Avant Homes Midlands

Birchwood Lane, Somercotes

REPTILE REPORT

September 2023

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1.0 INTRODUCTION

1.1 The following report has been prepared by FPCR Environment & Design Ltd. on behalf of Avant Homes and provides details of reptile surveys carried out on land at Birchwood Lane, Somercotes, Alfreton (Central Grid ref: SK 43083 53839).

1.2 This report should be read in conjunction with the Ecological Appraisal[1] and associated protected species reports produced for the site.

Site Location and Context

1.3 The site comprised an equestrian centre with poor semi-improved grassland fields and two riding manèges with a sand substrate. Fields were bound and divided by native hedgerows and lines of trees. A grassland bund was also present, supporting ruderal species and scrub. Located to the south-west of Alfreton, the site is surrounded by pastureland to the south and the east and Somercotes village to the west. Allotments are present to the north-east of site, with Clover Nook Industrial Estate located further to the north.

Development Proposals

1.4 The site is currently proposed for allocation within the Draft Local Plan. Proposals include the construction of residential dwellings and associated green infrastructure.

2.0 LEGISLATION

2.1 All common reptile species, including slow-worm *Anguis fragilis*, common lizard *Zootoca vivipara* and grass snake *Natrix helvetica*, are partially protected under Sections 9(1) and 9(5) of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)[2]. This legislation protects these animals from:

- intentional killing and injury;
- selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisements to buy or sell a protected species.

2.2 This partial protection does not directly protect the habitat of these reptile species. Where these animals are present on land that is to be affected by development, the implications of legislation are that providing that killing can reasonably be avoided then an operation is legal.

2.3 All reptile species are Species of Principal Importance under Section 41 of the NERC Act (2006)[3].

[1] FPCR (2022) Land at Birchwood Lane, Somercotes Ecological Appraisal

[2] The Wildlife and Countryside Act 1981 (as amended). [Online]. London:HMSO Available at http://www.legislation.gov.uk/ukpga/1981/69

[3] The Natural Environment and Rural Communities Act 2006. [Online]. London: HMSO Available at: http://www.legislation.gov.uk/ukpga/2006/16/contents

3.0 METHODOLOGY

Desk Study

3.1 As part of the desk study species records regarding existing reptile records within 1km from the site were obtained in December 2022 from the following organisations:

- Derbyshire Biological Records Centre (Derbyshire Wildlife Trust)
- The Multi Agency Geographic Information for the Countryside (MAGIC) website[4]

Field Survey

Habitat Suitability

3.2 An assessment of reptile habitat suitability was undertaken as part of the Extended Phase 1 habitat survey of the site on 17th November 2022. This confirmed that suitable habitat for reptile commuting was present within the site and that these areas could be affected by development.

Reptile Presence/Absence Survey

3.3 A strategic reptile presence/absence survey was undertaken at specific locations offering potential habitat within the application site boundary. The survey was undertaken based on methodology detailed in the *Herpetofauna Workers Manual* (Gent and Gibson, 1998)[5] and the *Froglife Advice Sheet 10 - Reptile Survey* (Froglife 1999)[6]. A total of 42 artificial refugia were placed within the survey area amongst habitats considered most suitable for reptiles to confirm presence/absence; the location of refugia is shown in Figure 1. The artificial refugia was then left for two weeks, in order to allow any reptiles in the area to become accustomed to their presence and begin using them as basking spots.

3.4 All of the surveys were undertaken between April and September 2023 by suitably experienced ecologists. The surveys were carried out in appropriate weather conditions i.e. air temperature between 9 and 18°C, no strong wind or heavy rain. As per the guidelines, seven surveys were undertaken.

3.5 In addition, the surveys also followed the guidelines' recommendations by:

- Using regularly spaced roofing felt (0.5m²) as artificial refugia, with a black upper side,
- Approaching refugia from downwind and avoiding casting a shadow and with care so as to not disturb basking animals when checking,
- That lifting and replacing naturally occurring or artificial refugia, to check for the presence of reptiles, is undertaken with care as to avoid potential harm to any animals.

