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A
Reptile Survey and Mitigation Report
from
Caldyne
for

Mr's Williams, Jacobs And Hooper

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1 Executive Summary

- Mr's Williams, Jacobs And Hooper intend to apply for planning permission to build a new house on land at the corner of Wallage Lane and Turner's Hill Road, RH10 4NB.
- In 2014, Calumma Ecological Services conducted a baseline ecology survey report which concluded that the site seemed likely to support reptiles.
- Verdant Ecology conducted reptile surveys during summer and autumn 2019.
- No reptiles were found.
- This is hard to explain because the habitats suggest they are almost certainly present.
- The survey equipment has been left in place so that surveys can continue in the spring.
- Common toads were found.
- The project should be sited towards the middle of the site where habitats are goats-rue or rhododendron, so as to avoid the semi-natural wooded areas around the edges.
- Nonetheless, habitat used by toads will be lost to the development. This impact needs to be offset with a landscaping/planting and establishment plan incorporating habitats suitable for toads, arranged in such a way as to maintain/increase habitat connectivity. You should think about wildlife ponds and/or natural waste water treatment.
- If reptiles are subsequently found, a translocation effort must be conducted. First, you will need to assign part(s) of the site for reptiles and enhance the habitat. The overgrown heathy area to the SW of the clearing would be best. Then erect a consistently-maintained, reptile-proof fence for the duration of site preparation and all construction-related activities so as to prevent reptiles (and toads) moving back onto the areas of the site being disturbed, under guidance from a competent ecologist. Then commission competent ecologists to translocate reptiles from the development site to the receptor site and conduct gradual, wildlife 'sensitive' vegetation removal. Note that if vegetation suitable for nesting birds is also affected this may be best scheduled for removal during the winter before the reptile translocation – assuming this can be done without negatively affecting the reptiles.
- Measures should also be taken to avoid indirect impacts on reptiles, toads and other wildlife, namely pollution prevention.
- If the recommendations of this report are complied with it is reasonable to believe that harming individual reptiles can be avoided, habitat loss will be relatively insignificant and habitat enhancements can be delivered so as to maintain/enhance their conservation status.
- Protection of reptiles should therefore not be a reason for refusal of planning permission. An appropriate condition of that permission would be compliance with the recommendations in this report.

2 Introduction

2.1 Background to Activity/development

The site is Caldyne Park, Turners Hill Road, West Sussex, RH10 4NB and is at OS grid reference TQ322366. The site consists of an area of grass and ruderal weeds set in woodland.

It is understood that there is plan to build a house in this area of grass/weeds and in a part of the woodland that is dominated by small trees and Rhododendron. In May 2019, Verdant Ecology was commissioned to conduct an investigation into any use of the site by reptiles and to provide recommendations.

3 Survey

3.1 Pre-existing Information on Reptiles at the Survey Site

The ecological record search associated with the baseline habitat survey contained records of grass snake within 1km.

3.2 Site/Habitat Description

The open glade in the approximate middle of the ownership site seemed suitable for 'common' reptiles. It is an area of grass, ruderal weeds and tree saplings. The dominant plant over most of the glade is goats-rue. The W portion is wetter and supports common rush and pendulous sedge. There is an area of heath overgrown by immature silver birch trees and rhododendron on the S side of the glade. The glade is surrounded by deciduous woodland.

3.3 Objectives of the Survey

To find evidence of the presence of reptiles. If present, to estimate the population size.

3.4 Method

On the 29th May, 35 artificial refugia were laid out in areas of habitat considered suitable for reptiles, as shown in Appendix 1. These refugia were made of corrugated tin, roofing felt, old car foot-mats and carpet off-cuts in roughly equal proportions. Each refuge was approximately 60cm x 60cm in size. Suitable habitat is estimated as being 0.7ha. This achieves a density of approximately 40 refugia/ha.

The introduced refugia were left for 10 days before the first survey visit so as to allow time for reptiles to discover them. Subsequently, the site was revisited during June - September when weather conditions were suitable. As artificial refugia were approached, the upper surface was viewed for resting reptiles. The refugia were then lifted and the underneath inspected for reptiles or sloughed skins.

On each visit, a visual survey of the site was conducted – focusing on likely spots for basking reptiles.

3.5 Results

No reptiles were found. Common toads were found.

4 Interpretation and Evaluation

Work to date suggests no reptiles. This is surprising given how suitable the habitats appear. Our best explanation is that there are plenty of 'natural' refugia in the form of woodpiles, stumps etc.

