

Ecology Planning

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1 Neath Road, Fforest Goch, Neath

Ecology Appraisal



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1. Introduction

- 1.1 This report has been prepared by Ecology Planning on behalf of the applicant in support of a planning application for the construction of a new dwelling at 1 Neath Rd, Fforest Goch, SA8 3JB, hereafter referred to as 'The Site'.
- 1.2 The Site extends to the footprint of the new dwelling which is less than 0.01 Ha. This is set within a small former field enclosure within the applicant's ownership, which extends to approximately 0.2Ha. It is centred at National Grid Reference SN 7401 0991. The works are limited to a small area of Site clearance to accommodate the new dwelling. Recommendations are provided to enhance the remainder of land within the enclosure since this will form a woodland garden and meadow.
- 1.3 The report includes full descriptions of all methods undertaken to gather ecological data, the results of survey with analysis and recommendations for appropriate mitigation and enhancement with regard to relevant legislation, planning policy and conservation documents.

2. Methodology

- 2.1 This section provides details of all methods used in this ecological assessment including timing of works, weather conditions and equipment used.

Desk Study

- 2.2 The impacts are extremely limited in extent and likely to affect only the Site in question. No background data has been purchased, but a search was made for statutory designated sites. The adjacent field to the north was subject to a planning application in 2021 and this was referred to in order to gain context of the Site in the local area.

Site Survey

Phase I Survey

- 2.3 An extended Phase I habitat survey was undertaken on 25th November 2022 by Rebecca Bohane. The methodology used was based on that used for Phase I habitat survey¹ and entailed walking the Site and mapping habitat types, including dominant and notable species. Any potential for protected species to be present within the habitats or features found at the Site was also recorded and surrounding offsite areas were surveyed where possible.
- 2.4 Habitats and features may be used by protected species throughout the year or within certain seasons and may provide potential breeding sites, commuting routes, hibernation sites or resting places. Note was made of any direct evidence of protected species presence, which might include: droppings or latrines, burrows, nests or roosts, feeding remains or tracks.
- 2.5 The weather was suitable for survey being dry and still.

Constraints

- 2.6 The survey was undertaken outside of the optimal season for Phase I surveys. However, all plant species present were identifiable and the disturbed/scrub nature of the habitat present means that it is highly unlikely that any notable plant species are present that were not visible at the time of survey. The Site was assessed using against the citation for Fforest Goch Bog SSSI and the lack of species present means it is highly unlikely that the Site is of botanical greater value than recorded during the survey.

¹ Joint Nature Conservation Committee (2010) *Handbook for Phase I habitat survey: a technique for environmental audit* JNCC

3. Results

Desk Study

- 3.1 The Fforest Goch Bog SSSI is the only statutory designated site for nature conservation within 2km of the Site. This lies approximately 100m to the north west of the Site and is continuous with marshy grassland and scrub to the west of the Site. This SSSI is designated as an excellent example of a lowland raised bog. It is dominated by mixtures of cross-leaved heath, purple moor-grass, and cotton-grasses with bog mosses and common liverworts beneath.

Site Setting

- 3.2 The Site is set adjacent to the A474 Neath Road to the east and an area of marshy grassland and scrub to the west. To the south lies the applicant's property and to the north is a new modern shed, located within a similar field enclosure that was subject to a recent planning application.
- 3.3 The 'Site' habitats described below include habitats within the field enclosure. They are clearly defined from off Site habitats by a fence to the north, a tree line to the east, a boundary wall to the south and a tree line and ditch to the west.

Habitat Survey

- 3.4 The following descriptions should be read in conjunction with **Appendix 1 – Photographs and Plan 1 – Habitat Features**.
- 3.5 The 'Wider Site' refers to the entire field enclosure which includes the Site. This largely comprises a ruderal/ bare ground/ scrub matrix. Some parts appear to be more disturbed than others but it is clear that it is a long time since it was a field in agricultural condition, presumably once similar to the marshy grassland to the west.

Scattered Scrub

- 3.6 Bramble *Rubus fruticosus* agg. is present across much of the Wider Site, with varying degrees of density. It is most dense along the eastern boundary and sparser to the east. However, there are very few parts of the Site where there is no bramble present.

