2079

TACP

Rhoose Point, Vale of Glamorgan

Reptile Survey Report – September 2012

TAYLOR WIMPEY

RHOOSE POINT, VALE OF GLAMORGAN
REPTILE SURVEY REPORT

SEPTEMBER 2012

TACP
10 PARK GROVE
CARDIFF
CF10 3BN

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RHOOSE POINT, VALE OF GLAMORGAN
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C O N T E N T S

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1.0 Introduction

This report was produced following seven visits to the site within the residential development of Rhoose Point from the 13th to the 21st of September 2012. These visits were carried out to survey the site to establish the presence/absence of reptile species as recommended by the Vale of Glamorgan Council, August 2012.

2.0 Background

The site is located on the South Wales coast within residential development at Rhoose Point in the Vale of Glamorgan and consists of a single plot covering approximately 2.7ha of ephemeral/short perennial and grassland vegetation with areas of bare ground. Residential developments dominate to the immediate south, east and west with open fields and Cardiff International Airport dominating to the north. Beyond these developments open countryside and agricultural areas dominate with some areas of broad-leaved woodland.

3.0 Purpose

The aim of this survey is to provide information on the presence or absence of reptile species within the site to inform whether a translocation exercise is required prior to any work commencing in these areas. This will ensure that the law is not contravened through the killing or injuring of reptile species during any construction works.

4.0 Reptile Legislation and Ecology

All native reptile species are protected against killing, injuring and sale under U.K. legislation through their inclusion in Appendix III of the Bern Convention 1979, Schedule 5 of the Wildlife and Countryside Act (WCA) 1981 (as amended) and the Countryside and Rights of Way (CROW) Act 2000. Some reptiles have further protection. In practical terms this means that the developer of a site is required to undertake all reasonable measures to ensure that the killing or injuring of these reptiles is prevented during all stages of development work to the site.

A total of six reptile species are native to the British Isles, these are the Adder (*Vipera berus*), Grass Snake (Natrix natrix), Common Lizard (*Lacerta vivipara*), Slow-worm (*Anguis fragilis*), Smooth Snake (*Coronella austriaca*) and Sand Lizard (*Lacerta agilis*). The two reptile species that could potentially occur on this site are the Slow-worm and the Common Lizard.

The Slow-worm and the Common Lizard are the most widespread species and occupy a variety of habitats across Britain. Although each individual species have particular habitat requirements, all reptiles occupy habitats that contain combinations of certain key features. The basic requirements of the habitat are areas of vegetative cover for refuge, open areas in which the reptiles can bask and foraging areas, which contain relatively high

concentrations of prey species, these areas will generally encompass a range of basking sites and refuges. Suitable areas in which the reptiles can hibernate are also required. This generally relates to a variety of semi-natural habitats. Slow-worms are the most likely reptile to be found in more urban environments.

Reptiles are active during spring, summer and early autumn as they hibernate during the winter. They generally emerge from hibernation in March and re-enter hibernation during October (dependent on weather conditions). Adult Common Lizards are approximately 15cm in length and are mostly brown in colour with some variation in patterning. Juveniles are generally 4cm at birth and almost black in colour. Slow-worms are legless lizards with adult Slow-worms growing up to 45cm in length but are more typically 30-40cm and are generally pale-grey, through copper to brown in colour. Juvenile Slow-worms can be as small as 6cm in length with a gold/ pale gold back and a black underside.

Because reptiles are cold blooded they need sufficiently high temperatures to be active and will bask to raise their body temperatures to a working level. It is this requirement to bask that allows the success of the artificial refugia methodology outlined in section 5.0.

5.0 Methodology

Potential reptile habitat in the form of potential refugia, vegetation cover and basking sites was identified at the site in the Rhoose Point Ecological Statement August 2012. All suitable areas of habitat were then surveyed using artificial refugia. These surveys followed the guidance provided within the Reptile Habitat Management Handbook (2010).

The artificial refugia used were in the form of 1m by 0.5m tiles of roofing felt and were placed at a density of approximately ten refugia per hectare across the site with a total of 30 refugia used (refer to Figure 1.0). The refugia were placed flat on the ground close to or within areas of likely reptile habitat (dense vegetation, long grass) where they would be largely un-shaded throughout the day.

The artificial refugia were placed on the 6th September 2012 and left in-situ for one week to "bed in". The artificial refugia were then checked for basking reptiles on seven separate occasions between the 13th and 21st September 2012 with all thirty refugia checked on each occasion. The timing of visits was carefully planned as reptiles can become very difficult to locate during periods of very hot/dry weather and during cold spells. Also surveying was avoided during the hottest parts of the day during periods of sunny weather as reptiles will not be using the refugia as much as they will have already attained high enough body temperatures to commence foraging.

