Retained grassland and scrub areas should also be managed in a sympathetic way for reptiles in the long-term, with a relaxed meadow management regime implemented to promote cover for reptiles during the active season. Creation of an attenuation pond will provide an additional foraging resource for grass snake in the long-term. Compost piles and hibernaculum should also be created in the north of the site; near to the proposed attenuation pond, to provide breeding and overwintering opportunities for grass snake in the future.
- 4.15 Providing a precautionary approach for reptiles is followed, the effects of the proposed works on reptiles are **not likely to be significant** in the long-term.

5. SUMMARY AND RECOMMENDATIONS

Summary

5.1 This section summarises the data gathered during the survey and the likely impacts on reptiles and supporting habitats that are present on the site, as described in previous sections of this report.

5.2 The following key ecological issues have been identified:

- ✧ A **Low** breeding population of grass snake was identified during the course of the seven survey visits. Individuals were predominantly associated with the site margins with adult grass snakes being largely located along the western boundary. The site is assessed as being of value for small numbers of reptiles **within the zone of influence of the site**.
- ✧ Proposals will result in the loss of grassland together with ruderal vegetation and areas of scrub, as well as a large manure pile which provides suitable conditions for grass snake to breed. The proposed works will include removal of habitats where reptiles were encountered during the survey, with grass snakes assumed to be passing throughout the site due to their mobile nature, therefore site preparation works required as part of the proposals to include the clearance of vegetation and the tracking of machinery has the potential to impact negatively on reptiles. This is through both habitat loss and the killing or injury of individuals. Mitigation is therefore required in order to safeguard this species group.
- ✧ Based on the low population of reptiles present, the mobile nature of grass snakes, and the current distribution of individuals, a formal translocation to move reptiles from the site is not considered necessary and unlikely to be effective. Instead, adopting a precautionary approach to deter animals from the working area is considered sufficient to fully safeguard this species group and is considered to be the most suitable and appropriate approach in this situation.
- ✧ This approach will include phased habitat removal to discourage reptiles from the footprint of the development area. Retained habitats in the north and east of the site together with retained habitats along the western site boundary are sufficient to provide connectivity and cover for grass snakes to continue to pass between sites in the wider area for the duration of the works. Newly created garden areas will provide connectivity through the site post development.
- ✧ Suitable fencing (HerrasTM or similar) will be installed around the footprint of the working area in order to stop machinery and materials encroaching into retained habitats. Any vegetation within the working area will then be maintained at ground level for the duration of the construction phase in order to protect the adjacent reptile population throughout construction activities. Due to the mobile nature of grass snakes, trenches will also be covered at night

- ✧ Providing a precautionary approach for reptiles is followed, the effects of the proposed works on reptiles are **not likely to be significant** in the long-term.
- ✧ Retained grassland and scrub associated with the northern site extent together with the creation of an attenuation pond, compost piles and hibernaculum within this part of the site will serve to provide foraging, breeding and overwintering opportunities for grass snake in the future.

Recommendations

Reptiles

- 5.3 Reptiles must be displaced by the persuasion method which must be carried out in the active period for this species; taken to run between **mid-March and October** inclusive. This will involve carrying out phased vegetation cutting throughout the working area to remove any cover opportunities and to encourage reptiles to move into adjacent and/or retained habitats in the north and east of the site. A working methodology is provided below.

- ✧ Prior to Construction- Habitat Enhancement (Retained Habitats)
 - Prior to construction commencing, habitat enhancement measures must be undertaken throughout retained habitats in the north and east of the site. This should include relaxed grassland management, installation of hibernaculum and compost heaps and management of scrub. Vegetation cut from the phased habitat management stage (detailed below) could be stacked to form the compost heap(s). More details regarding site enhancement measures are provided in the site enhancement section below.
- ✧ Prior to Construction- Phased Habitat Management
 - In the first phase, all standing vegetation within the working footprint should be reduced in height to approximately 250mm above ground level. Vegetation should be cleared using hand tools, such as chainsaws and strimmers. All cut vegetation should be removed from the working area and stacked in the north of the site;
 - the second phase should then be undertaken the following day. Vegetation should be cut to ground level using the same method as detailed above; and
 - for each phase, the vegetation should be cut towards the northern and eastern site extents of the working area to enable reptiles to move into retained habitats.