Ruderal/ Bare Ground

- 3.7 The Site and the majority of the Wider Site is covered by a matrix of ruderal vegetation and bare ground, with very occasional remnant species typical of marshy grassland, which it is assumed was the habitat present at some point in the past.
- 3.8 Bracken *Pteridium aquilinum* covers much of the enclosure, together with bramble scrub and ivy *Hedera helix*. There are few patches that are free from either bramble or bracken, which is now beginning to encroach along the trimmed pathways.
- 3.9 There are patches of bare ground, presumably resulting from deliberate management of the Site. Small piles of logs throughout the enclosure show recent management, as well as immature multi-stemmed hazel *Corylus avellana* and goat willow *Salix caprea*, which have been cut at some point in the past. There are garden escapes present, with montbretia present along the western edge. Mounds of bare soil are present from earthworks near to the southern boundary and much of the Site (within the red line boundary) is devoid of vegetation. The presence of holly *Ilex aquifolium*, hazel and rowan *Sorbus aucuparia* saplings suggests that management is intermittent.
- 3.10 In more open areas, other species rarely present, where only one or two individual plants were recorded, include: foxglove *Digitalis purpurea*, common ragwort *Senecio jacobaea*, red campion *Silene dioica*, creeping buttercup *Ranunculus repens*, common mouse ear *Cerastium fontanum*,

hairy sedge *Carex hirta* and common nettle *Urtica dioica*.

Marshy Grassland

- 3.11 A small patch of marshy grassland is present towards the northern end of the enclosure. This is largely a patch of soft rush *Juncus effusus* and bulbous rush *Juncus bulbosus*, with occasional Yorkshire fog *Holcus lanatus*, mat grass *Nardus stricta*, spear-leaved willowherb *Epilobium lanceolatum*, creeping bent *Agrostis stolonifera* and velvet bent *Agrostis canina*. This area is small, approximately 3m x 2m, with the species very rare in the remainder of the Wider Site.

Tree Line

- 3.12 Unmanaged tree lines are present along the eastern and western boundaries. The eastern boundary is sparse and comprises ash *Fraxinus excelsior*, English oak *Quercus robur* and multi-stemmed hazel. The western boundary appears to be an historic hedgerow, which now comprises mature trees on a bank. This western boundary comprises oak, alder *Alnus glutinosa*, hazel and holly. Within this tree line two of the oak trees are large and mature. Of these, only the southernmost tree has limited potential to support bats, as set out below.

Ditch

- 3.13 There is a ditch within the Wider Site that is associated with the western tree line. This runs the full length of the hedgerow to the west, beyond which is narrow strip of garden with ornamental planting. The ditch is approximately 1m deep and 1m wide at the top, narrowing to approximately 30cm at base of the channel. At the time of survey, this had a water depth of approximately 10cm. The banks are relatively steep and bare on the west, with no marginal vegetation, suggesting that at some times of year there may be significantly more water. There is some polypody *Polypodium* sp., ivy and broad buckler fern *Dryopteris dilatata* on the eastern bank. The substrate is silt/gravel, although this becomes more rocky to the south of the Wider Site.

Off Site Habitats

- 3.14 There is a large area of marshy grassland and scrub to the west of the Wider Site, beyond the garden boundary and outside of the applicant's ownership. This is continuous with the SSSI and is likely to have some supporting value. The Ecological Appraisal for the land immediately to the north (*Four Seasons Ecology, December 2021*), suggests that this land is extremely similar to the Wider Site, although obviously subject to some disturbance through the erection of the building.

Protected Species

Bats

- 3.15 There is a mature oak within the western tree line in close proximity to the Site. This contains very little dead wood and no rot holes. There is one split at approximately 3m height from the bank in a branch overhanging the ditch. The branch is not particularly large and the split has limited potential to support bats. A further small dead branch is present with no potential to support bats. There are two bat boxes sited on this tree. Both face over the ditch so as to be unaffected by light from the existing property. There were no bats present at the time of survey.
- 3.16 The western tree line may be used by foraging bats. There is unlikely to be significant foraging over the Wider Site owing to its small size. There is likely to be some light spill from the existing dwelling to the south.