The weather conditions on each survey were as follows:

13th September – Sunny with patchy cloud, light to moderate westerly wind, temperature 18°C
14th September – Sunny with patchy cloud, moderate to brisk westerly wind, temperature 20°C

17th September – Sunny with moderate to strong south westerly breeze, temperature 17°C but feeling cooler, spitting rain toward end of survey with rain shortly after
18th September – Sunny with a light to moderate south westerly breeze, temperature 12°C
19th September – Sunny with approx. 50% cloud cover, moderate westerly wind, temperature 16°C.
20th September – Sunny with some scattered cloud cover, moderate south westerly, temperature 13°C
21st September – Sunny becoming cloudy during survey, spotting rain to end with notable downpour at end of survey, light to moderate westerly, temperature 16°C

6.0 Results

The results of this survey are contained within Table 1.0. It can be seen that reptiles were found during the six of the seven visits with adult Slow-worms recorded on three separate occasions and juvenile Slow-worms also recorded on three separate occasions. No other reptile species were found during the surveys.

Table 1.0 Record of reptile species found on different survey dates in the three survey areas.

Date of Visit	Survey Time	Results
13/09/2012	14:00	One juvenile Slow-worm under the tile 2, Field Vole under tile 18
14/09/2012	14:30	One juvenile Slow-worm under the tile 2
17/09/2012	15:30	One adult male Slow-worm under tile 8, vole nests under tiles 25 and 26
18/09/2012	08:30	One adult male Slow-worm under tile 8, vole nests under tiles 25 and 26
19/09/2012	15:45	No reptiles found under any tiles, Field Vole runs and nests under several of the tiles.
20/09/2012	08:30	One adult male Slow-worm under tile 14, several vole nests and runs recorded
21/09/2012	15:00	One juvenile Slow-worm under tile 2, several vole nests and runs recorded

It was noted that Field Voles (*Microtus agrestis*) were present using the artificial refugia as cover. This is an incidental observation and is beyond the scope of this report given that the survey focused on the presence or absence of reptiles.

7.0 Assessment

It can be concluded from the results that Slow-worms are present throughout the study site with the neutral grassland to the western part of the site being the most utilised area. It is also clear from the results that the population has a reasonably healthy age structure and that breeding takes place within the study site and has taken place during 2012.

Although a definite assessment of population numbers would need far greater levels of survey work it appears evident that the population levels present are not high (populations have been reported to reach high levels of 600-2000 individuals/hectare in other areas) but are sufficient to sustain a small but healthy breeding population.

It is considered that it is likely that other reptile species are present on site despite none being recorded during the survey.