✧ Prior to Construction- Fence Installation/Site Maintenance

- Once all suitable habitat is removed, suitably robust fencing (Herras™ or similar) should be installed around the working footprint in order to stop materials and machinery encroaching into retained habitats; and
- All vegetation within the working footprint should be managed at ground level in the lead up to construction commencing. This may require weekly strimming during the plant growing season (March to September inclusive).

✧ During Works

- All fencing must remain in situ for the duration of the construction works; and
- All vegetation within the working footprint should be managed at ground level throughout the construction period. This may require weekly strimming during the plant growing season (March to September inclusive).

✧ Post Construction

- The perimeter fencing must remain in place until all construction activities, including the use of heavy machinery, are complete.

Site Enhancement

Log Piles

- 5.4 To enhance the retained habitats and to increase the carrying capacity for reptiles in retained habitats, a series of two log piles should be constructed in the north and east of the site order to provide additional hibernation and basking opportunities. These should be located within retained grassland.
- 5.5 Log piles will be oriented so as to maximise their daily exposure to the sun and will be made from neatly stacked cord wood, locally sourced where possible, and stacked approximately 1m in height, either in a pyramidal shape (bound with wire to prevent them breaking apart over time) or stacked against a semi-mature/mature tree trunk or fence post. The piles will be oriented such that their longest side faces south.

- 5.6 Log piles are ideal environments for reptiles; the surface of the structures may be used for basking and they may also be used as a refuge from predators. The dead wood in the log piles also supports a diverse invertebrate fauna; a food source for reptiles.

Compost Piles

- 5.7 Due to the presence of juvenile grass snakes within the site, two compost piles should be installed prior to construction works commencing in order to compensate for the loss of the manure pile at the site which is likely to provide a breeding resource for grass snakes in the locality. These should be located in a sunny aspect along the northern boundary of the site and outside the footprint of the proposed attenuation pond. These should measure a minimum of 2m² to enable warm and stable conditions to be supported within the centre of the compost pile which are required for the successful incubation of grass snake eggs. These should be formed initially with some of the manure from the southern extent of the site and then augmented through stacking cut arisings during the site preparation phase of works. These can continue to be added to as a result of any on-going site management. These can eventually be fenced, as required, to obscure and protect the compost piles from human interference once the new plots are occupied however the fences should enable ingress by reptiles at the base. If manure cannot be used to initially form the compost heaps, then chipped bark should be used as this will help to generate and hold heat required by grass snakes for incubation.

Scrub Management

- 5.8 Periodic scrub clearance should be undertaken to control encroachment of scrub in order to maintain the open grassland supported at the site.
- 5.9 In order to avoid any potential impact on breeding birds, the clearance of any scrub will be timed to occur outside the main bird nesting season and in the active period for reptiles, with clearance works undertaken between **September and October**, as required.

Grassland Management

- 5.10 A sympathetic grassland cutting regime should be implemented for the retained grassland areas to enhance the site for reptiles. Adopting an annual cut late in the year, after the plant growing season, will serve to encourage a greater wildflower diversity and structural variation throughout the sward. Annual cutting will serve to control the dominance of coarse grasses over the long-term while enabling the grassland sward to develop during the summer months when reptiles are active.

6. REFERENCES

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- * CIEEM – Chartered Institute of Ecology and Environmental Management (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater and Coastal*. Winchester: CIEEM [On-line]. Available from http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf [Accessed on 10/09/2024].
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- * English Nature (2004) *Reptiles: Guidelines for Developers*. Peterborough: Natural England.
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- * Herpetofauna Groups of Britain and Ireland (HGBI) (1998) *Evaluating Local Mitigation/ Translocation Programmes: Maintaining Best Practice and Lawful Standards*. HGBI Advisory Notes for Amphibian and Reptile Groups (ARGs). Halesworth: HGBI, c/o Froglife. Unpublished.
- * Hill, D. Fasham, M. Tucker, G. Shewry, M. Shaw, P (2005). *Handbook of Biodiversity Methods – Survey, Evaluation and Monitoring*. Cambridge: Cambridge University Press.