Other Protected Species

The site is also likely to support a range of common and widespread birds and invertebrates. It is possible that dormouse may be present within the wider hedgerow network, although the length

surrounding the Site is sufficiently small so as to not to constitute habitat for an individual as this does not connect to further habitat to the north. Bats are likely to forage along the hedgerows and potentially over the open grassland.

4. Planning Policy, Legislation and Conservation Context

- 4.1 This section briefly recounts the various levels of planning policy, legislation and conservation status pertaining to the Site and the species, or likely species, of importance contained therein.

Planning Policy

Neath Port Talbot Local Development Plan (2011-2026)

- 4.2 The Local Development Plan was adopted in 2016 and will guide development within the county. The following policies are relevant to the Site:

Policy SP 15 Biodiversity and Geodiversity

- 4.3 Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed. All statutory sites of nature importance are identified and protected. This also applies to sites of regional and local importance and important natural heritage features.

Policy EN 6 Important Biodiversity and Geodiversity Sites

Development proposals affecting Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where: 1. They conserve and where possible enhance the natural heritage importance of the site; or 2. The development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site. Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable.

Policy EN 7 Important Natural Features

Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows / field boundaries, watercourses or ponds will only be permitted where: 1. Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or 2. The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed

Legislation

- 4.4 Specific ecological resources, including habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Conservation of Habitats and Species Regulations 2019 - this affords protection to: sites known as Special Areas of Conservation (SACs) that are of importance at a European level for habitats and species, excluding birds; sites known as Special Protection Areas (SPAs) that are of importance to birds; and it also protects certain species of plant and animal that are considered to be most in need of conservation at a European level;
 - The Wildlife and Countryside Act (WCA) 1981 (as amended) forms the key legislation protecting habitats and species. Sites of Special Scientific Interest (SSSIs), representing the best examples of our natural heritage, are notified under the Act;
 - The Countryside and Rights of Way Act (CROW) 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' harm or disturb a place of rest or shelter of a protected species;
 - The Environment (Wales) Act 2016 includes a duty on all public authorities, including Local

Authorities, to have regard to biodiversity conservation. Section 7 protects those Species and Habitats that are of Principal Importance (SOPs and HAPs, respectively) for the purpose of conserving biodiversity in Wales;

- 4.5 Where relevant, the assessment takes account of the legislative protection afforded to specific habitats and species.

5. Discussion and Recommendations

Evaluation

Habitats

- 5.1 The habitats within the Site are of negligible ecological value, being almost exclusively bare ground with a small amount of scrub. Likewise, the majority of the Wider Site is of the Site comprises a scrub/ bare ground/ ruderal matrix of common and widespread species, largely dominated by bramble and bracken. There is a very small patch of marshy grassland, which appears to be the only remnant of the likely natural habitat type. However, this area is far too small to really be considered of any value.
- 5.2 The tree line to the east is sparse and of limited ecological value. It does however provide a buffer between the Wider Site and the adjacent road. The tree line to the west and the associated ditch is of local ecological value.

Bats

- 5.3 The tree within the western tree line has very minor potential to support a bat roost. This was not subject to further survey, given that all impacts can be avoided. The split is not sufficiently large to support a significant roost.
- 5.4 The Site is likely to support foraging and commuting bats of a variety of species, although is not large enough to support a significant number of individuals. There is no potential for bats to roost within the Site.

Impact Assessment

- 5.5 The proposals include:
- Construction of a new dwelling within the Site, including earth works and removal of immature trees in the eastern tree line.
 - Creation of a meadow/woodland garden within the Wider Site.

Protected Sites

- 5.6 Fforest Goch Bog SSSI is sufficiently removed so as to be unaffected directly by the proposed new dwelling. It is also too far removed and the Site too different in habitat type for the Site to offer any supporting value. The excavations and levelling required to site the new dwelling will not affect water levels at the SSSI owing to the distance between the Sites and the presence of the ditch to the west, which already drains water.

Habitats

- 5.7 There will be minimal loss of habitat to the location of the new dwelling and the existing habitat to be lost is currently species poor and of negligible ecological value.
- 5.8 Whilst not within the red line Site boundary, there will be enhancement works to the Wider Site to increase both the amenity and ecological value of this Site.

