

## Land to Rear of Cherry Tree Way, Trelewis

### Preliminary Ecological Appraisal & Bat Survey Report

*A report by MPS Ecology*

*September 2020*



*Land to Rear of Cherry Tree Way, TRELEWIS*

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|--------------|------------------------------------------------------------|
| Project:     | Land to Rear of Cherry Tree Way                            |
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| Prepared By: | Kate Davies                                                |
| Checked By:  | Mike Shewring CEcol MCIEEM                                 |

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## 1. Introduction

MPS Ecology were commissioned by Huw Williams (the client) to undertake a Preliminary Ecological Appraisal (PEA) and subsequent bat surveys of a parcel of land located to the east of Cherry Tree Way, Trelewis, Merthyr Tydfil County Borough. The site is centred at approximate grid reference ST 10428 97538 (Figure 1). The site is immediately bordered by a stone wall and footpath to the south, single track road to the east and further residential dwellings to the west with a remnant boundary hedge bank and scattered trees. The Ystrad Mynach to Cwm Bargoed railway corridor is located approximately 35 m to the east of the site. It is our understanding that the site is proposed for a bungalow.



*Figure 1 Site Location (Google Maps, 2020)*

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## 2. Methodology

In order to establish the relevant baseline ecological conditions onsite, and in the adjoining habitats, a combination of desk-based consultation and ecological site survey were undertaken in May 2020 by a suitably experienced ecologist.

### 2.1 Desk Study

A review of the Multi-Agency Geographic Information for the Countryside (MAGIC) database was carried out in July 2020. This was used to search for statutory sites located within the site's locality and to assess the potential for any impacts that the proposed development might have on such designations and any protected species. A data request was not submitted to the South East Wales Biological Records Centre (SEWBRc) to inform this appraisal.

The following designated sites were included in the data search:

- RAMSAR
- Special Marine Conservation Areas
- Special Areas of Conservation concern (SACs)
- Special Protected Areas (SPAs)
- Sites of Special Scientific Interest (SSSIs)
- National Nature Reserves (NNR)

### 2.2 Field Survey

The site walkover survey was undertaken on 27<sup>th</sup> May 2020, in accordance with The Handbook for Phase I Habitat Survey (JNCC, 2010) and guidelines on Preliminary Ecological Appraisal (IEEM 2012). Field survey work was completed by Kate Davies<sup>1</sup>.

Habitats within the site and (where possible) immediately adjacent were classified, mapped and described in terms of their structure and broad floristic composition. Where they were encountered, invasive non-native plant species listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended in 2010) were recorded.

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<sup>1</sup> NRW bat survey license no: S087312/1

The habitats within the site were assessed for their potential to support legally protected or otherwise notable flora and fauna. Where species are not specifically mentioned, this indicates that no habitat of potential value for these species was identified during the survey.

The survey also incorporated a subjective, ground-based assessment of the potential of the garage due to be removed and larger boundary trees to support roosting bats. This assessment was aided by the use of close-focus binoculars and a high powered torch (1 million candlepower) where required to check for potential roost features. Where buildings and/or trees were assessed for bat potential, each was categorised according to the following criteria (Bat Conservation Trust 2016):

- Known or confirmed roost;
- High – A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a regular basis;
- Moderate – A structure or tree with one or more potential roost sites that could be used by bats but are unlikely to support a roost of high conservation status;
- Low – Trees of sufficient size and age to support potential roost features (PRFs) but with none seen the ground or features seen with only very limited roosting potential. Or, a structure with one or more potential roost sites that could be used by individual bats opportunistically;
- Negligible – Trees or structures with negligible habitat features, unlikely to be used by roosting bats.

Where possible, habitats were cross-referenced to any relevant priority habitats such as those described within the Environment Wales Act (2016) or local habitats adopted by the local Biodiversity Action Plan.

Additionally, any species listed as a pernicious weed under Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (as amended) – for example Japanese Knotweed *Fallopia japonica* and Himalayan Balsam *Impatiens glandulifera* - were also noted and mapped during the field survey.

### *Bat Surveys*

During the external assessment of the garage, the structure was identified to provide low potential to support bat roosting opportunities. As such further survey effort was recommended. An internal inspection was carried out on the 30<sup>th</sup> June, following which a static bat detector (Anabat Express) was installed within the building on continuous record for five nights.

