

Preliminary Ecological Assessment



Project: Land at Honeysuckle Close, Merthyr Tydfil

Instructed by: Merthyr Valley Homes

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1. Introduction

The applicant is seeking permission to create a six bungalows within two parcels of land off Honeysuckle Close, Merthyr Tydfil. The units will be used as temporary accommodation for people being discharged from hospital. The parcel of land to the north is located at SO 04171 08064 and the parcel of land to the south is located at SO 04205 07987. These areas will be referred to as the northern and southern site within this report.

Both parcels of land sit within a wider housing estate. The land within the northern site currently consists of species poor semi improved grassland. The land southern site contains species poor semi improved grassland, a small outdoor play area, two mature oak trees and five young trees.

This report will assess the potential of the land within the site boundary to support habitats and species and the implications that any future development proposals could have on them.

1.1 Site Description

The proposed development sites sit within a wider housing estate. Both parcels of land are immediately surrounded by well maintained grassland, residential housing roads and street lighting. The site is located on the northern outskirts of Merthyr Tydfil. Prince Charles Hospital is located approximately 280m to the east of the site and Cyfarthfa Castle and grounds are located approximately 600m to the south.

The closest watercourse is the Pwll Glas which flows approximately 580m to the south west at its closest point. It then joins the River Taff approximately 950m to the south west. Small areas of woodland, open fields and scattered trees are present in the wider landscape to the north east and south of the housing estate.

1.2 Survey Constraints

Full access was gained to all areas of the proposed development site. The site visit was undertaken during December which is outside of the optimum time to undertake phase 1 habitat surveys. However a broad analysis of habitat types was still possible.

1.3 Surveyor Experience

Aislinn Harris is a full member of Chartered Institute of Ecology and Environmental Management (CIEEM). Aislinn is an ecologist with 12 years experience undertaking a wide range of flora and fauna surveys. All survey work is undertaken following JNCC Phase 1 Survey Guidelines and CIEEM Guidelines for Preliminary Ecological Appraisal (2nd Ed 2017).

2. Desktop Study

A data search was undertaken via South East Wales Biological Records Centre (SEWBRc) for the proposed development site and surrounding area. **LERC reference 0201-563**. A 2km buffer zone was searched and records returned within 500m of site are noted below:

- Record for the presence of Hedgehog - closest approximately 170m away,
- Record for the the presence of common frog - closest approximately 460m away,
- Numerous bird records - including lesser redpoll, house sparrow and dunnock

Records of note returned for the rest of the buffer zone are detailed below:

- Foraging Daubentons bats over lake at Cyfarthfa Castle,
- Common lizard,
- Soprano pipistrelle found in local school building,
- Commuting / foraging myotis bat species, common pipistrelle and daubentons bats
- Common toad
- Slow worm,
- Otter
- Kingfisher

2.1 Protected Sites

A data search for species records was undertaken for the proposed development site and surrounding area. The search also considered statutory and non-statutory protected sites.

Statutory Protected Sites

The site does not lie within or directly adjacent to a statutory protected site. There are two Sites of Special Scientific Interest (SSSI) within the wider area. The closest such site is the Cwm Taf Fechan Woodlands which lie approximately 560m away at the closest point. The Cwm Glo A Glyndyrys SSSI is located approximately 1.9km away at its closest point.

The Cwm Taf Fechan Woodlands are also designated as a Local Nature Reserve. The closet point of the nature reserve to the development areas is approximately 560m away.

Non-Statutory Protected Sites

The proposed development site does not lie within or directly adjacent to any non statutory designated site. There are a number of Sites of Importance for Nature Conservation (SINCs) within 2 km of the site, the nearest being Cyfarthfa Park which lies approximately 150m to the south of site. Details of the remaining SINC sites and distances from the development site are listed below:

- Dan y Darren Wildlife Site (1822m) 5027
- Afon Taf (1155m)
- Morlais Hill (1345m)
- Bryniau (1069m)
- Cwm Ffrwd (1239m)
- Cwm Taf Fechan (555m)
- Cwm Taf Fawr (904m)
- Y Graig (320m)
- Gyrnos Wood (705m)
- Gellideg North Fields (1154m)
- Winchfawr East & Clwydyfagwyr (1940m)
- Cwm Glo (1851m)
- Cwm Taf Fields & Cefn Coed Tip (927m)
- Cilsanws Common South (974m)

There is a single Regionally Important Geodiversity Sites (RIGs) within 2km of the proposed development site. The Nant Ffrwyd RIGs is located approximately 1.27km away to the west of site.