[4] www.magic.gov.uk

[5] (2003) Herpetofauna Workers Manual

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

Table 1: Survey Dates and Weather Conditions 2023

Survey	Date	Time	Temp. (°C)	Cloud (%)	Rain	Wind
Refugia set up	16.05.23	n/a	n/a	n/a	n/a	n/a
1	30.05.23	AM	12°C	70-80%	None	Light Air
2	07.06.23	PM	17°C	20-30%	None	Light Air
3	12.06.23	AM	17°C	0-10%	None	Light Breeze
4	19.06.23	AM	16°C	20-30%	None	Light Breeze
5	26.06.23	PM	18°C	10-20%	None	Light Air
6	03.07.23	PM	16°C	30-40%	None	Light Air
7	10.07.23	AM	17°C	30-40%	None	Light Air

Survey Limitations

3.6 Six of the surveys were carried out in June and July, outside of the recommended optimal survey period (April, May and September). June and July are generally considered to be a sub-optimal months to conduct presence/absence reptile surveys in due to the typically higher temperatures during this month which reduces the need for reptiles to use the artificial refugia to increase their body temperature. Consequently, the likelihood of reptiles being recorded using artificial refugia during the surveys decreases during warmer weather. However, surveys were carried out in accordance with the weather conditions recommended in the guidelines (temperature range of 9 - 18ºC, no/little wind and no/little rain), consequently the results of these surveys are considered to be valid.

4.0 RESULTS

Desk Study

4.1 Consultation with the Derbyshire Biological Records Centre (Derbyshire Wildlife Trust) and The Multi Agency Geographic Information for the Countryside (MAGIC) website showed one record of grass snake, located adjacent to the northern site boundary (Figure 2). An additional nine records were identified approximately 350m north-west of the site associated with the Pennytown Pond LNR. There were no records identified more recently than 2010.

Field Survey

Habitat Assessment

4.2 During the initial Extended Phase 1 Habitat Assessment certain areas of the Site were assessed as having some suitability to support reptiles. Full descriptions of these habitats can be found in the 2022 Ecological Appraisal by FPCR Environment & Design Ltd[7].. On-site habitats, namely hedgerows were considered to offer suitable commuting and foraging habitats for reptiles. Adjacent to the southern boundary of the site ran a wet ditch, which also provided suitable commuting habitat

[7] FPCR (2022) Land at Birchwood Lane, Somercotes Ecological Appraisal

for grass snake. There was connectivity to the wider landscape of hedgerow networks and grassland fields to the south and east of the site.

4.3 Areas of scrub were present in the fields on the site and provide suitable habitat for reptile rest/shelter. There was a large amount of poor semi-improved grassland on-site which does not provide much suitable habitat for reptiles due to the fields being used as grazing for horses resulting in a consistent sward length of approximately 10-20cm. The grassland is largely over-grazed, and the presence of livestock reduces the suitability of the grassland and the scrub for reptiles (although these habitats could potentially be used for basking).

4.4 Areas of bare ground and hardstanding were also identified on the site and provide an unsuitable habitat for reptiles.

Reptile Survey

4.5 During the course of the surveys no reptiles were recorded on any occasion, with all surveys completed during suitable weather conditions in May, June and July 2023.

5.0 CONCLUSIONS

5.1 Habitats within the site offered some suitable commuting and foraging habitat for reptiles in particular for grass snake, who will disperse across a wide area along habitat corridors to use suitable habitats within their home range. Desk study results indicated a previously observed presence of grass snake near the northern boundary of the site, with an additional nine records identified approximately 350m north-west of the site associated with the Pennytown Pond LNR. The most recent desk study results were recorded in 2010.

5.2 No reptiles were recorded during the presence/absence surveys. All surveys were carried out in appropriate weather conditions.

5.3 Given that no reptiles were recorded during the presence/absence surveys and that the most recent record of reptiles in the area was from 13 years ago, it is considered that reptiles are absent from the site in its current state and do pose a constraint to the proposals at this site

5.4 Should the site remain in its current state of management, with the grassland habitats being regularly heavily grazed by horses, then the clearance of grassland habitats will not require ecological supervision. However, should the management of the site change, ecological advice should be sought on whether ecological supervision and passive displacement methodology is required. A passive displacement methodology is described in the section below, should this be required.