During the ground level tree assessment a cluster of ash trees along the western boundary (TN 1) was identified to support moderate potential roosting opportunities for bats. Further emergence surveys

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were carried out on the 20<sup>th</sup> August and 3<sup>rd</sup> September. Emergence surveys started approximately 15 mins prior sunset and finished at 90 mins after sunset. All surveys were carried out in suitable weather conditions followed BCT (2016) best practice guidance as far as practicable.

## 3. Results

### 3.1 Desk Study

#### 3.1.1 Designated Sites

No internationally or nationally designated sites were located within the site boundary or 1 km search buffer.

### 3.2 Field Survey

#### 3.2.1 Habitats

Habitat descriptions are provided below along with a habitat map (Figure 6). The site broadly consists of recently cleared bare ground, with some areas of regenerating vegetation consisting of tall ruderals and semi-improved grasslands. The southern boundary of the site supports a stone wall, with the western boundary backing onto further residential gardens with a number of standard trees along a remnant boundary hedge bank. The site also supports a garage.

#### *Buildings*

The site supports a garage constructed from rendered block with box metal sheeting roofing. Adjacent to the development site boundary fencing is a further garage and the eastern extent of a neighbouring properties shed.

#### *Bare Ground*

The majority of the site supports bare ground due to the recently cleared nature of the site. Some areas of the site have regenerating vegetation, however it was generally less than 50% cover and as such classified as bare ground. Regenerating species include common grasses such as Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and perennial rye grass *Lolium perenne*, as well as occasional meadow buttercup *Ranunculus acris*, broadleaved dock *Rumex obtusifolius*, ribwort plantain *Plantago lanceolata*, Greater plantain *Plantago major* and dandelion *Taraxacum officinalis*. This area also supports a mound of cleared material, which has become dominated by cleavers *Galium aparine* (TN 5).



Figure 2 Bare ground in center of site looking towards mound of material dominated by cleavers



Figure 3 Bare ground at northern extent of site, hedge bank along western boundary and tree stump

#### Poor Semi-Improved grassland

Areas of regenerating grassland are dominated by Yorkshire fog, common bent and perennial rye grass with frequent meadow buttercup and broadleaved dock. The site also supports a number of small herbs including ribwort plantain, common mouse-ear *Cerastium fontanum*, forget-me-not *Myosotis scorpioides*, common vetch *vicia sativa*, dandelion, Willowherb *Epilobium* sp., thistle *Cirsium* sp. as well as lesser trefoil *Trifolium dubium* and common groundsel *Senecio vulgaris*.



Figure 4 Photo looking towards southwestern corner of site supporting stumps and brash/log pile in corner, stone wall and water butts to south

#### Tall Ruderal

The western extent of the site supports tall ruderal vegetation, which is dominated by common nettle *Urtica dioica*, broad leaved dock and bramble *Rubus fruticosus*.

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### Scattered Trees

Scattered trees were present along the western boundary hedge bank (Figure 5). These included a cluster of three ash *Fraxinus excelsior* trees to the northern extent of the boundary (TN 1), as well as species such as elder *Sambucus nigra*, sycamore *Acer pseudoplatanus* and hazel *corylus avellana*.



Figure 5 Scattered trees present along boundary hedge bank, with bordering tall ruderal vegetation. Photo looking north towards garage to be removed.

