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Daedalus Park
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PO13 9FX

30th August 2023

RE: Land South of Maddoxford Lane, Boorley Green: Reptile Capture and Mitigation Report

Background

This ecology note summarises the findings of the initial reptile survey undertaken during June / July 2021, reptile capture undertaken between August and September 2021 in support of condition 6 (reptile monitoring survey) of planning permission F/19/84937, in addition to the subsequent reptile survey / capture conducted during June to August 2023 following damage to the reptile fencing which was considered to render the previous works invalid.

Site Description and Location

Prior to planning, the site comprised of a series of grassland parcels used as horse pasture and associated buildings with mature tree line boundaries, (which has since undergone the start of construction work) located south of Maddoxford Lane, Boorley Green, West End, Southampton, SO32 2DD (centered on OS grid reference SU 511 142) (**Fig 1**). The north of the site is bound by Maddoxford Lane, the east and south by arable fields and the west by a site with permission for 50 new dwellings which is now under construction.

The proposals entail an uplift application to an existing permission for 50 dwelling (granted under (O/16/7960) to provide 73 new dwellings and associated landscaped areas.

Reptile Survey / Capture (2021)

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Figure 2. Screenshot of the results of the reptile survey conducted by Ecosupport in 2021. The blue squares indicate where Slow Worms were present and the red areas absence.



Following the granting on planning permission, a translocation was undertaken between August and September 2021 during which 44 Slow Worms were captured from the site and relocated into the retained on site receptor (area they were moved to shown below in **Fig 3**).

Figure 3. Area of the site that was set up with exclusion fencing where any captured reptiles were moved to in 2021.



Damage to Fence and Capture Works (2023)

A monitoring survey was conducted by Ecosupport during September 2022 but this noted damage to the line of the reptile fence around the receptor site and Slow Worms outside of the receptor (which had presumably escaped) with comments on this provided by EBC on the 08/12/2022. Following the damage, the fence was repaired and a new capture undertaken during summer 2023 to ensure any reptiles that had escaped the receptor were placed back into the area before construction works commenced fully (in particular the removal of the mound which appears to be acting as large hibernacula). The results of the updated capture works in 2023 are outlined below and in total 30 reptile capture visits were carried out between the 22nd June and the 10th August 2023 (***NB despite most of this being outside of the core period for conducting reptile surveys, due to the mild temperatures and changeable weather conditions, all visits were conducted during suitable whether***). Reptiles were captured by hand by an SQE from beneath artificial refugia, and placed into a suitable container and immediately moved into the receptor area (**Figs 4 and 5**).

Figure 4. View of the longer grassland areas in the reptile receptor (taken August, 2023).



Figure 5. View of hibernacula within the receptor area to increase the carrying capacity for reptiles (August 2023)



Results of 2nd Capture (2023)

Table 1. Results of the reptile capture works undertaken on site. AF = Adult Female, AM = Adult Male, SA = Subadult, J=Juvenile

Date	Temp (°C)	Time	Wind (Beaufort)	Cloud Cover (%)	Precipitation	Slow Worm
22/06/23	18	08:25	1	60	Dry	1AM
23/06/2023	15	08:26	1	20	Damp	-
26/06/23	18	10:20	2	40	Dry	1AM
28/06/23	20	07:40	0	100	Dry	-
29/06/23	18	08:35	1	80	Dry	3AF
30/06/23	18	09:27	2	100	Dry	1AM, 1AF
05/07/23	18	08:10	2	50	Dry	-
06/07/23	19	09:10	1	70	Dry	2AM, 1AF
10/07/23	14	09:40	0	0	Dry	-
13/07/23	12	09:35	0	80	Dry	1AM, 2AF
17/07/23	15	11:25	0	30	Dry	1 SA
18/07/23	17	10:45	1	40	Rain before survey	1AF, 1 SA
24/07/23	18	09:10	1	80	Dry	3AM, 2AF
25/07/23	16	08:15	1	50	Dry	-
26/07/23	19	08:45	1	40	Dry	1AF, 1 J
27/07/23	19	09:15	2	100	Dry	1SA
28/07/23	19	08:55	1	80	Dry	-
01/08/23	19	09:55	0	90	Dry	2AM
02/08/23	18	13:55	2	50%	Damp	-
03/08/23	19	08:45	1	90%	Dry	2AF, 2SA
04/08/23	17	10:45	0	90%	Dry	1AM, 2AF,
07/08/23	18	09:35	1	10%	Dry	-
08/08/23	17	11:15	1	100%	Dry	1J

09/08/23	18	10:30	0	70%	Dry	1AM, 2AF
10/08/23	19	10:40	1	15%	Dry	1 SA
11/08/23	20	09:10	1	100%	Dry	-
15/08/23	19	09:50	0	10%	Dry	-
16/08/23	19	08:55	0	5%	Dry	-
17/08/23	20	10:30	1	50%	Dry	-
Totals						39 (31 adults)

Limitations

There were not considered to be any limitations of the capture results with all areas of the site to be impacted upon accessible and the visits conducted at the appropriate time of year.

Works to Still Do

Destructive Search

Prior to the removal of the large mound area and the areas where reptiles were captured a supervised sensitive destructive search of the area where reptiles were will be carried out under the supervision of an Ecological Clerk of Works (ECoW) to ensure that no reptiles are harmed or killed. Work will be carried out when temperatures are above 12 °C, so that reptiles are more mobile. Firstly, the search will begin by hand, dismantling any piles of rubble, debris and structures that may be utilised by sheltering reptiles. Then the vegetation on site will be stripped with a digger using a toothed bucket whilst a suitably qualified ecologist searches each bucket for individuals and safely relocates any animals encountered.