Three of the visits were in July and August, which is considered an acceptable but suboptimal (often too warm) survey period (but conditions were ideal during surveys). Given that we exceeded the much minimum density of refugia (5-10/ha) than recommended by Froglife 1999, and the minimum number (30) recommended by Sewell 2013 this is not considered significant.

Survey effort is therefore considered adequate and appropriate.

However, a total absence of reptiles on this site seems highly unlikely. Consequently, the refugia have been left in place so that surveys can be refreshed.

5 Impact Assessment

5.1 Potential Impacts

Potential impacts considered are;

- Physical harm to reptiles during work.
- Direct impacts on habitat.
- Indirect impacts such as pollution.
- Habitat fragmentation.
- Post-development impacts.

5.2 Predicted Impacts without Mitigation

On common toads (policy protected against habitat loss). Currently none on reptiles (legally protected against killing/injury and significant habitat loss).

Demolition and construction activities (e.g. site clearance, storage of materials and moving of arisings) have the potential to conflict with policy by negatively affecting toad conservation/population status.

There is potential for negative indirect impacts on reptiles nearby (e.g. toxic materials in the air and/or in run-off water).

If suitable habitat fringing the site is lost, an increase in habitat fragmentation is likely.

6 Recommendations/Mitigation

- Promise to devise a site clearance schedule/method statement that avoids/minimises/offsets impacts to toads (and is integrated with the needs of any other relevant ecological features).
- Promise to devise and adhere to a pollution prevention plan.
- If reptiles are subsequently found, stop work and seek advice.

7 Summary

Despite habitat seeming ideal, sufficient effort has been exerted for probable absence of reptiles to be assumed.

Consequently, protection of reptiles need not be a reason for refusal of planning permission.

Toads are present. Their conservation status is of concern to decision-makers. You should demonstrate that your proposals will benefit toads and other wildlife.

If reptiles are found, seek advice.

8 Appendices



8.1 Appendix 1. Map of Site and Refugia Locations

8.2 Appendix 2. Results of Reptile Survey.

visit #	Date	Survey start time	Temp (°C)	Humidity (%)	Cloud cover (octas)	Windspeed (Beaufort scale)	Descriptive text	Found	Surveyor
0	29/5	-	-	-	-	-	Refugia laid out.	-	Jonathan
1	9/6	16.00	16.7	59	2	1 - 2	Dry. Weak sun.	2xsubad toad. 1xadult frog.	Jonathan
2	1/7	19.45	17	69	4	0 - 1	Dry. Sunny.	4xsubad toad	Jonathan
3	7/7	08.45	14.5	89	6	1 - 2	Wet ground. Hazy sunshine.	2xsubad toad	Jonathan
4	15/8	20.00	17.4	69	0	2-3	Dry. Sunny.	1xadult toad	Jonathan
5	1/9	11.15	17.1	72	1	2-3	Dry. Sunny.	-	Jonathan
6	8/9	18:30	17.2	70	1	1-2	Dry. Clear	-	Jonathan
7	16/9	07.00	15	98	1	1	Damp ground (dew). Sunny.	2xsubad toad	Jonathan

Figures for temperature and humidity taken from ETI Thermadata logger on site at time of survey at 10cm above ground in the shade.

8.3 Appendix 3. Protective Legislation and Policy Pertaining to Reptiles

The main items of legislation protecting reptiles in England are;

- The Conservation of Habitats and Species Regulations 2010.
- The Wildlife and Countryside Act 1981 (as amended).

Smooth snakes, sand lizards and their habitats have legal protection.

More 'common' reptiles (slow-worms, adders, grass snakes and common or viviparous lizards) are legally protected from killing or injury and their habitats are protected by policy. The Countryside and Rights of Way Act 2000 and The Natural Environment and Rural Communities Act 2006 expect those in a position of influence to consider the impacts of their actions on biodiversity, especially Biodiversity Action Plan features and to seek opportunities to benefit them.

Reptiles are a material consideration in planning decisions under the National Planning Policy Framework, meaning that local planning authorities must consider the potential impacts of development on reptiles before granting permission.

Reptiles may also be indirectly protected by virtue of their association with 'Important' hedgerows (Hedgerow Regulations 1997), trees (also a material consideration), veteran trees and habitats that serve to connect (both specifically mentioned in PPS9) or some special habitats that are protected in their own right.

8.3.1 What This Means for You

Planning permission should only be given if the status of the affected protected species can be maintained or enhanced and if measures are taken to avoid harming individuals. Recent changes in legislation and policy are increasing the emphasis on expecting improvements or enhancements.

The onus is on the developer to provide enough information to enable the planning authority to make an informed decision as to whether the development will have negative impacts on the local population and if so, what can be done to conserve reptiles.

8.4 Appendix 5. References

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