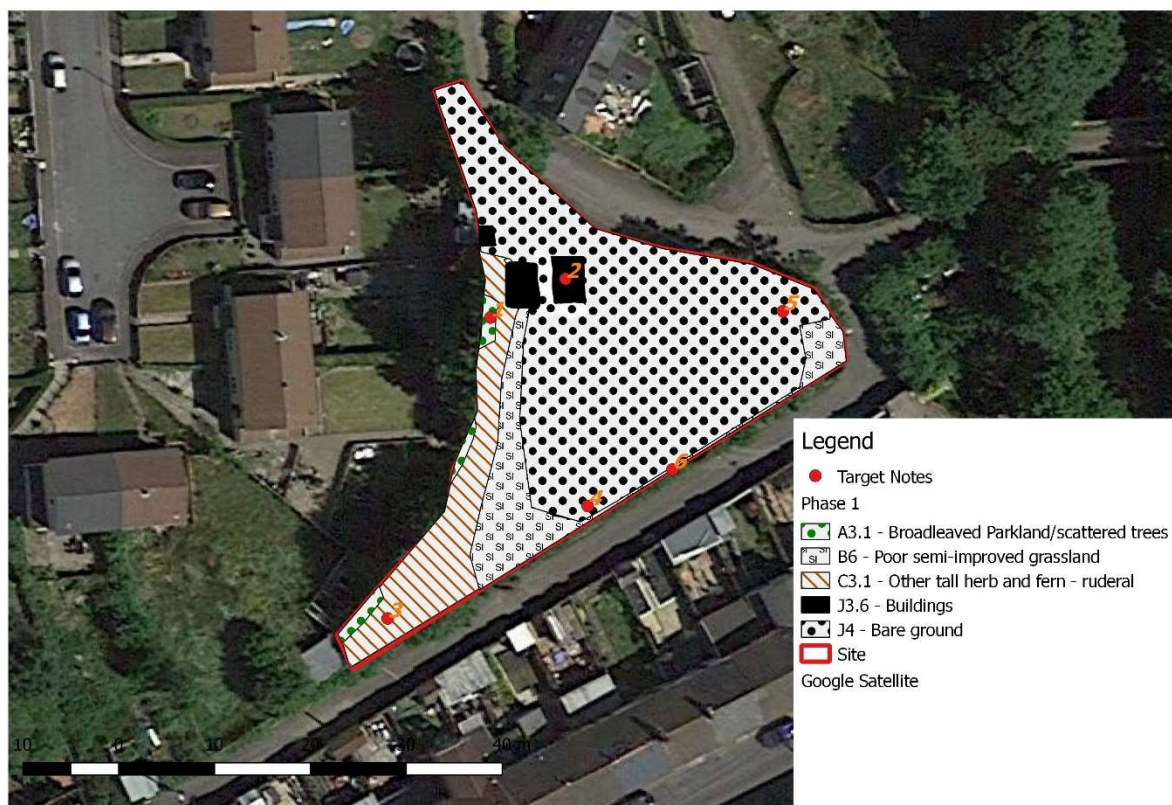


Figure 6 Phase 1 habitat map

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### 3.2.2 Species

#### *Bats*

No direct evidence of bats was identified during the survey; however, the site supports habitats that provide potential roost sites.

#### *Preliminary roost assessment – Garage*

During the preliminary roost assessment, the garage within the site, which is due to be demolished (TN 2) was identified as providing low potential to support roosting bats. The garage is constructed from rendered block with box metal sheeting roofing. Suitable access points to the garage were present along the top of the wooden double doors (Figure 5).

Internal inspection was not possible during the phase 1 survey visit; however, a follow up internal inspection was carried out on the 30<sup>th</sup> June 2020. The garage supported internal timber beams with crevices suitable to support roosting bats (Figure 6). All areas of the garage were accessible during this visit; no direct evidence of bats was identified. Following the internal inspection a static bat detector (Anabat Express) was installed within the building on continuous record for five nights. Analysis of results was undertaken using AnalookW; no bat calls were recorded.

It is our understanding that the smaller garage that is present adjacent to the development site fencing will be retained.



*Figure 2 Garage building with potential access point above door*



*Figure 3 Internal beam of garage showing crevice between ceiling*

#### *Preliminary roost assessment – Trees*

The preliminary roost assessment identified the cluster of ash trees along the western boundary (TN 1) to support moderate potential roosting opportunities for bats. This assessment was primarily due *Land to Rear of Cherry Tree Way, TRELEWIS*

to the mature ivy covering of the tree (Figures 7 & 8), which provides some limited roosting opportunities in itself and may conceal further potential roost features. However, evidence of notable potential roost features was not identified from ground level.

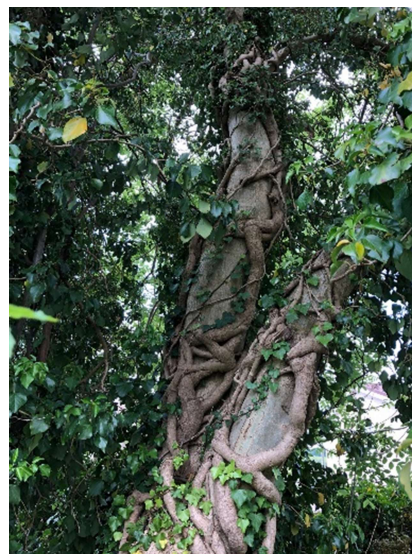
The remaining trees along the hedge bank were found to support negligible potential to support roosting bats.