8.0 Recommendations

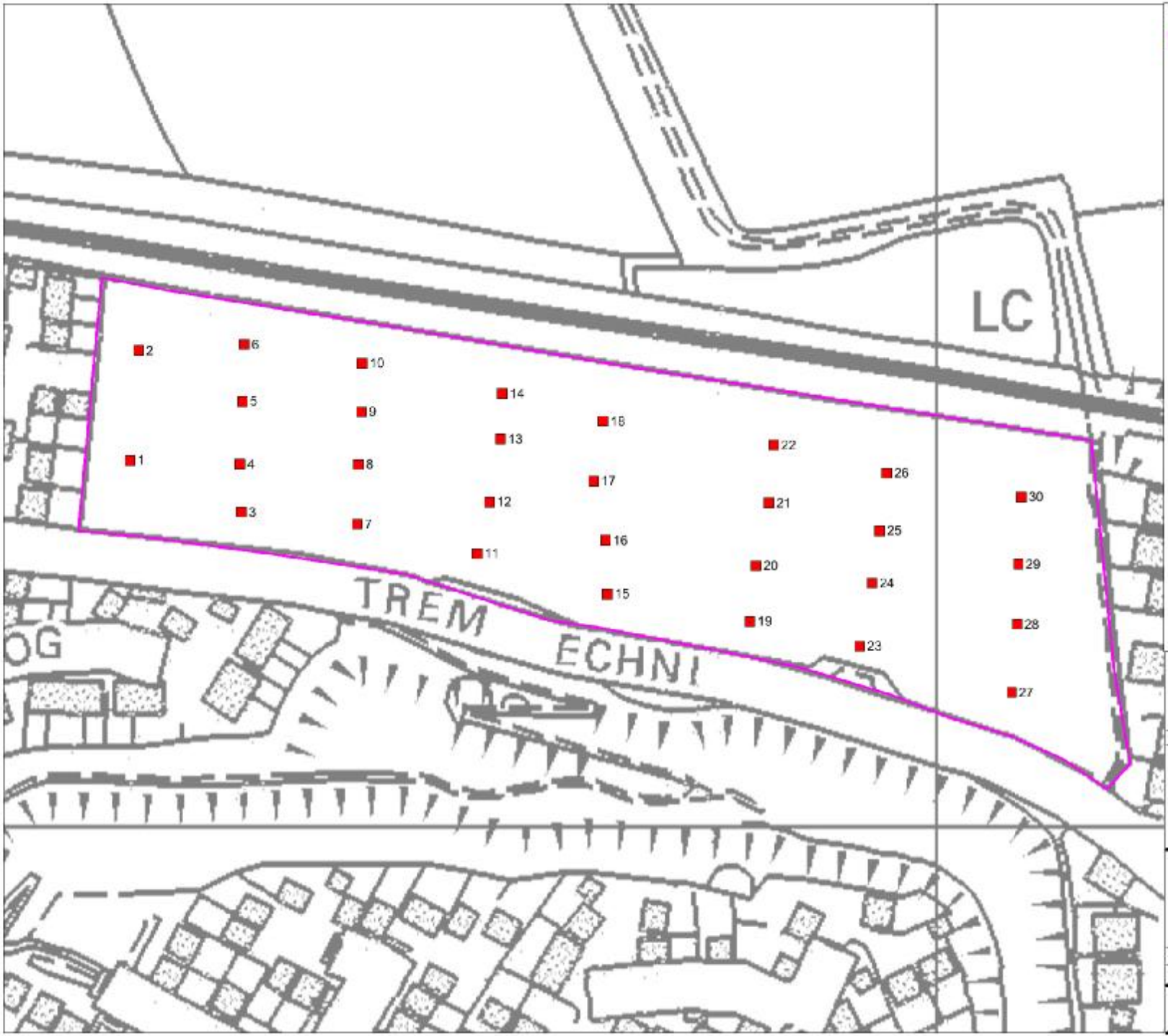
- Having confirmed the presence of reptiles within the study area it is recommended that a programme of trapping and translocation is undertaken within the study site.
- It is recommended that this programme of trapping and translocation is undertaken during the period from late April to late June.
- It is recommended that this programme should follow the methodology outlined in "Evaluating local mitigation/translocation programmes: Maintaining best practice and lawful standards. HGBI advisory notes for amphibian and reptile groups" published by the Herpetofauna Groups of Britain and Ireland.
- This methodology recommends that trapping using artificial refugia as carried out during the population assessment study is the best method.
- Minimum capture efforts vary dependent on the population present within the study area. Given the apparent relatively low population within the study site it is recommended that a refugia density of 50/hectare is used and these are checked and reptiles captured on sixty suitable days. The period between late April and late June is the most suitable time to undertake this operation as this is the period when reptiles are most likely to utilise the refugia. The period from late August to the end of September is also suitable but is less desirable as that years young will also be present increasing the capture effort needed.
- If this level of capture effort is impractical due to proposed development timings or costs then it is possible to remove the reptile population by means of a destructive search of the proposed development area. It should be emphasised that this is recommended as a last resort and requires the presence during operations of a recognised specialist. Using this methodology it is possible to clear between 0.1 and 1.0 hectares per day dependent on a number of factors such as machinery used and habitat present on site.
- If the refugia methodology is to be used it is recommended that approximately 150 refugia be placed throughout the development area during early April in preparation for the start of capturing in late April.
- If a destructive search is to be used this should be agreed with relevant authorities i.e. Vale of Glamorgan Council and the Countryside Council for Wales at the earliest possible date. This will ensure the availability of necessary specialists to oversee the operations.
- A suitable translocation site will need to be identified and a survey of the receptor site will be required to establish firstly that it contains suitable habitat for Slow-worms and other reptiles and secondly that it

is not likely to be lost to future developments necessitating the recapturing and translocating of the reptiles in the future. It is however recommended that reptiles are not translocated to an area that already contains a population of this species. Bearing this in mind a survey of their presence in the receptor site may be required. If the area is suitable but already contains a population of reptiles then an exception to this can be made if the area to which the reptiles are translocated to is to be enhanced making the habitat more suitable for this species. A second back up area for translocation of reptiles should be identified however in case larger than expected numbers are found during capturing operations. This will be done in liaison with VoG and local wildlife groups where appropriate.

- It is imperative that a suitable temporary fence is erected to prevent any reptiles left within the nature reserve end of the site returning to the proposed housing development area before the vegetation has been cleared.

9.0 Figures

Figure 1.0 Reptile Survey Refugia Location



Legend

Site Boundary

Tile Location

N

NOTES

TACP
10 Park Grove, Cardiff CF10 3BN
Tel. 029 2022 9900
admin@tacp.co.uk

Rhoose Point Reptile Survey September 2012

DRAWN: GS CHECKED: JW OFFICE: CARDIFF

NOT TO SCALE DATE: AUGUST 2012

FIGURE / DRAWING NO.	REV
1.0	--