

DAVID CLEMENTS ECOLOGY LTD

ST TYDFIL HOSPITAL, MERTHYR
REPTILE MITIGATION STRATEGY

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1.0 INTRODUCTION

- 1.1 This reptile mitigation strategy has been prepared by David Clements Ecology Ltd (DCE) on the instructions of Huw Morgan from Merthyr Developments Ltd. It refers to an area of land which was formally utilised as a hospital in Merthyr Tydfil, South Wales.
- 1.2 The site measures approximately 2 hectares and is located to the centre of the town of Merthyr Tydfil at the Ordnance Survey grid reference SO 05168 06441 at 192m AOD. The site supports mostly bare ground habitats comprising areas of rubble and debris. Small areas of potentially suitable reptile habitat are present within the site, with scrub situated in the south-west and some limited areas of grassland in the south and east of the site. Several buildings are situated in the south and west of the site.
- 1.3 Features within the wider landscape include residential housing to the south and west, a formal recreational green space is situated to the west of the site, and a wooded corridor lies to the east.
- 1.4 Development proposals comprise the construction of residential dwellings across the majority of the site with associated car parking and road infrastructure. An ecological mitigation area is planned in the east of the site, with habitats in this area, particularly the grassland, being retained and enhanced through planting.

Statutory position and background information

- 1.5 Four native reptile species occur in South Wales, comprising common lizard, slow-worm, adder and grass snake. These four species are all afforded so-called ‘partial protection’ under the amended Wildlife & Countryside Act 1981, which prohibits the deliberate killing or injury of individuals. However, there is no direct protection extended to the habitats which support these species. All four common reptiles are listed as ‘Priority Species’ in the UK BAP and its Welsh equivalent.
- 1.6 The site was subject to a preliminary ecological assessment by the Local Authority Ecologist (2019), and several areas were noted to support potential suitability for reptiles. As the areas of suitable habitat are relatively small, reptile refugia surveys were not conducted, and an ‘assumed presence’ approach is being followed.
- 1.7 The aim of this document is to provide guidance for the sympathetic treatment of suitable reptile habitat within the site and provide sensitive working methodologies to ensure that the risk of accidental injury / killing of reptiles is minimised. Subsequent mitigation strategies are detailed below.

2.0 REPTILE CLEARANCE AND MITIGATION STRATEGY

- 2.1 A draft reptile clearance and mitigation strategy is set out below and in Plan 1. The principles of this should be agreed in consultation with the Merthyr County Ecologist once the construction programme has been confirmed.
- 2.2 Due to the suspected low number of reptiles present within the site, it is not seen as feasible or necessary to carry out a Fence, Trap & Clear (FTC) operation. Any reptiles discovered during ‘species deterrence’ activities, within the grassland areas in the south of the site, will be translocated to the designated receptor area in the east of the site (See Plan 1 & below). Areas with bramble scrub and rubble piles, which need to be removed, will be cleared by means of localised ‘destructive searching’ (i.e. supervised dismantling and clearance). Plan 1 highlights the areas to be cleared.
- 2.3 Site clearance must take place during the period when reptiles are active (between April and September), before they go into hibernation over the winter period. Owing to other species constraints, in particular nesting birds, and given the area of dense scrub habitat in the south-west of the site being suitable to support nesting birds, it is recommended these works be carried out between September – October/November inclusive.

Receptor Area

- 2.4 Any arising reptiles found during the supervised clearance operations will be moved to retained habitat: the portion of grassland present in the east of the site (See Plan 1), which will serve as the receptor area. This area will form part of an ecological enhancement area.
- 2.5 The numbers of reptiles anticipated is low and therefore it is not presently considered necessary to carry out any enhancement measures in the grassland receptor area. However current plans look to expand and enhance this area for use by reptiles through planting and the construction of features such as hibernacula.