The Taf Fechan Woodlands are also designated as a Wildlife Trust Reserve. The closet point of the nature reserve to the development areas is approximately 560m away.

There are numerous areas of Ancient Semi Natural Woodland within 2km of the site. These woodlands have been identified as Priority Areas by Natural Resources

Wales (NRW) as they comprise mostly broadleaved native trees and shrubs believed to have been in existence for over 400 years. The nearest such site is approximately 150m to the south.

2.2 Potential Impacts to Protected Sites

Given the localised nature of the works, it is unlikely there will be any impacts to protected sites within the wider area.

3. Phase 1 Survey

3.1 Habitat

A walkover survey of the site was completed on the **2nd December 2020** which included all areas of both sites. A full species list can be found in Appendix 1 and a map of the habitats found within the site is provided in Appendix 3.

Northern Site

The northern parcel of land is made up entirely of **semi improved grassland**. The proposed development area is a small parcel of a wider area of open space which appears to be frequently mown. The sward was short and even and given its urban location the grassland will be mown a number of times each year. The site is mainly flat but a shallow bank to the north of the plot leads up to the wider grassland which extends north and eastwards.

Species identification within the sward was difficult due to the time of year but species noted include dandelion, yarrow, creeping buttercup and a species of grass thought most likely to be annual meadow grass.

Southern Site

The southern parcel of land is bigger but also consists mainly of **semi improved grassland**. Species noted include dandelion, a species of dock, yarrow, creeping buttercup, ribwort plantain and a species of grass thought most likely to be annual meadow grass. Small areas of **tarmac** are all present around the edges of the site adjacent to parking areas already in the area. A small outdoor play area is present to the north of the site. The play area is made up of beams and logs for

There are two large mature oak **trees** within the centre of the site and a number of smaller younger trees. The mature larger trees are a species of oak tree. The eastern most tree, approximate location shown on the map in appendix 3, has a crack in the trunk. The younger **trees** appeared to be non native varieties.

3.2 Great Crested Newts

Great crested newts (*Triturus cristatus*) are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,

- Deliberate disturbance of a breeding site or resting place,
- Deliberate taking or destroying of eggs,
- Damage or destruction of a breeding site or resting place.

Great crested newts (GCN) are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a great crested newt. Great crested newt and common toad are listed in section 7 of the Environment (Wales) Act 2016 which makes them key species to sustain and improve biodiversity.

The closest record for the presence of Great Crested Newt (GCN) is approximately 1.2km.

No ponds are present within the proposed development site and there do not appear to be any waterbodies within 300m of either parcel of land proposed for development. OS maps show two ponds approximately 390m to the east of the site separated from the development area by housing, roads and car parking.

The northern and southern parcel of land are considered to have negligible potential for use by great crested newts. No further survey work for great crested newts are recommended.

3.3 Dormice

The dormouse (*Muscardinus avellanarius*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Dormouse is listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a native dormouse. Dormouse is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

No records for the presence of dormouse have been returned via the data search. There are no known records of dormouse within 2km of the proposed development sites.

The habitat within the proposed site boundary is considered to be unsuitable for use by dormouse. No further survey work is recommended for this species.

3.4 Bats

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and or obstruction of their roosting places. Barbastelle, bechstein, noctule, brown long eared, common pipistrelle, soprano pipistrelle, greater horseshoe and lesser horseshoe bats are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

The closest record for the presence of bats is a record of foraging daubenton's bats over the lake at Cyferthfa Castle approximately 500m to the south of site. A confirmed daubenton's bat roost in a tree approximately 600m away. There are numerous other records for foraging and commuting bats in the wider area including a myotis species, natterers, common and soprano pipistrelle bats.

There are no buildings within either proposed development site which could be used by bats.

Tree Assessment

There are a small number of trees within the southern parcel of land site boundary which were subject to a ground level visual assessment for potential roosting features for bats. The younger trees within the site are considered to have negligible potential for use by bats as no suitable gaps or cracks were observed. The diameter of the younger trees was roughly 10cm and no flaking bark was noted. During the site visit the mature sycamore to the west of the site (T3) did not have any noticeable gaps or cracks suitable for use by bats.

When reviewing the Tree Survey Report by Steve Ambler & Sons dated 13th November 2020 it was apparent that features within the trunk of T3 had been missed. The tree was revisited by Aislinn Harris on the 29th April 2021. A basal wound is present on the north facing elevation of the tree which extends about 50cm upwards into the trunk of the tree. A knot hole was noted above the basal wound with signs of decay into the feature.