#### *Tree Emergence Survey Results*

Emergence surveys were carried out on the tree on the 20<sup>th</sup> August 2020 and 3<sup>rd</sup> September 2020. No bats were recorded emerging from the tree on either occasion. Low levels of bat activity were recorded from soprano and common pipistrelle, with low numbers of individuals commuting over the site. Upon completion of the second emergence survey, a small number of soprano pipistrelle bats were observed foraging along the tree lined railway line to the east of the site. A small flock of jackdaw *Corvus monedula* were also observed roosting in the tree.



*Figure 4 Ivy covered ash*



*Figure 5 Closer view of thick stemmed ivy covering ash*

### *Reptiles*

The site supports some small extents of suitable habitat for reptiles in the form of the boundary hedge bank and brash/log and rubble piles (TN3, 4 & 5 and Figures 9 & 10) that offer suitable resting places, as well as small extents of foraging and basking habitat.



Figure 6 Log/brush piles and stumps in south western corner of site (TN 3)



Figure 7 Rubble piles along southern boundary (TN 4)

### *Nesting Birds*

Suitable nesting habitat is present within the site, although this is restricted in extent due to the recently cleared nature of much of the site. Suitable nesting habitat is present within the western boundary, the log piles and stone wall along the southern boundary may also provide suitable nesting sites. No direct evidence of nesting birds was identified during the survey, however species such as wren *Troglodytes troglodytes*, blue tit *Cyanistes caeruleus* and great tit *Parus major* were observed using the site for foraging.

### *Badger*

The site supports some limited suitable habitat to support setts along the western boundary, however no evidence was identified during the survey. The site may also support limited foraging and commuting habitat.

## **4. Legislation and Planning Guidance**

### *The Conservation of Habitats & Species Regulation 2010*

Annex IV of the Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora all bat species are listed as of Community Interest, in need of strict protection. In England and Wales, the EC Habitats Directive was transposed into law in 1994 and, following recent amendments is set out in the Conservation of Habitats & Species Regulation 2010. This legislation gives bats, their breeding sites and resting places a high level of protection making it an offence (subject to certain specific exceptions) to deliberately capture or kill/injure a bat, to damage or destroy a place used for shelter or protection or to deliberately disturb a bat in such a place.

### *The Wildlife and Countryside Act 1981 (as amended) (WCA)*

The WCA is also relevant to the current development proposal due to the presence of potentially suitable nesting bird and reptile habitat.

Relevant aspects of this legislation are:

- All wild birds are protected against killing or injury and their nests against damage or destruction whilst they are being built or contain eggs/dependent young; and
- Common reptiles are protected against killing or injury.

### *The Environment (Wales) Act 2016*

The Environment (Wales) Act introduces a new biodiversity duty which applies to local authorities during the planning process and thus is of relevance to the current proposals. This duty replaces the biodiversity duty in the Natural Environment and Rural Communities Act 2006. The Environment Act enhances the current NERC Act duty to require all public authorities, when carrying out their functions in Wales, to seek to “maintain and enhance biodiversity” where it is within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”.

### *Planning Policy Wales (PPW)*

This report is prepared with reference to Planning Policy Wales (PPW) 9 (Nov 2016). This document sets out the land use planning policies of the Welsh Government with Chapter 5 dealing with Conserving and Improving Natural Heritage and Coast. The advice contained within PPW is supplemented for some subjects by Technical Advice Notes (TAN's), with TAN 5 addressing Nature Conservation.

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TAN 5 identifies a number of key principles, which the town and country planning system in Wales should incorporate. Those principles relevant to the current application are:

- Work to achieve nature conservation objectives through a partnership between local planning authorities, Natural Resources Wales (NRW), voluntary organisations, developers, landowners and other key stakeholders;
- Integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time;
- Ensure that the UK's international obligations for site, species and habitat protection are fully met in all planning decisions;
- Look for development to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally; and
- Promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable.

## **5. Discussion, Evaluation and Recommendations**

### **5.1 Protected and Priority Species**

#### *Bats*

Bats are protected by the Wildlife and Countryside Act 1981 (as amended) (WCA) and the Conservation of Habitats and Species Regulations 2017 the protection afforded under these acts makes it an offence to kill, injure, capture/take bats, disturb or harass bats, damage or destruct their roosts or to obstruct access to a breeding or resting place.