Bats

- 5.9 The mature oak at the south of the western tree line has minor potential to support roosting bats. This is located approximately 10m to the north west of the existing dwelling to the south of the Site. The feature is a small split in a horizontal branch that faces over the ditch to the west and therefore is unlikely to be significantly affected by light spill currently. The new dwelling will be located 9.5m to the east of the tree, and approximately 12m to the branch with minor potential. It

is not considered likely that any additional light spill resulting from the new dwelling will impact on this feature.

- 5.10 The western tree line and ditch will be unaffected and in the event that these provide a commuting route for bats, this function would remain unimpacted.

Enhancements

- 5.11 The applicants wish to enhance the Wider Site and the following recommendations would result in a diverse habitat, far exceeding the current ecological value.

Grassland

- 5.12 The applicants would like a traditional wildflower meadow across much of the Site. This can be achieved through thorough clearance of the existing scrub and removal of topsoil to remove nutrients from the soil and aid the establishment of grassland. The Wider Site appears to be damp in patches and a meadow mix suitable for damp grasslands should be chosen for at least the dam/rush dominated part of the Wider Site. This will support the marshy grassland habitats present off Site. A suitable meadow mix option is available from Wyndrushwild², harvested from south west Wales, and a 'wetland' option. Some of the species they have harvested from Rhos pasture will be suitable (the hand collected seed from fen plants will not be suitable for the meadow).

- 5.13 The meadow will need to be cut in late Summer, with all arisings removed and composted. Paths can be mown through the area but it is recommended that it is left alone for the first year to establish.

Tree Lines

- 5.14 The tree line to the east should be allowed to develop and gaps will be planted with new native saplings. Any of the species currently present will be suitable.
- 5.15 The tree line to the west is mature and well established, but gappy. The hazel and holly understorey is present but the ground flora is largely absent. This would benefit from underplanting with native ground flora. A range of plug plants suitable for woodlands can be used, which will provide an attractive display throughout spring. It is recommended that these are purchased from Shipton Bulb's collection of native woodland bulbs³, which are grown in south west Wales. The species can be chosen by the applicant for visual interest as all will contribute to the ecological diversity above the existing level. In addition, native ferns can be planted to provide visual interest throughout the summer. Broad buckler fern is already present, but any of the native fern species sold by Shipton Bulbs will be suitable.
- 5.16 Whilst the above recommendations will provide significant ecological enhancement, the Wider Site is to be function as amenity space and bulb planting can include cultivated bulbs for naturalising.
- 5.17 Meadow seed and bulbs can be purchased through a range of suppliers, but should be native, a mix of a natural community type and local to the area if possible, for the highest chance of success and maximum enhancement of biodiversity.

Bat Boxes

- 5.18 Whilst the Site offers foraging habitat/flightline for bats, roosting opportunities are largely limited to the two bat boxes present. Whilst these are unlikely to be affected by light spill from the new dwelling, it is recommended that the higher box can remain on the existing tree. The other should

² Available online: <https://wyndrushwild.co.uk/products/wild-meadow-seed> [Accessed 12.12.22]

³ Available online at: <https://www.shiptonbulbs.co.uk/product-category/native-bulbs> [accessed 12.12.22]

be re-sited onto the other mature oak, again on an open section of trunk at 4-5m height.

- 5.19 The low height of the new dwelling means that provision is more appropriate on trees.

Compliance

- 5.20 The works undertaken will not result any significant ecological impacts to existing habitats. Impacts to protected species are likely to be negligible. The ecological connectivity and integrity of the Site will be enhanced in accordance with Local Plan policy EN7. The proposed enhancements will strengthen the value of the Site to a range of species, thereby increasing its function as part of the ecological network in the wider area in accordance with both local and national planning policies.
- 5.21 It is envisaged that compliance with the recommendations will be controlled via an appropriately worded planning condition.

Appendix 1 – Photographs



Photograph 1. View showing encroachment of bramble and bracken across almost all of the Wider Site.



Photograph 2. Bare ground dominates the Site.



Photograph 3. Bare ground at the Site, looking towards the western tree line.



Photograph 4. The gappy eastern tree line.



Photograph 5. The western tree line, looking south across the Wider Site.