The eastern most oak tree (T4) does have a crack within the trunk facing southwards. The bark has fallen away leaving the inner wood exposed.

When considering the potential roost features within the T3 and T4 the guidelines for roost suitability provided in section 4.1 of the BCT Good Survey Guidelines (2016) are relevant. Whilst the features in T3 are suitable for use by roosting bats, especially the basal wound the tree is isolated from immediate suitable surrounding habitat being within a housing estate. Whilst the wound within T4 seemed well sealed due to growth of the bark, potential access points for bats cannot be ruled out. On balance both T3 and T4 are assessed as having low to moderate potential for use by roosting bats. Further bat surveys will be required should the trees ever be removed.

It is noted that the Tree Survey report covers two trees to the north of the northern plot of land. These trees are outside and not directly adjacent to the development plot and as such have not been subject to an inspection by an ecologist. T1 and T2 will not be impacted by the development proposals and as such further survey work by an ecologist at this point is not required.

However consideration to the presence of bats will be required when designing lighting as part of the development proposals.

3.5 Otters

The common otter (*Lutra lutra*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Otter are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer

or expose for sale an otter. Otter is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

There are numerous records for the presence of otter within 2km of the site. The closest record is for an otter sprint approximately 600m to the south of site along the River Taff. The majority of records are associated with the River Taff.

Otters tend to prefer secluded locations for their holts to help prevent them being disturbed by other animals. It is accepted that otters can travel long distances from river corridors to find acceptable holt sites. No evidence of mammal use within the site boundary was noted. Both sites are considered to offer negligible potential for use by otter due to its open nature. As such no further recommendations will be made for this species.

3.6 Badger

Badgers are protected under the Protection of Badgers Act 1992. In summary they are protected from:

- Taking, killing or injuring;
- Cruelty;
- Interfering with a badger sett;
- The selling and possession of badgers;
- Marking or ringing.

Badgers are also listed on schedule 6 of the Wildlife and Countryside Act 1981 as amended.

Badgers tend to have a variety of setts with different uses and functions within the territory for the family unit. In general there is usually a main sett which the family will use the most. There are then annex, subsidiary and or outlier setts which depending on family structures and environmental pressures may be used at different times of the year. As female badgers tend to have their cubs over winter the disturbance and damage of badger setts is prohibited between December and June inclusive. NRW are the licensing body for any actions which may contravene the above legislation.

The closest badger record to site is approximately 660m away and is for a badger sett. A small number of records for badger around the area approximately 750m away are returned via the data search.

No evidence of the presence of badger, such as sett, latrine or digging, was noted within or habitats adjacent to the proposed development site. Badgers favour a dry sloping site for digging their setts preferably within woodland or even under a large hedgerow bank. Badgers are creatures of habit and tend to follow regular pathways between their setts and foraging grounds, no such evidence was found within the site.

Both parcels of land are considered to have negligible potential for use by badger as they are open and subject to frequent human disturbance. No further surveys for this species are recommended.

3.7 Birds

All breeding birds are protected under schedule 1 of the Wildlife and Countryside Act (1981) as amended. Under this Act it is an offence to:

- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.

Enhanced protection is afforded to species listed on Schedule 1 of the Act, this additional protection makes it an offence to:

- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

The northern site is considered to have no potential for use by nesting birds as no suitable vegetation is present. The two mature oak trees in the southern site are considered to offer some potential for use by nesting birds. However these trees will be retained and therefore there should be no direct loss of nesting bird habitat.

3.8 Reptiles and Amphibians

Reptile such as the slow worm, common lizard, adder and grass snake are protected under the Wildlife and Countryside Act 1981(as amended). They are protected from killing, injuring and sale. They are also listed in section 7 of the Environment (Wales) Act 2016 as species of principle importance.

The closest reptile record to the proposed development areas is for common lizard approximately 520m away. The closest amphibian record is approximately 440m away from site and is for common toad.

Reptiles prefer a mosaic of habitats with diverse vegetation structure creating open areas and nearby cover to provide protection from predators and the elements. The uniform and well maintained sward within both parcels of land proposed for development offer negligible potential for use by reptiles. No further survey work for reptiles is recommended.

4. Recommendations and Mitigation

It is proposed to build six bungalows within two separate parcels of land off Honeysuckle Close, Merthyr Tydfil. The bungalows will be used as sheltered accommodation for people leaving hospital with no fixed address or additional needs. The development proposals on the southern plot of land have reduced from the original site boundary and will focus on the areas adjacent to Honeysuckle Close.