No evidence of bat use within the building was identified during the inspection survey or through analysis of the detector data, which was installed for five nights within the garage. The ash trees along the western boundary were found to support moderate value roosting potential. However, no evidence of use was identified during the emergence surveys. Bat activity was also found to be low within the site and restricted to individual commuting passes by common and soprano pipistrelle. Increased levels of bat activity were associated with the tree lined railway corridor to the east of the site.

#### *Reptiles*

The widespread reptile species of the UK: common lizard, slow worm, grass snake and adder are protected under the WCA which protects them against killing and injury.

The site supports limited areas of habitat that may provide resting places for widespread reptile species. In order to protect any reptile species that may use the area precautionary working methods are recommended. The development area should be kept largely clear of vegetation in order to make it unattractive to reptiles. Where the area supports vegetation, it is recommended that vegetation is cut to 15 cm at least 48 hours prior to works, this should encourage any reptiles using the area to vacate to nearby more suitable habitat. It is also recommended that the brash/log and rubble piles are dismantled by hand prior to the commencement of works. This will also help to protect any hedgehogs that may also be using the area.

#### *Nesting Birds*

Nesting birds are protected under the WCA which makes it illegal to intentionally kill, injure or take a wild bird and take damage or destroy its nest or egg. In addition, some bird species are listed under Schedule 1 of the WCA which also makes it an offence to disturb them whilst they are building a nest, nesting or in or near a nest that contains their young as well as disturb their young. The Conservation of Habitats and Species Regulations 2017 also places a duty upon all competent authorities to provide and protect habitat for wild birds and as such any planning submission will be assessed in this context.

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The site supports areas with the potential to support breeding birds such as the western boundary. Any works that may impact potential nesting habitat should be undertaken outside of the nesting bird season (March – August inclusive). If this timeframe cannot be avoided, a close inspection of any vegetation and brash/log piles to be removed should be undertaken immediately prior to the commencement of works. All active nests should be protected from any potential impacts until the young have fledged.

### *Badger*

Badgers are afforded protection under the Protection of Badgers Act 1992 which makes it an offence to intentionally capture, kill or injure a badger, damage, destroy or block access to their setts and disturb badgers within their setts.

No badger setts were identified during the walkover survey. In order to protect badger and other terrestrial mammals that may use the site (i.e. hedgehogs) any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which enter the trench. Any open pipework with an outside diameter of greater than 120 mm should also be covered at the end of each working day to prevent animals entering/becoming trapped.

## **5.2 Enhancements**

It is recommended that provisions for roosting bats and nesting birds are incorporated into the development in order to enhance the ecological value of the development. These could take the form of 2FE Schwegler Wall-Mounted Bat Shelters located on the east or south facing aspect of the bungalow or a 1FD Schwegler Bat Box located on a suitable tree within the grounds. These boxes are best located at between 3 – 6 meters and in open, sunny positions. In addition, one 1B Schwegler nest box (or similar) should be provided on a suitable tree within the site.

It is also possible to provide enhancements for hedgehogs by making small holes within any boundary fencing. This allows foraging hedgehogs to be able to pass freely throughout a site.

## **5.3 Lighting Considerations**

External lighting in the vicinity of bat roosts can cause disturbance, roost abandonment or reduce the likelihood of bats inhabiting new roosting provisions. It is therefore recommended that any external lighting is kept to a minimum and not facing any new roosting provisions or retained and/or adjacent vegetation and trees. Lighting should be positioned within 3 m of the ground and fitted with hoods to direct light below the horizontal plane of potential bat emergence points. Lights should also have Passive Infra Red (PIR) triggers to minimise illumination.

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## **6. Conclusions**

This preliminary ecological appraisal recorded the habitats present within the site and assessed their potential to support protected and priority species. The appraisal also included phase 2 surveys with regard to bats within the boundary trees and garage, which is due to be removed to facilitate the bungalow. No evidence of bat use within the garage or trees was identified during the follow up phase 2 surveys.

Avoidance and precautionary working methods should be adopted in order to protect nesting birds and reptiles that may use the site.

In addition, a scheme of ecological enhancements (in the form of roosting provisions for bats and birds) has been recommended in order to enhance the biodiversity value of the area.