Appendix A

Survey Map

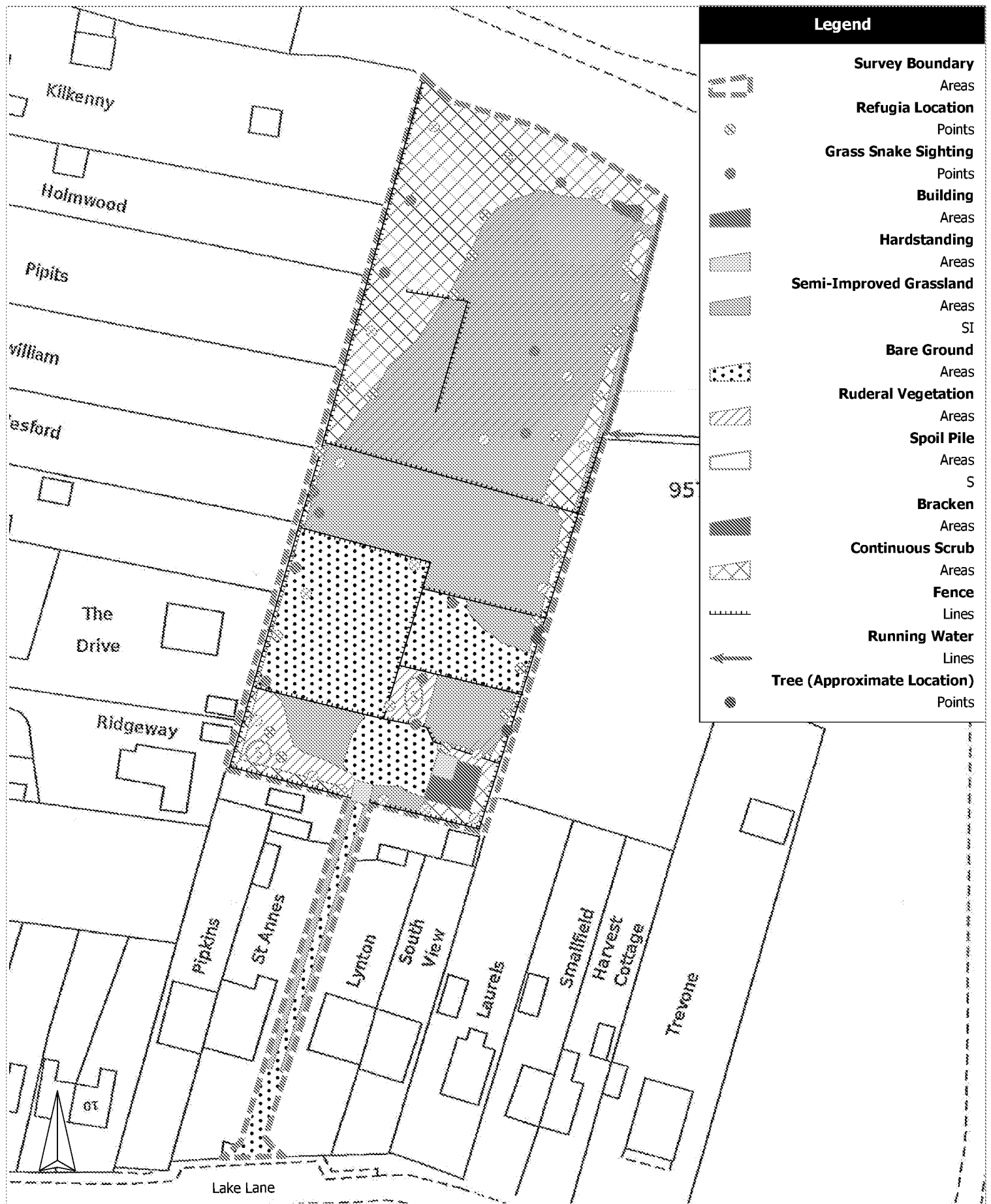


Figure 1: Land Adjacent to Lake Lane Reptile Survey Map

Drawn by: CT
 Date: 01/10/2024
 Scale: 1:1250



Appendix B

Legislation

LEGISLATIVE FRAMEWORK

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) is to conserve plants and animals which are considered to be rare across Europe.

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include

- ✧ Countryside and Rights of Way (CROW) Act 2000
- ✧ Deer Act 1991
- ✧ Natural Environment & Rural Communities (NERC) Act 2006
- ✧ Protection of Badgers Act 1992
- ✧ Wild Mammals (Protection) Act 1996

Herpetofauna (Reptiles and Amphibians)

The following species receive full protection under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

- ✧ sand lizard (*Lacerta agilis*);
- ✧ smooth snake (*Coronella austriaca*);
- ✧ natterjack toad (*Epidalea calamita*);
- ✧ great crested newt (*Triturus cristatus*); and

- * pool frog (*Pelophylax lessonae*).

Under this legislation, Regulation 41 prohibits:

- * deliberate killing, injuring or capturing of species listed on Schedule 2;
- * deliberate disturbance of any Schedule 2 species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- * deliberate disturbance of any Schedule 2 species as to affect significantly the local distribution or abundance of the species;
- * deliberate taking or destroying of the eggs of a Schedule 2 species;
- * damage or destruction of a breeding site or resting place; and
- * keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part of a species.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- * intentional or reckless disturbance (at any level);
- * intentional or reckless obstruction of access to any place of shelter or protection; and
- * selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). These species include:

- * adder (*Vipera berus*);
- * grass snake (*Natrix natrix*);
- * common lizard (*Zootoca vivipara*); and
- * slow-worm (*Anguis fragilis*).

Under this legislation, for these species it is prohibited under Section 9(1) & (5) to:

- * intentionally (or recklessly in Scotland) kill or injure these species
- * sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

The following species are listed in respect to Section 9(5) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) which only affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale:

- * common frog (*Rana temporaria*);
- * common toad (*Bufo bufo*);
- * smooth newt (*Lissotriton vulgaris*); and
- * palmate newt (*L. helveticus*).

Appendix c

Reptile Survey Results

Reptile Survey Results. Land Adjacent to Lake Lane

| Survey No: | Date | Time | Temp/°C | Rain | Sky/Octares | Sightings | Sex | Number | Location |
|------------|------------|-------|---------|------|-------------|-------------|------|--------------------|---|
| 1 | 14/05/2024 | 10.15 | 16 | 0 | 7 | Grass snake | - | 2 x Juv | Grassland E extent |
| 2 | 19/05/2024 | 10.00 | 14.6 | 0 | 0 | Grass snake | - | 2 x Juv, 2 x Ad | Grassland E and W extent |
| 3 | 24/05/2024 | 08.25 | 16.6 | 0 | 1 | Grass snake | F | 1 x Juv, 1 x Ad | Grassland/scrub interface W extent |
| 4 | 29/05/2024 | 09.15 | 19 | 0 | 3 | Grass snake | M, F | 3 Juv, 2 Adult | Grassland/scrub interface W extent, N extent |
| 5 | 05/06/2024 | 08.45 | 16.2 | 0 | 5 | Grass snake | - | 2 juv | Grassland/scrub interface W extent |
| 6 | 13/06/2024 | 07.30 | 17.4 | 0 | 2 | Grass snake | - | 3 Juv, 1 Adult | S extent (1 x juv and adult by mulch heap), grassland in N extent |
| 7 | 23/07/2024 | 20.30 | 18.2 | 0 | 1 | Grass snake | - | 2 juv | S extent by mulch heap |