There are two mature trees within close proximity to the development site footprint of the southern plot. As such they have been subject to a ground level visual inspection for the presence of features suitable for roosting bats. Two trees are present to the north of the northern plot of land. The trees lie a few meters away from the development site and are outside of the red line boundary. **No trees will be removed as part of the development proposals within this planning application.** They have been assessed by the Tree Survey and ecologist to advise the client on any future works to the trees which maybe undertaken. **No further survey work is recommended as part of this planning application as trees T1 - T4 will not be directly impacted on by the development proposals.** Lighting will be sensitively designed to ensure all retained trees are not subject to increased lighting levels. **However the development sites are located within a housing estate which has street lighting and housing within 20m of each trees.** The current night time lighting levels are higher than in other more rural locations. This does not exclude bat species from using the area, however it is more likely that less light averse species such as pipistrelle bats may forage and commute around the locale.

The development could negatively affect nesting birds and bats within the local area and result in overall habitat loss. Recommendations are made below to help reduce and avoid any negative impacts that the development proposals may have:

- In order to prevent any damage to retained trees It is recommended a root protection zone (RPZ) be implemented around them. The RPZ, British Standard BS 5837, *Trees in relation to design, demolition and construction - Recommendations* will be followed. Measures will include clear marking of the RPZ to guarantee no machinery is used or digging carried out in that area. This will ensure that there is no detrimental impact to the trees and the flora or fauna it supports.
- One mature tree within the site boundary has low potential for use by roosting bats. This tree will be retained as part of the development proposals. Whilst no further survey work of the potential roost feature

within the tree is proposed at present should work in the future be required, a bat ecologist must be consulted for advice.

- All grassland within the site boundary will be maintained in its current state to prevent colonisation by reptiles prior to development work commencing
- Careful consideration must be given to the use of lighting within the site as this can adversely affect activity by a variety of fauna, particularly foraging bats, nesting birds and invertebrates. Light spillage into adjacent semi-natural habitats must be avoided and brightness kept to the lowest permissible level in the areas adjacent to such habitats. All external lighting must be motion activated and set to the lowest time to remain lit that is possible. This will avoid lights being left on over night.

The Environment Act (Wales) 2016 places a duty on competent authorities such as Merthyr Tydfil County Borough Council to conserve and enhance biodiversity. The below bullet points are some simple measures that could be achieved to enhance the biodiversity of the site:

- Soft landscaping within proposed development site boundary would improve the biodiversity of the development site. Native species tree planting within both parcels of land would improve diversity. As mature specimen planting as possible is recommended to ensure survival and reduce potential for vandalism. Planting close to the new units would also reduce the likelihood of vandalism of planting. At least 15 mature trees will be planted between both parcels of land proposed for development.
- An aftercare package for any soft landscaping for a minimum of 5 years will be required. Any damaged or failed planting will require replacement. All planting will require weeding and watering to ensure survival to mature trees.
- The use of integrated bird boxes within a structure is preferred as the features are more likely to be maintained and subject to less damage or vandalism. However, given the prefabricated units proposed for use within the development it is not possible for integrated boxes to be used in this instance. The units proposed for use are quick and easy to erect, make the development economically viable are a suitable for temporary housing. The units cannot be changed to allow the use of integrated bird boxes. A suitable compromise, in this instance, is the provision of wall mounted boxes as detailed below.

- Two Vivara pro seville 32mm wood stone nest boxes will be provided in the northern most site boundary. One box will be placed on each unit at eaves height on the north eastern facing elevation of the building.

<https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box>

- Two Vivara Pro Barcelona wood stone open nest boxes will be proved on the two units built within the southern most parcel of land. One box will be erected on the north western elevation of unit 1 and north eastern elevation of unit 3.

<https://www.nhbs.com/vivara-pro-barcelona-woodstone-open-nest-box>

- One Vivara Pro Barcelona wood stone open nest box will be placed on a mature oak tree along the southern boundary of the site. The exact location of the bird boxes are to be shown on the supporting architectural plans.
- Any fencing on site will be installed to allow small mammal movement across the site. Any close board or weld fencing will be installed with either a continuous 13cm gap between the base and ground or with 13cm by 13cm hols cut every 3m.