Initial Vegetation Clearance (‘Species Deterrence’)

- 2.6 This operation will comprise the sequential removal of vegetation in the grassland and scrub areas (See Plan 1) in order to make the site superficially unattractive to reptiles. This will be achieved by means of the staged cutting of the vegetation. It is considered that this operation cannot take place during the bird-nesting season (i.e. March – September).
- 2.7 Two cuts will be carried out, 48 hours apart. The ‘1st cut’ will be carried out using hand operated tools, such as strimmers for bramble scrub and grassland, and hand-chain saws for small trees and other forms of woody scrub, to a length of 200mm, with the cut material being raked and removed from the site immediately. It is recommended that the vegetation clearance begins in the centre of each portion of grassland and progresses outward, in a circular motion, towards the boundaries; the vegetation clearance should be supervised by an ecologist, so that any reptiles encountered may be collected and removed from the affected areas to the receptor area, an area of retained grassland in the east of the site.

- 2.8 The '2nd cut' would then be undertaken 48 hours later using hand-strimmers and chainsaws. The vegetation would be cut to approximately 'ground level', ie a height of about 50mm, and any significant amount of vegetation collected and removed from the site.
- 2.9 Any reptiles which are encountered will be physically removed to the receptor area. All arisings will be collected and removed from the site immediately (ie no long-term storage piles will be created, as these may attract sheltering reptiles).
- 2.10 Any reptiles which need to be physically removed will be carefully collected and removed, using gloved hands, to the designated receptor area. The species most likely to occur is slow-worm, which does not pose a hazard to humans. In the event that any snakes are encountered, however, contractors will not attempt to handle these as they could potentially include the venomous adder. Instead, an appropriately experienced reptile handler will be contacted immediately and will attend the site with appropriate snake-handling equipment.

Clearance of Refugia ('Destructive Searching')

- 2.11 The predominant substrate of the site is compacted rubble; however, smaller rubble piles, with a more slack and open structure, are present within the site (See Plan 1) and are considered to have particularly high reptile suitability. Following the vegetation clearance, any naturally occurring or pre-existing refugia within the affected areas will be carefully lifted and cleared away by hand, if possible, under the supervision of the supervising ecologist, with any reptiles which are present being removed to the receptor area. The refugia will then immediately be removed from the site.
- 2.12 Rubble piles, which are too large for hand removal, will be carefully lifted and removed from the site by a small excavator. Any reptiles encountered will be rescued and released to a receptor area as appropriate.
- 2.13 Any above ground scrub vegetation will be cleared using hand tools such as chainsaw, brush-cutter and strimmer etc, with the arisings being collected and removed from the site immediately. This work will take place outside of the bird-nesting season (ie not between March to August). Tree and shrub roots will then be extracted using a small excavator under the supervision of an appropriately experienced reptile handler who will stop the works, and rescue and remove any reptiles which are found during the operation. The clearance operation will be completed before the start of the reptile hibernation period (ie before the start of November).
- 2.14 Any areas where the substrate is deemed by the supervising ecologist to be potentially suitable to support slow-worm will be subject to destructive searching by turning over of the topsoil, such as the grassland areas in the south of the site (See Plan 1). The top 250mm of soil will be carefully turned over using a wide-tined toothed bucket attached to a suitable excavator, such as a 3CX or mini-digger, under the close supervision of the supervising ecologist who will stop works and rescue and remove any reptiles which are found during the operation.

- 2.15 The vegetation clearance will probably involve the use of a small vehicle (eg pick-up or Land Rover with trailer). Vehicle movements within the site will be kept to the minimum necessary, however, and will be confined to areas which have previously been inspected by an appropriately qualified person to ensure that the probability of reptile presence is minimal.

Clearance of Trees

- 2.16 In the event that any trees need to be removed during the demolition stage, for example for access, these will be treated as follows:
1. The above-ground trunk and canopy will be removed to a height of approximately 100cm above ground-level.
 2. The root plate will be extracted using an excavator (3CX or similar) under the supervision of the SE, who will rescue and remove any reptiles which may be present and take these to the receptor area.
- 2.17 Canopy removal will occur outside of the bird-nesting season (ie not between March to August inclusive) wherever possible or will otherwise only be undertaken following a check by the supervising ecologist or other suitably qualified person to ensure that no nesting birds are present.
- 2.18 Trees with bat potential must be subject to checks in search of any bats present prior to the commencement of any tree works. This is a statutory requirement. Please refer to the bat survey report for full advice regarding bats and trees (DCE 2020).