Photograph 6. The horizontal branch containing a minor potential roost feature in the western tree line.

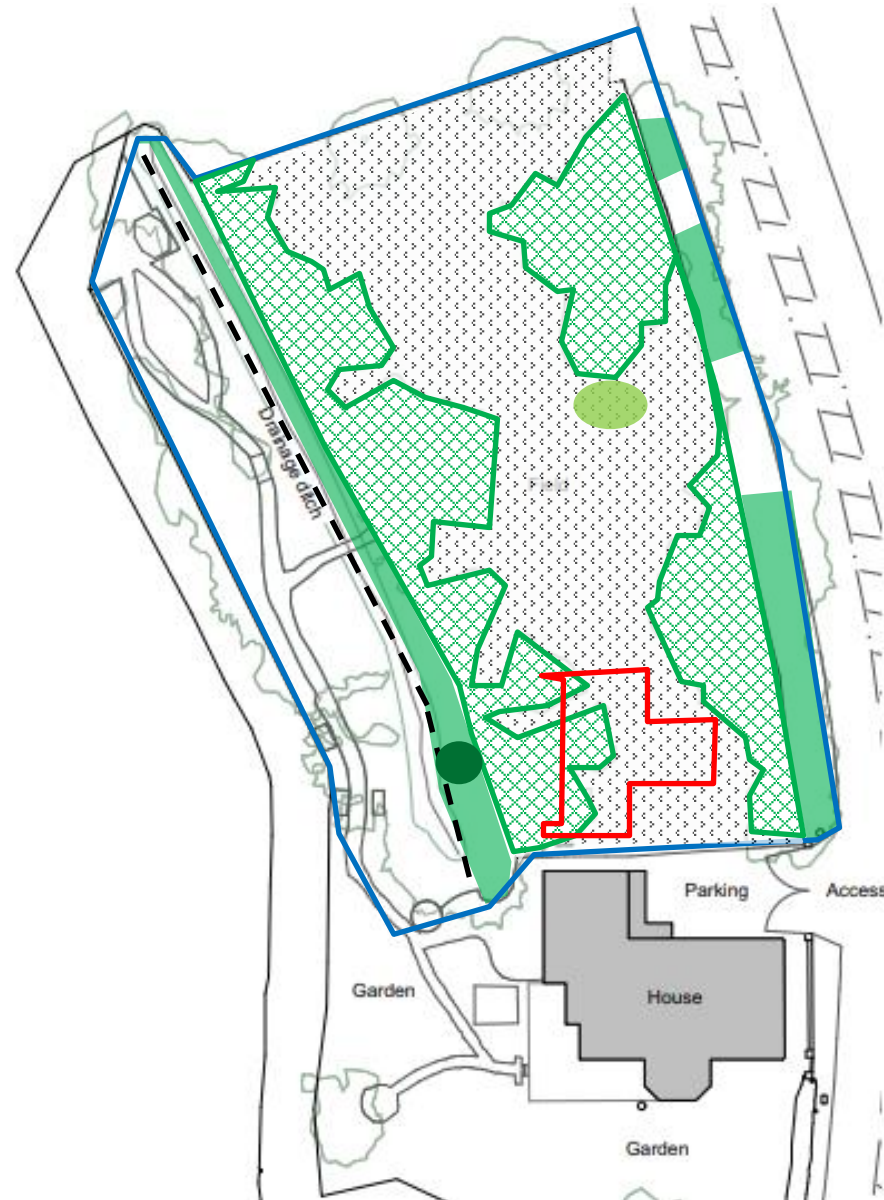


Photograph 7. The ditch associated with the western tree line.



Photograph 8. Two bat boxes on a mature oak in the western tree line. The lower one to be re-sited to an alternative tree in the same tree line.

Plan 1 - Habitat Features



KEY

-  Application Boundary
-  Semi-improved species poor grassland
-  Tree line
-  Marshy grassland
-  Bare ground/ruderal/scrub matrix
-  Scrub
-  Tree with minor potential roost feature



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Ecology Planning

Ecological Planning Advice and
Protected Species Surveys

Project: 1 Neath Road, Fforest
Goch

Drawing Number: 1742/01

Drawn by: RJB

Date 14/12/22