Appendix 1 - Plant Species Recorded

Species	Common Name
Woody Plants	
<i>Quercus robur</i>	English Oak
Herbaceous Plants	
<i>Plantago lanceolata</i>	ribwort plantain
<i>Ranunculus repens</i>	creeping buttercup
<i>Rumex sp</i>	Dock sp
<i>Taraxacum officinalis agg</i>	Dandelion
<i>Trifolium sp</i>	Clover sp
<i>Achillea millefolium</i>	Yarrow
<i>Poa annua</i>	Annual meadow grass

Appendix 2 – Site Photographs

Northern Site



Looking south east



Looking south west

Southern Site



Northern half of site looking eastwards



Southern half of site looking westwards



View of split in tree trunk of T4



View of T4



Eastern edge of site looking southwards



View of T4 canopy



View of basal wound T4



Interior view of basal wound T4



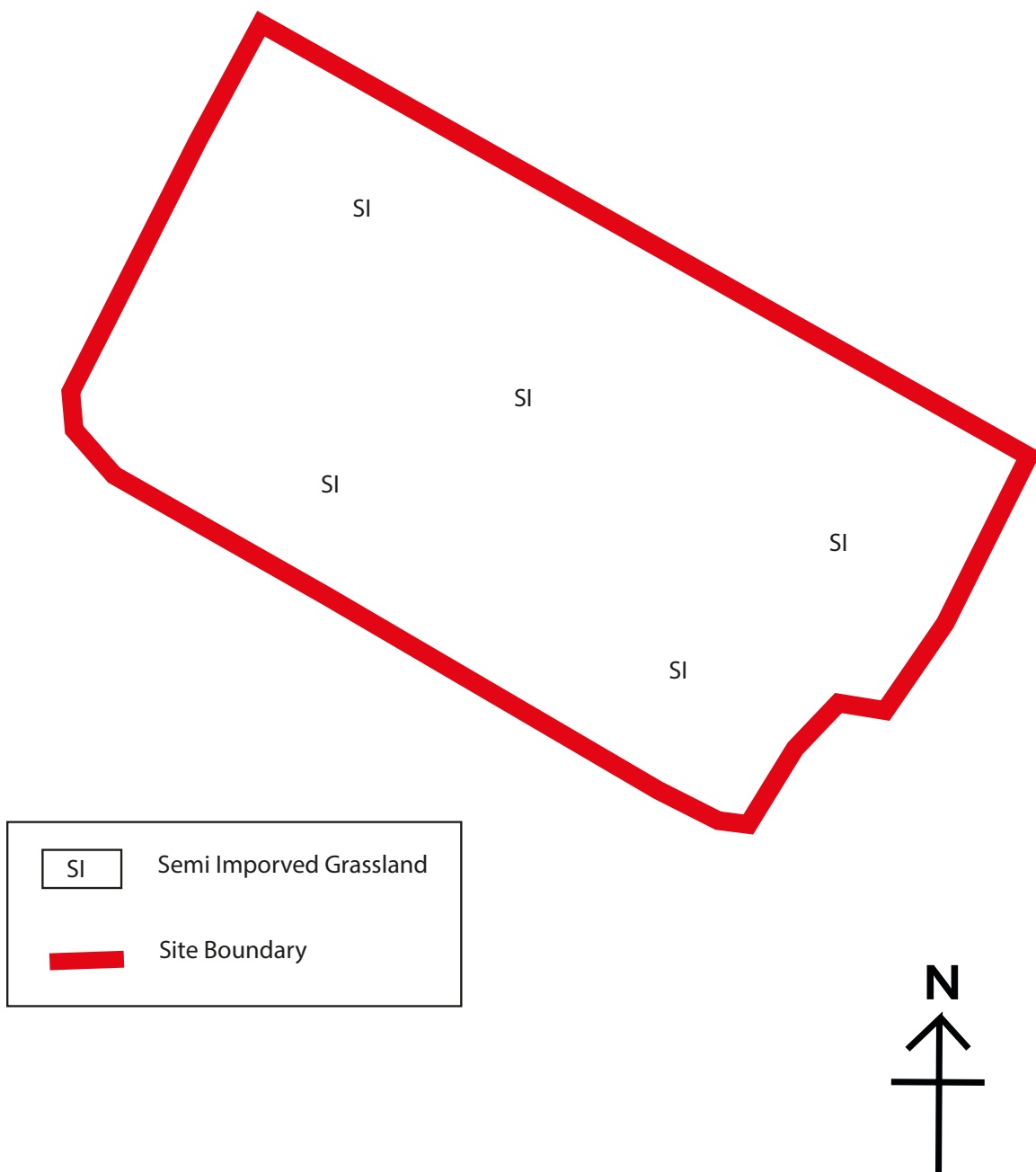
Interior view of basal wound T4

Appendix 3 - Site Habitat Map

LAND OFF HONEYSUCKLE CLOSE, MERTHYR
TYDFIL

Habitat Map - Northern Site

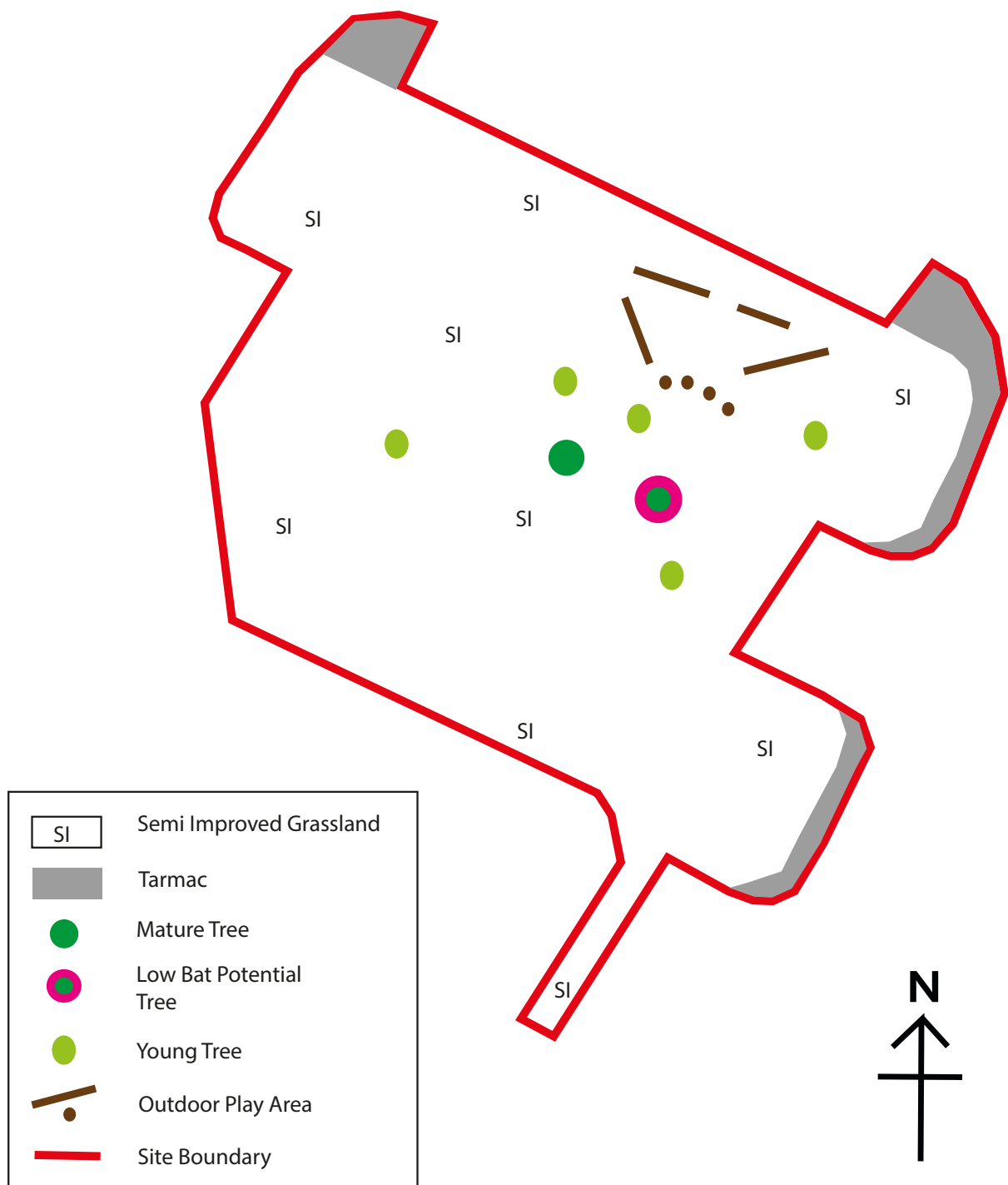
December 2020



LAND OFF HONEYSUCKLE CLOSE, MERTHYR
TYDFIL

Habitat Map - Southern Site

December 2020



Appendix 4 - Aerial View of Site Location