Post-clearance

- 2.19 Once the reptile clearance has been completed, site clearance and construction operations may start immediately and should commence within five days. If there is a delay of any greater than five days between the cessation of clearance work and the start of construction works, then the site must be maintained in a reptile-free condition during the intervening period.
- 2.20 This may be achieved by the continued removal of all of the vegetation from the site and maintaining it in a bare condition. Soil compaction after stripping is advised, with subsequent vegetation suppression by means of regular cutting or treatment with a suitable herbicide (eg Glyphosate Biactive). Herbicide should be applied in accordance with manufacturer's advice in order to maintain bare ground with negligible weed cover.

Holding & transfer of reptiles and amphibians

- 2.21 Collected reptiles will be removed to suitable containers (eg steep-sided buckets with lids) with the different species being kept separate. Any adders will initially be collected to a snake-bin using tongs, snake-stick and/or gloved hands by a suitably experienced reptile handler. Both adder and grass snake will be transferred to large hessian holding sacks with a drawstring rope at the top.
- 2.22 All reptiles will be transferred to the receptor area immediately or at least within 1 hour of collection, where they will be released under suitable cover in an undisturbed area.

Reptiles in temporary holding containers will be placed in a safe location under shade and will be monitored to ensure that they do not become either too hot or too cold.

Constraints to Clearance Programme

- 2.23 Mitigation operations for reptiles cannot be carried out during the hibernation period, which runs approximately from (October) November to February (March), when there would be a significant risk of encountering hibernating or torpid individuals in the soil which would be unable to rouse themselves and escape from the area of the works. The works are therefore to be carried out outside of the hibernating period, ie between (March) April to September (October) inclusive.
- 2.24 The exact dates of the hibernation period depend on individual weather and seasonal conditions and can vary from year to year, with the beginning and end dates extending variably into October and March respectively. The viable period for clearance in each individual case should be determined at the time by an appropriately qualified person. The occurrence of overnight frosts and/or daytime temperatures of $<5^{\circ}\text{C}$, for periods of longer than 3 consecutive days, are generally considered to be unsuitable conditions for reptile clearance operations and should accordingly be suspended until the conditions ameliorate.
- 2.25 Clearance of any standing trees and scrub, including any dense clumps of bramble and tall herb vegetation, should avoid the bird-nesting season which runs approximately from March to August inclusive, depending upon local seasonal variation. If vegetation clearance works must necessarily occur during the bird-nesting season, the clearance works must be preceded by a check for any bird-nesting activity. Where any such activity is found, works must be suspended until the current nesting cycle has been completed. This is a statutory requirement.

Oversight

- 2.26 The services of an appropriately qualified person will be available to assist as required throughout the clearance operations and will be available to attend the site at short notice on an 'on-call' basis as required.

Record Keeping

- 2.27 A record of any reptiles and amphibians which are found during the clearance will be maintained by the site manager and will be tendered to the local planning authority ecologist at the end of the clearance operation. Where possible, additional details should include the species, numbers, age and sex of the animals encountered, details of any injuries, and their release site etc.

3.0 REFERENCES

DCE (2020) St Tydfils Hospital, Merthyr Tydfil. Bat Survey Report.

English Nature (EN 2004) *Reptiles: Guidelines for Developers*. English Nature. Peterborough.

Froglife (1999) *Reptile Survey: An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation*. Froglife Advice Sheet No. 10. Froglife, Halesworth.

Gent, T & Gibson, S (Eds) (1998) *Herpetofauna Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

St Tydfil's Hospital, Merthyr Tydfil

Plan 1 - Reptile Habitat Clearance Strategy

DCE 1088 NTS October 2020



Key

- Grassland w. Reptile Potential
- Scrub w. Reptile Potential
- Receptor Area
- Rubble / Debris Pile
- Site Boundary