Receptor Site Protection

During Construction

The reptile exclusion fencing will remain in place during construction to prevent reptiles from re-entering the construction site from the receptor area. ***This will be checked every 3 months for the duration of construction.*** The reptile receptor site must be protected and therefore the edge of the reptile receptor will have a line of Heras fencing placed in front of it. Signage will be placed on this fence with phrases such as:

Protected Reptile Habitat, Do Not Disturb

This level of protection will remain in place for the duration of the construction works and the ecologist will make quarterly visits to the site to check on the integrity of the reptile fence and ensure any repairs are made as necessary.

Additional recommendations for the protection of the receptor are as follows:

- Regular checks of the reptile exclusion fencing around the boundary of the site must be undertaken by the Site Manager.
- Any breakages to the fencing must be repaired immediately.
- Vegetation must not be allowed to grow over the fence as this can allow reptiles to return to the construction site.
- All site contractors should be made aware of the presence and importance of the reptile fence during their site induction.
- Any concerns should be raised with the Ecologist at the earliest opportunity to ensure compliance with wildlife legislation.

If any works are required within the receptor site, these must be undertaken under the full guidance and supervision of a suitably qualified Ecologist in a sensitive manner to ensure the protection of reptiles.

Site Operation

Upon completion of all development activities, the reptile exclusion fence can be sensitively removed, to allow the site to be recolonised by those reptiles within the receptor area.

To ensure the retained reptile receptor is afforded the appropriate level of protection once the site has been built, it should be listed within the Section 106 agreement (or similar such as a restrictive covenant) as protected reptile habitat.

Receptor Management

Management works will need to be undertaken to ensure the receptor area is maintained as a favourable habitat for reptiles. This will be achieved through adopting the following prescriptions:

- The aim will be to keep on top of scrub (Bramble) encroachment to prevent too much shading of basking areas. Bramble currently growing within the area can be cut back annually to aim to keep coverage below 10% by area (as some Bramble coverage is desirable to create shade and 'eco tones').
- All arisings must be removed and can be composted on site, away from buildings, fences, sheds and sources of ignition: This will provide additional habitat for reptiles.
- During each management visit, any rubbish and waste will be removed.

All management works as described above should be secured through an appropriate Section 106 agreement for the site that will legally oblige the developer to carry out the works.

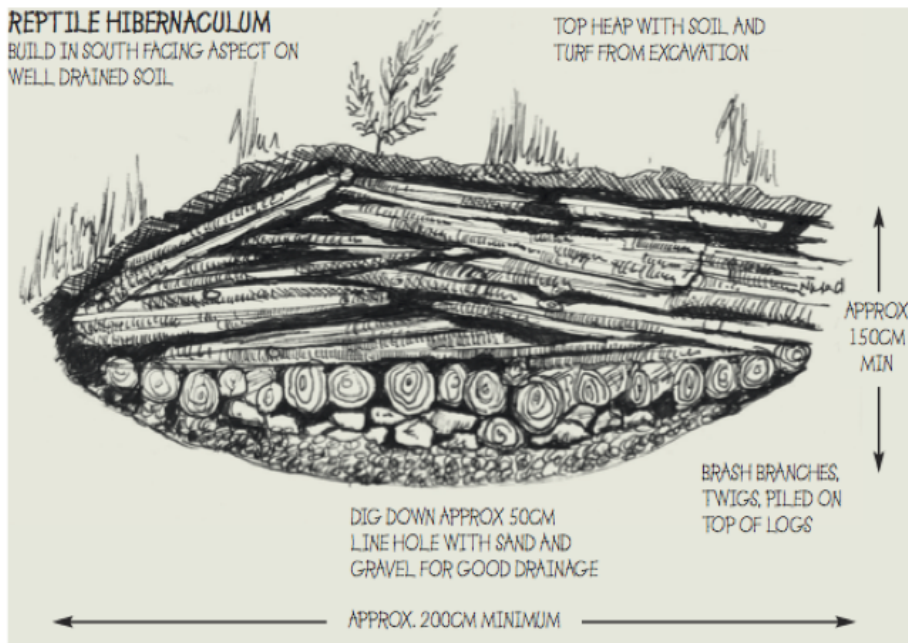
Receptor Monitoring

It will be necessary to monitor the receptor area (and the surrounding suitable habitat which they may disperse into) post translocation to ensure the efficacy of the capture operation and that the population have successfully established. Monitoring works will involve undertaking population surveys following best practice guidelines (e.g. Froglife 1999) for 2 years post completion of relocation (at years 1 and 3 so 2024 and 2026) with the results passed onto the LPA.

Hibernacula

To act as a biodiversity enhancement for reptiles, the site will include a hibernaculum in addition to the already present hibernaculum to provide these areas with additional suitable locations for reptiles and therefore increase the carrying capacity of the receptor area. The hibernacula will be created following the specification outlined within Reptile Habitat Management: Guidelines for Landowners (HART, 2009) (**Fig 6**).

Figure 6. Reptile hibernaculum design as provided in HART (2009).



Native Scrub Planting

Native scrub planting will take place within the receptor area prior to works commencing and will help provide a matrix of habitats and additional opportunities for a variety of species including reptiles. The scrub planting will not be dense to avoid areas becoming overly vegetated, but it will be allowed to establish in sparse patches.

The following native species will be used:

- Dogwood (*Cornus sanguinea*)
- Hazel (*Corylus avellana*)
- Spindle (*Euonymus europaeus*)
- Dog Rose (*Rosa canina*)
- Elder (*Sambucus nigra*)
- Guelder Rose (*Viburnum opulus*)

NB this will be planted up in autumn 2023 to ensure the area is suitable for reptiles and the hibernacula will be created before the end of October 2023

Kind regards,

Leah Cook

Assistant Project Ecologist

References

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