5.5 Enhancements to retained areas of habitat could be included in order to increase the value of these habitats for reptiles. The following enhancement measures are recommended to improve the value of retained habitats for reptiles:

- Inclusion of brash/log piles, to be created from arisings of vegetation removal, to be placed in sunny locations in area of long grass or long grass and scattered scrub These should be located away from area of public access to reduce the risk of disturbance.
- Inclusion of artificial hibernacula and egg laying sites in suitable locations (south facing, sunny position). Artificial hibernacula can contain a range of material such as cut timber, brash, rocks and

hardcore. Egg laying sites usually comprise decaying organic material i.e. grass cuttings, all of which should be available during vegetation clearance. These features should be placed at the transition zone between habitats to maximise their value to reptiles through their life cycle.

- Where appropriate the landscaping and sensitive management of areas will also be used to ensure that longer grass swards can be maintained which are of greater value to reptiles, particularly along boundary habitats. These measures provide a range of suitable 'edge' habitats for reptiles around the boundaries of the site's green infrastructure, supplying cover, foraging and basking areas.

5.6 These design features will lead to the creation of a habitat network for features of greater value to reptiles, and with the incorporation of hibernacula and egg laying heaps around the site, will reduce the effects of habitat loss and improve the carry capacity of the wider habitats for reptiles.

Passive Displacement Methodology

5.7 This section details a Passive Displacement Methodology designed to safely remove areas of reptile suitable vegetation. This section has been included to provide information on the working methods, should they be required in future if the management of the site changes, and the grassland habitats are no longer closely grazed/mown.

5.8 All works within suitable reptile habitats will ideally be undertaken during suitable weather conditions, outside the reptile dormant phase. No works shall take place between November and mid-March (inclusive) when reptiles are likely to be hibernating. Doing so will minimise the risk of torpid reptiles being present within onsite terrestrial habitats.

5.9 A Toolbox Talk will be given to all Site operatives by the Ecological Clark of Works (ECoW) immediately prior to the start of the proposed works. All construction staff will be provided with training in relation to reptiles and the contents of this Methodology by an appropriately experienced ecologist prior to commencement of works on the first working day. All operatives will be made aware of all ecological constraints, working methods and procedures to follow in the unlikely event a reptile is observed during the works. A copy of this document should be made available on Site/within the Site office at all times.

5.10 Where works are scheduled to take place within vegetation longer than 150mm, vegetation will be flailed/directionally strimmed towards retained habitats. This will include an initial cut reducing vegetation to a height of approximately 250mm, followed by a second cut to <50mm after a 2-3hr period to allow any reptiles present to displace passively. All arisings will be removed from the working area and the site should be left for between 3 to 4 hours to further allow any animals to disperse. Any remaining suitable habitats, including grass tussocks, hedgerow bases etc. will be hand-searched by the attending ecologist. Any reptiles found will be removed from the site and relocated to an area of suitable habitat offsite. Following these working measures will reduce the onsite habitat suitability for reptiles and allow works to carry on un-supervised.

5.11 Any reptiles found whilst the passive displacement works are taking place will be relocated by the ecologist supervising the works to suitable retained habitat. Arisings from the vegetation clearance works will be removed from site.

5.12 As the timings for passive displacement works of reptiles overlap with the bird nesting season, vegetation suitable for nesting birds, namely hedgerows and areas of scrub, will need to be checked by an ecologist prior to its removal.

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Key

- Tin Location
- Scrub - scattered
- Tree with bat potential
- Target note
- coniferous trees
- Running water
- Intact hedge - species-poor
- Fence
- Site Boundary
- Bare ground
- Buildings
- Built Environment: Buildings/hardstanding
- Built Environment: Gardens (lawn and planting)
- Cultivated/disturbed land - amenity grassland
- SI — Poor semi-improved grassland
- Scrub - dense/continuous

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masterplanning ■ environmental assessment ■ landscape design ■ urban design ■ ecology ■ architecture ■ arboriculture

client
Avant Homes

project
Birchwood Lane,
Somercotes

drawing title
REPTILE REFUGIA LOCATION PLAN

scale @ A3
1:1000

drawn
KGF

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4/12/2023

drawing / figure number
Figure 1

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Key

- **Grass Snake**
- **Site Boundary**
- **LWS**
- **1km Buffer**

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client
Avant Homes

project
Land at Birchwood Lane, Somercotes

drawing title
REPTILE CONSULTATION PLAN

scale @ A3
1:4000

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Figure 2

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